University of Washington Department of

Psychology

Self Study

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Department of Psychology Self-Study
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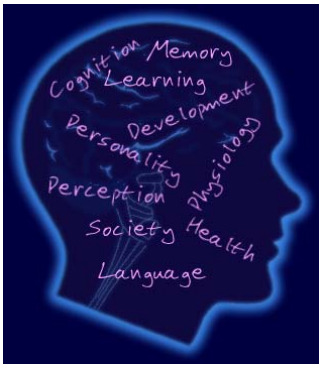
TABLE OF CONTENTS



SELF-STUDY

DEPARTMENT OF PSYCHOLOGY * UNIVERSITY OF WASHINGTON

Section A: General Self Evaluation

1. The Discipline of Psychology: Definition and Re-definition

The term psychology comes from two Greek words, *psyche* which refers to the soul or mind, as distinct from the body, and *logos*, which refers to the study of a subject. Psychology was first the study of the soul or mind and a subset of philosophy.

In its earliest incarnation as a separate discipline, psychology became the scientific study of conscious experience. What made it distinct was its emphasis on the techniques of science and on experimentation or empirical investigation. As the field both emerged and evolved, tension erupted between the imperative of science with its focus on the directly observable, and the study of mental processes which are observable only indirectly. So, over time, and especially in the United States, the focus of scientific psychology shifted from an examination of the mind to the study of behavior, both human and animal. Another aspect of psychology that marked it as unique, both from philosophy and from the basic natural sciences, which it sought to emulate, was an emphasis on the practical applications of science. This is most apparent in terms of Clinical Psychology, which seeks to develop appropriate treatments for individuals with mental health problems.

The evolution of the field at large is echoed in the history of our own department and is best epitomized by Edwin R. Guthrie, after whom our building is named. The Department of Psychology at the University of Washington was founded in 1917, when it separated from Philosophy. Guthrie, who had a Ph.D. in Philosophy, came to the UW in 1914 as an instructor in that department, but moved to Psychology 5 years later, and he remained there throughout his career. He is most famous for his theory of learning based on association, which grew out of experiments he conducted with cats. On the practical side, Guthrie nurtured a lifelong interest in teaching, education and behavioral interventions. Together with his wife, he translated a book on psychotherapy from French into English.

Psychology began with an emphasis on the mind and moved to a focus on behavior. As the "behavior of the mind" becomes increasingly observable through techniques like fMRI, which make it possible to obtain high resolution pictures of the brain in action so that researchers can determine the areas of the brain involved in certain cognitive processes, an interest in the mind has increasingly returned to our field. Today the field is essentially *integrative*. Retaining its emphasis on scientific study and experimentation, and on the practical applications of science, psychology not only looks at mind, brain, and behavior, but also seeks to explain the links between them.

Modern psychology is the study of cognitive processes, behavior, and development, their social, cultural, physiological and genetic causes, and their pathologies and dysfunctions. In keeping with an emphasis on integration, psychology is unique in its desire to understand both the social *and* biological influences on behavior. We stand at the interface of the social and natural sciences, and most comfortably define ourselves as a life science.

2. Psychology at the University of Washington: A Full Spectrum Program

As members of a diverse, dynamic, and integrative field, faculty members at the University of Washington, Department of Psychology, tackle a daunting array of both basic and applied problems. Our interests are varied, and include understanding why people have different personalities, how we remember, why we see colors, how infants and children learn, why some people discriminate against others, why birds sing and how this behavior is regulated. We study the origins and physiological bases of hyperactivity, the genetic underpinnings of autism, and what we can do to maximize human learning and development through the lifespan.

In the process of discovery, we use research techniques that are as varied as the questions we ask. These include questionnaires and interviews, laboratory tests, brain imaging, single neuron recordings, physiological measurements, observations of children in preschools and daycares, and field and experimental tests of animal behavior.

Our researchers have made fundamental discoveries in the science of behavior including ways of examining adult memory, measuring children's learning, uncovering unconscious prejudice, and assessing group decision-making. We are also developing innovative treatment programs for mental health problems, including depression, alcohol and drug abuse, traumatic stress syndromes, adult personality disorders, children's behavioral problems, and autism.

As this very brief overview of our research interests and techniques suggests, we are a broad-based, full spectrum department of psychology with top ranked programs of study in both basic and applied fields. Because of our field's diversity, a number of departments in other universities are more specialized, building important strengths in some areas, while down-sizing or dropping others. This specialty emphasis, or truncated structure, is not only found in less renowned departments, but is common, and becoming more so, in top departments. This is especially the case for psychology programs in high prestige private universities. For example, top twenty programs such as Stanford, Harvard, Carnegie Mellon, Princeton, Cornell, and Columbia, have neither a clinical psychology nor animal behavior area. Thus, in size, scope, and reputation we are most like the psychology departments at UCLA, Berkeley, University of Minnesota, University of Michigan, University of Illinois, and University of Wisconsin[1].

As is typical for other top-rated departments, our fundamental goals are to offer good general education courses that introduce majors and non-majors to ideas in psychology; to teach them to think critically and creatively about psychological issues; to offer a rigorous academic program for our undergraduate majors; to provide students with a rich variety of research and internship opportunities; to maintain world class graduate programs across a broad range of areas; and to support research programs that make critical contributions to our understanding of the biological, social, cognitive, and cultural underpinnings of behavior. We also strive to provide service to our communities through the application of innovative research to local and global problems related to education, health, and mental health.

We have come to view the diversity of our department as a source of strength. Yet, ten years ago, at our last review, there was a suggestion that the "more biological" areas of the department (i.e. animal behavior and behavioral neuroscience, then called physiological psychology) split off and form a new interdisciplinary unit. But no resources were allocated for such a move and many in the department were opposed to it on principle. For these and other sundry reasons, we did not move in that direction. In this last decade, one of the most obvious changes in the field, and in our department, is the infusion of a biological emphasis across departmental areas. For example, our most recent hires in clinical and social psychology make extensive use of psychophysiological procedures and it is our hope to hire someone using fMRI techniques through our cognitive neuroscience search. This year, our department submitted a proposal to the Murdock Charitable Foundation to obtain funds to develop a molecular genetics facility and thirteen faculty members, spanning four of our areas, participated in the effort. The importance of the biological foundation of behavior is also infused across our undergraduate curriculum. We no longer offer separate introductory courses, one emphasizing the social foundations of behavior, the other the biological foundations of behavior. Instead we have a unified introductory course that covers both the biological and social aspects of behavior. In addition, all students must take Psychology 202, Biological Psychology, before they can apply to the Psychology major.

In the face of stiff competition from other departments and limited resources within the university, the pressures to specialize, or truncate, are real. Yet, the most exciting scientific advances of the recent past and those most likely to occur in the future stem from research that better illuminates how nature and nurture work in concert to affect behavior. As we sort out the implications of mapping the human genome, develop increasingly sophisticated techniques for studying animals within their natural

[1] These programs all received a quality of score between 65 and 70 in the NRC rankings and are generally ranked in the top 20.

settings, begin to crack the puzzle of how infants and children learn, hone our assessments of the impacts of neighborhood and school environments, and refine our methods for looking at the brain in action, the department's breadth and diversity of areas has situated us nicely to contribute at the leading edge.

3. Departmental Strengths: A Foundation of Teaching and Research Excellence

Whether one focuses on scholarship, teaching, or service, this department's record is one of excellence. We are, without a doubt, one of the strongest units in the College and University. As we will argue in later portions of this report, we are clearly *the very best* in terms of value per expenditure. Ten years ago departmental reviewers noted that there was "no other psychology department in the country that was doing more with less." Ten years later, we have no more, yet we *are* doing more.

We are one of the top rated Psychology departments in the country. Our leadership role in research and scholarship is reflected in numerous ways. As we detail in this self-study report, our faculty is well published, and their publications are having a major impact as indicated by citations and applications. Almost all our senior faculty are fellows in their respective professional organizations, most edit, or have edited, leading scholarly journals, and almost all sit on major editorial boards. Most of our senior faculty, and an increasing number of our mid-level faculty members, sit on NIH grant review panels, and about 75% of our faculty have held an external grant in the last two years.

The table below summarizes key results from the most recent (1993) National Research Council (NRC) rankings of research doctorate programs. As this table shows, we were ranked 12th among all 190 psychology programs rated. This places us at the 94th percentile of all Psychology departments in the country with a quality rating of 4.24 out of a possible high of 5. This is both the highest rating and the highest percentile rank of the UW departments we compare ourselves to. Indeed, it is the highest percentile ranking *of any department in the College of Arts and Sciences*. Results are similar when ratings from the U.S. News and World Report (2001) are examined Here, Psychology is ranked 17, with a percentile ranking of 95, again, *the highest percentile rank of all departments in the College*[2]. The assessment score of 3.9 (out of 5) is second to none amongst our peers.

UW Program	NRC Rank	%	Qualtiy Rank	US News Rank	Assess Score	%
PSYCH	12 (190)	94	4.24	17 (322)	3.9	95
Physics	14 (146)	91	4.20	16 (170)	3.9	91
Chemistry	28 (168)	83	3.70	27 (195)	3.7	86
Math	26 (135)	81	3.76	26 (158)	3.8	84
Sociology	10 (95)	90	4.03	16 (108)	3.8	86
Economics	26 (123)	79	3.15	>30		

The most highly rated specialty within the department was Clinical Psychology, our largest sub-area, which was rated 2nd in the country (99th percentile) by U.S. News and World Report, up from number six at the time of our last review. This number 2 rating and 99th percentile *is the highest of any subunit in the University, outside of Nursing or Medicine*. The Clinical program also received the 2003 designation as "program of the year" by the Association for the Advancement of Behavior Therapy.

Because it is based on the most rigorous form of peer review, another excellent indication of our department's research strength is our number two ranking, among all Psychology departments in the country, in the receipt of federal grants. This is a designation we've held throughout the last decade.[3] Within the College of A&S we have been one of the top three departments in grant awards throughout the decade. Most recently we were number three in the College in terms of Grant and Contract expenditures, number two in terms of G&C awards[4]. This is especially impressive, since the grant awards of one of our top faculty members, Geri Dawson, do not even count in our department's favor in the UW database. Dawson was recently (5/03) awarded a 8.6 million dollar grant to continue her research on autism. This comes on top of her earlier (6/02) 10.2 million dollar grant to uncover the genetic and neurobiological

[2] See Appendix L for percentiles and performance indicators of all A&S departments ranked in the top twenty.
[3] Based on data from NSF, 1992-2002.
[4] With the new re-constructed Biology department, we will be one of the top four.

causes of autism. Because of our severe space constraints, her grants are run through the Center for Human Development and Disabilities (CHDD), in the medical school.

While Dawson's largest grants do not add to Psychology's standing in the tally of grant funds, she is one of the best exemplars of our department's strengths. She is a 100% genuine UW Psychology department product. She completed both her undergraduate psychology major and her doctoral degree in our department. Her first academic job was at the University of North Carolina, but she returned to our department as a faculty member, quickly achieving tenure and rising through our ranks to Full Professor after 6 years. In this sense, her success not only adds to the prestige of our department, it is also an indicator of our overall excellence.

The common stereotype outside (and sometimes, within) the academy, pits scholarship against teaching. But, the teaching accomplishments of our unit are no less impressive than our scholarly ones. We are the top science department (social or natural) in undergraduate teaching**,** offering approximately a third more undergraduate student credit hours (SCH) than other science departments, with the exception of mathematics, and more than a third more undergraduate SCH than the top social science departments. Our teaching is strong, not only in terms of quantity, but quality. As we show in later sections, undergraduate satisfaction with instructional quality is highest among our majors, compared with our peer departments. Our undergraduate program is also known for its quality nationally. The Princeton Review Gourman Report (1997) ranked it amongst the top 20 in the country (96 percentile). Over the years, 8 of our faculty or graduate students have received Distinguished Teaching Awards or Excellence in Teaching Awards, with a handful more receiving nominations on a regular basis.

The table below compares us to peer departments in terms of resources (inputs), productivity (outputs), and yield (input/output). When *both* teaching, in terms of student credit hours (SCH),

(2001-2002)	Chemistry	Mathematics	Physics	**PSYCHOLOGY**	Sociology	Economics
INPUTS						
FacFTE	42.6	54.5	42.9	44.9	27.8	26
TAFTE	43.7	27.6	23.7	24.3	15.2	17.3
Median Salary	72,639	76,783	76,863	58,639	74,619	74,714
$ Budgeted	6,943,194	4,867,988	5,803,651	4,853,854	2,714.995	3,063,390
OUTPUTS						
G&C	14,617,876	947,946	11,102,641	8,376,759	378,510	56,203
SCH(Undergrad)	44,227	60,931	30,293	63,433	36,024	38,575
SCH(Total)	49,812	64,491	35,115	67,786	38,227	41,969
BA/BS Degrees	124	86	37	426	344	236
PhD's Awarded	25	5	15	17	4	17
YIELD						
G&C/FacFTE	158,627	19,913	140,008	139,621	20,891	1,458
G&C/Budget $	2.1	.19	1.9	1.8	.14	.17
UDegree/FacFTE	2.9	1.6	.86	9.7	11.3	9.1
SCH/FacFTE	1169	1183	818	1510	1375	1614
$/SCH	134	75	165	72	71	73

NOTE: Except for median salary (OIS databases) all data for this chart from UW Departmental Academic Profiles 2001; FTE=Teaching Faculty Equivalent; G&C=Grants and Contracts; TA=Teaching Assistant; UDegree=Undergradaute Degree

or degrees conferred, and research, in terms of extramural funding, are examined together, there is simply no other department so productive.

Within the College of Arts and Sciences, the top generators of extramural funding, in terms of total dollars or yield (Grant $ per Budget), are in the natural sciences. When it comes to total student credit hours or degrees conferred and yield (SCH or degree per FTE, or budget dollar) the top departments are generally in the social sciences[5]. Psychology offers the best of both worlds. Our grant funding puts us in the top tier of the sciences, and our teaching productivity and bang for the buck are as good as the top social science departments[6]. That we do this while being ranked at, or near, the top in the

[5] Several departments in the Arts and Humanities (e.g. art, English) also generate large numbers of SCH, but cost per SCH, or FTE per SCH, is generally lowest in the Social Sciences.

[6] The only other natural science department with a high teaching profile, in terms of SCH's, is Mathematics, which does not have many majors, and which does not have a high grant profile. (With Biology now on board, there may be three teaching intensive Science departments).

College and the country, in terms of graduate and undergraduate program quality, is truly remarkable. When outputs are compared with inputs, we may well stand alone, not only in the College, but in the country.

As strong as our department looks when it is compared with others on quantitative indicators, there is more to excellence than these indicators can show. We are proud of the quality of our programs, both undergraduate and graduate, but we believe that we must make changes to become even better and to stay even with our national competitors. This is something we are committed to and have plans for. But, more resources are needed if we are to take these next steps. We are past the peak of our utility curve and at the breaking point. If our resources stay the same or diminish, we will have to do less, whether in quantity or quality. In this last year, we have begun movement in that direction by offering fewer undergraduate general education courses. This was a necessary move, albeit one we have taken with a great deal of ambivalence.

4. From Campus to Community: Our Commitment to Service

We have thus far focused on research and teaching because these contributions are both most central to our mission and most readily quantifiable. However, our service contributions, whether to the community or to the campus, should not be underestimated. At the campus level, in the last decade psychology faculty members have served as Dean of Arts and Sciences and also as Acting Divisional Dean of Research, Computing, and Facilities. We've had members of College Council, contributed a Chair to the Department of American Ethnic Studies, and a Director to the University Honors Program. Members of our faculty direct the Institute for Ethnic Studies in the U.S. and co-chair the Undergraduate Advisory Council. Psychology faculty members also serve as the Director of the University of Washington Autism Center and Co-Director of the UW Institute for Learning and Brain Sciences. Members of our faculty have also been active on the Faculty Senate serving as Chair of the Faculty Senate Committee on Minority Faculty Affairs, Chair of the Faculty Council on Educational Outreach and at present, one of our faculty members is on the Senate Budget and Finance Committee. Two members of our faculty have also run for faculty Senate Chair.

Aside from Psychology's contribution to campus service, the department has always had a strong applied component, and these applications translate into community service of various sorts. Our faculty are actively involved in research and the advancement of knowledge that has practical implications for infants, children, adolescents, adults and families. The dissemination of knowledge that can help in better serving individuals occurs through publications, workshops, and participation in professional boards and meetings as detailed on faculty vitae.

Psychology faculty are also involved in providing consultation and service programs for the community. Examples include the following:

* Alan Marlatt has been involved in numerous projects in the state of Washington developing alcohol/drug treatment programs for college students, prison inmates, and Native American youth. He also provides training and consultation on evidence-based prevention and treatment for addictive behaviors (relapse prevention and harm reduction) to local treatment centers.

* Andrew Meltzoff is involved in valuable community service by sitting on the Board of Directors for the Foundation for Early Learning, a state-wide philanthropic organization. The Chair of the Board is First Lady Mona Locke and other members include business and political leaders . The mission of the Foundation is to nurture the profound learning children experience from birth through age five and to help every child get ready for school. Meltzoff serves on the Program committee, which has given out a total of $2.5 million to teacher training, childcare, and early learning programs in 39 counties throughout the state. The Foundation has touched the lives of more than 4,000 young children. Meltzoff plays a key role in helping the Foundation choose effective programs to put into practice, while raising awareness about the importance of basic and applied research in developmental psychology. Leaders from other states are coming to Washington to learn how to set up similar partnerships among government, universities, and the private sector. Meltzoff has been a tireless advocate of adding the '0-K piece' to debates about K-12, and for linking these to higher-education, by emphasizing the mutual benefits of combining the science and practice of learning throughout the lifespan. In part, due to Meltzoff, early learning in the 0-K age group is fast-becoming a national concern from the State House to the White House.

*Bill George serves on the Advisory Board for the Sexual Offender Treatment Program at Twin Rivers Correctional Center in Monroe, Washington and consults about matters related to minority clientele of the unit. Over the last decade, George's theoretical contributions to our understanding of sex crimes has revolutionized treatment for this population.

*Ron Smith and Frank Smoll do workshops for youth-sport coaches and parents designed to help them provide a more positive athletic experience for children. This includes a project that involved workshops for inner-city coaches designed to keep minority children in sports and out of gangs. Over the past two decades, Smith and Smoll have trained more than 20,000 coaches.

*Ana Mari Cauce's work, in partnership with YouthCare Inc. and the State of Washington Department of Health and Human Services, provided intensive casemanagement to over 300 adolescents. Her research on youth homelessness played a major role in enactment of Washington State legislation referred to as the "Hope Act."

*Geri Dawson directs the UW Autism Center which provides high-quality, coordinated, multi-disciplinary services to more than 200 children with autism spectrum disorders and their families annually. A wide range of services is offered for children from infancy through late adolescence. The Autism Center partnered with the Microsoft Corporation to offer the first insurance benefit for early intensive behavior intervention. The Autism Center offers extensive professional training opportunities, including workshops and consultation for schools, community agencies, mental health providers, and autism specialists. In addition, the Center provides training in both Early Intensive Behavioral Intervention and Applied Behavior Analysis to pre- and post-doctoral students, fellows, and home therapy assistants. Staff members recently worked with the Washington State Department of Disabilities to revise and expand the WAC codes that define eligibility for autism services. As a result, state services will be expanded and easier to access. Autism Center staff work with the American Cultural Exchange Program to enhance communication with non-English speaking families and immigrants. In the past year, the Center responded to over 6,000 telephone calls and many emails from parents, professionals, and others in the community requesting information, services, and referrals.

*Marsha Linehan's Behavior Research Training Center treats high treatment utilizers for low fees. In her research studies, she takes many of the very highest utilizers out of the community mental health system and treats them for free or for very low fees.

*Bob McMahon's Fast Track project has been providing prevention services for the past 12 years to a sample of high-risk children and families in the Seattle area. Approximately 50% of these children are of color.

*The Psychological Services and Training Center, which is partially subsidized by the department, provides low-fee psychological services to the greater Seattle and University communities. In this way, we disseminate current current knowledge of psychological disorders and their treatment to typically underserved populations. Almost 200 clients a year receive services and more than 80% qualified on the basis of low income for our minimum fee. Of those clients who qualified for the "minimum" fee, 43% were actually seen for below minimum fee. In recent years due to the economy, we have seen an increase in unemployed clients; last year alone 18% of our clients were unemployed and between 25 and 27% were racial or ethnic minorities.

These are but some of the many ways in which our faculty and their programs enrich the local community. We believe passionately in service. It is our mission to take our science and its applications into the world. We begin by taking these applications into our local communities.

5. Departmental Weaknesses: A Crumbling Infrastructure

Virtually every area in our department can be improved and we are working to do just that. As we will describe in subsequent sections of the self study, we would like to offer more small classes for our majors that are interactive and that offer more writing opportunities. We are still in the early stages of revamping the graduate program so that course offerings are more systematic and advanced. Our development efforts, while improving, remain crude. And, despite the many individual accolades our faculty members routinely garner, at the department level, our faculty struggles to maintain morale, cohesion, and an espirit de corps.

These problems are real and worthy of being addressed in their own right, but they are also symptomatic of our major weaknesses, which can be enumerated in very stark terms. The infrastructure in support of our teaching mission is weak. The infrastructure in support of our service mission is very poor. The infrastructure in support of our research mission is even weaker. In other words, we are understaffed, underbudgeted for operations, and have major equipment needs. We also lack the space to do our

research, for faculty to meet formally or informally, to house student labs, or to have an undergraduate study center. We will talk about each of these in order, noting how these impact our ability to do those things necessary to join the ranks of the top ten Psychology programs in the country.

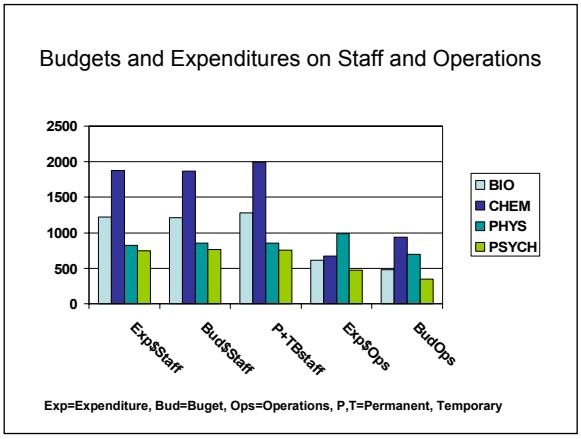
INFRASTRUCTURE RESOURCES: STAFF, OPERATIONS, and SPACE

	PSYCHOLOGY	PHYSICS	CHEMISTRY
STAFF FTE	13.4	27.4	44.9
OPERATIONS BUDGET	322,939	720,902	765,243
RES SPACE (square feet)	35,328	78,991	124,135
OFFICE SPACE	29,187	35,465	34,168
MISC SPACE	1,974	5,402	16,100
FACFTE/STAFFTE	3.4	1.6	.95
G&CS/STAFFTE	625,131	405,206	325,565
SCH/STAFFTE	4,813	1,281	1,109
OPERATIONS/FACFTE	7,192	16,804	17,963
G&C/OPERATIONS	25.9	15.4	19.1
OPERATIONS/SCH	5.0	20.5	15.3
RESPACE/FACFTE	823	1,841	2,914
G&C/RESSPACE	237	140	118
SCH/RESSPACE	2.0	.45	.40

NOTE: With the exception of information about space, taken from A&S data base, data is from the UW Academic Profiles 2001.

The table above compares infrastructure resources of our department with that of other departments with large research infrastructures. Information about three key resources – staff, operations budget, and research space – is presented in numerous ways. First, we present number of staff members, operations budget and amount of space. Then, we present the same information in light of the size of our faculty, research operations (as indicated by grant and contract dollars) and teaching operations (as indicated by SCH). The data clearly shows that in terms of actual size, whether size of staff, size of research space, or size of our operations budget, we have fewer resources that our UW peer departments. This disparity remains when resources are examined in light of our research operations, and they become magnified in light of our teaching operations. Resource allocation to our department is poor, but it is especially poor in light of what we accomplish in teaching and research.

Staff Needs. The chart below presents information specifically related to staff. Rather than showing number of staff FTE allocated to our department, as was the case in the table, it first shows the amount of money budgeted for staff, then it show the amount expended on staff (in thousands of dollar) in 2002. Information is also included on the amount expended for permanent staff and for temporary staff combined. As this chart shows regardless of how you slice the pie, we have fewer monies to expend on staff than other similar departments. This information comes from the A&S 2003 database which has information on Biology as a unified department. (Information from Academic Profiles does not include data from Biology as a department, so it is seldom used as a comparison). But, regardless of whether Biology is included as a comparison or not, the story remains the same. Compared with other large science departments with complicated research operations, we are understaffed.



Psychology department operations are varied and complex. We run a clinic that serves about 100 community clients a year, and serves as the major training site for our clinical students (2 staff members). We also have a rat breeding facility that produces rats for our undergraduate labs and for some of our animal researchers (1 Staff). We graduate more majors per year than any other department in the college, and our undergraduate advising office (2.75 staff) and writing center (.5 faculty) play a crucial role in preparing them, and moving them along, toward graduation. Given the large number of SCH's that we offer, scheduling is extremely difficult (.70 staff), and is made even more difficult as we have some very large classes that are not designated as "priority" because they are not feeders for other classes. We are dependent on media technology, computers, and on a well-functioning computer network (2.4 Staff) for both our teaching and our research. Our research is especially computer intensive, both for data analysis, and increasingly for data collection. And, with a faculty of about 60 including Research faculty and part time lecturer's, a large contingent of post-doctoral fellows, and close to 150 affiliate or clinical faculty members, the job of the Chair's assistant (1 Staff) is complex and continually busy.

Despite the fact that we are already supplementing staff in these areas with funds from our indirect recovery funds, every one of the staffing areas mentioned could use additional staff. The front desk at the clinic is staffed by part-time undergraduates who do not always perform in the most professional manner and whose dependability is not as good as one would hope for in this delicate position. The advising staff is overwhelmed with student demand. They do not have the time to do all they would like to enhance the experience of our students. Furthermore, half of a present position in advising is from the evening degree budget that will disappear in Summer 2005. When viruses enter our computer system it can take as long as two weeks to get things back up and running. Moreover, our technicians simply do not have the time to help faculty configure or master new software programs or to support class webpages. We have no adequate back-up for class scheduling and after 20 years of service, the staff member responsible for this retired early, pushed by the accumulated frustration of working with classroom scheduling.

But, the needs are even greater when it comes to other support functions, where staffing is either totally inadequate or non-existent. For example, despite being one of the largest, most complex, departments on campus, our administrator (1 staff) is paid considerably less than the administrator of other major departments. And, instead of keeping track of facilities in one or two newer buildings, she has 10 (!) buildings she looks after, all but two of them temporary buildings that have already outlasted their intended purpose. Providing oversight for dedicated, and highly regulated, space for our various animal colonies (i.e. rats, bats, birds, and fish) also makes this job a very demanding one, where another associate administrator would be highly desirable. Infrastructure to support accounting, and payroll processing and other personnel functions (1.75 staff) of the department is barely adequate, and the front office (1 staff) is partially staffed by hourly students. Our financial staff is especially overstretched (2 staff) as they oversee a department with not only a large state budget, but large and complex grant and contract budgets. The Associate Administrator (1 staff) works with faculty in the last stages of grant development, helping them to finalize their grant budgets, but junior faculty, who compare our resources to that of departments they have come from, uniformly note that the lack of support for grant development is a major problem for them. Lack of support for faculty involved in grant processing is one of their three top concerns (along with space and salary issues). Some faculty members informally report that, when a choice is available, they route grants through other departments or institutions in order to receive greater support and resources for grant budgeting and coordination.

It is worth noting at this time that faculty members in our department are *not* provided with *any* traditional secretarial support, whether it comes to preparing manuscripts, course syllabi, examinations, or photocopying. In the face of budget cuts, we have sacrificed our secretarial support to fund, or partially fund, support for grant monitoring and computer support. And, because of our acute staff shortages, we are using up to $57,000 in our indirect cost recovery (ICR) funds to fund, or partially fund, a little over 2 of the positions just described. The ICR budget now faces a sizeable shortfall. More importantly, using ICR monies to fund basic departmental functions robs us of the ability to re-invest in our research and researchers in ways that might yield even higher pay-offs (e.g. grant support personnel). It also breeds

resentment among our department's top grant-getting faculty who, despite generating considerable funds in ICR, cannot readily keep their labs professionally furnished or re-furbished, and who cannot get the grant preparation help they need so they can concentrate on the science. Moreover, it is especially difficult to get faculty to play important departmental roles, such as coordinating admissions, evaluating teaching, or human subjects review, because of the inadequate staff support that we can offer them. While staff underbudgeting no-doubt interferes with the optimal efficiency and productivity of our faculty, serious costs in morale are piled on top – both for faculty and for our overworked staff members.

Operations. Monies for departmental operations cover a host of miscellaneous expenses, ranging from instructional support to copier leases. We are not only under-budgeted for staff, but as the previous table and charts show, our operations budget is quite low compared with other large departments. In the last biennium the discrepancy between what we spent on operations and what was budgeted was quite large. We have taken steps to reduce our operations cost, but unexpected expenses, such as the 25% increase in telephone equipment costs in January 2002 (approximately $30,000 per year for our department) have negated any efficiencies we have accomplished. Realistically, as long as our budget remains at its present size, it is likely that shortfalls will continue unless we stop doing something essential.

A Note about our Budget. Part of how we got into the bind where our budgeting levels are so low compared to others dates back to 1993, when the department was audited by both the University's Internal Audit department and the Washington State Auditor's Office based upon a whistleblower complaint. This audit closely examined the way we conducted some of our fiscal activities. The audit results were not very complimentary, and required numerous changes in the way we conducted our daily fiscal activities. We appeared in newspaper headlines and were used in many meetings and seminars across campus as an example of the improper way to conduct business.

Our response to the audit findings was contained in two 3 ½ inch binders. It took approximately 4 years to close this dark period in our history, but we emerged from it a better and stronger department. Today, we are displayed as a model department, one that conducts business properly and within the numerous federal, state and other regulatory rules and regulations governing such items. Numerous systems and controls implemented by this department many years ago have been adopted and are used University wide today.

However, the audit-induced changes were severely detrimental to our budget. The practice of charging grants for budget monitoring services, which at one time had been approved by Grants and Contract services, was no longer allowed. However, the monies recovered through these recharges had actually been built into our operations budget. *The loss of these recharge dollars was, in essence, a permanent reduction in our operations budget of approximately $80,000 per biennium*. We were not given new budget monies to pick up the loss in our budget. Instead, the operation budget was simply reduced and it has only been reduced further since that time.

Space. When Guthrie Hall (picture at left) was constructed in 1973 our faculty was half the size that it is now. But even then, it was assumed that a second section of Guthrie Hall, equal in size to the first, would be constructed within five years. This never happened.

Twenty years later, in 1993, at that time of our last review, Psychology had sprawled into various annexes, buildings around campus, and off-campus spaces. In order to accommodate our growth and better consolidate our operations, the letter from the review team, authored by Professor Paul Hodge, stated that "the space problem may be alleviated somewhat when Cunningham Hall is renovated and an additional 30,000 square feet of space will be allocated to Psychology" (pg. 7 of report to Deans Eastman and Norman). Cunningham was, in fact, renovated, but Psychology was given *no* space there. We actually lost the space in Cunningham that we used to have.

Our most optimistic calculation is that, over the last decade, we have gained only a third of the promised space (approximately 9,000 square feet). And, most of this new space is substandard, and some of it is unsuitable to research and is now used to house students or faculty while we wait for funds to renovate the space where they used to be housed (e.g. the Guthrie basement). So, ten years later, when modern psychology demands even more sophisticated laboratories, our space resources continue to be woefully inadequate, both in terms of square feet and in terms of quality. As the previous table showed, despite a much larger teaching mission and a larger faculty, we have less than half the on-campus research space of other major science departments.

We are not only sprawled across campus in about 10 different buildings, most of these are so-called "temporary" buildings. Because they are temporary, the UW has chosen not to invest in re-furbishing them for our use. For example, we were recently forced out of space in Johnson Hall (which is being renovated and consolidated for Earth and Space Sciences) and into Johnson Annex. We had hopes of consolidating Johnson Annex into research space for those of us who work with children. We hoped to develop a shared video-taping room and psychophysiological recording room. But, because the space was temporary, UW facilities refused to install sound-proofing or air-conditioning. So, not only were we unable to consolidate and make better use of the square footage we had, we actually lost one of our psychophysiological labs (the one in Johnson)in exchange for space only suitable for housing research assistants, post-docs, or conducting data analysis.

Those faculty members whose research space is not sub-standard, are almost uniformly in cramped quarters. It is quite typical for 2 to 3 research assistants and post-docs to share a desk and computer. Sometimes, when an experiment is underway, a research assistant or post-doc may lose their desk altogether. Scheduling experiments or research subjects can be a nightmare under these situations. It certainly leads to reduced productivity and there are faculty members who report that they would be writing additional grants and running additional studies if they could be guaranteed the space to do so.

We do not have the space to accommodate some of our faculty at all. Some of our faculty rent off-campus research space. For example, Bob McMahon, Director of our Child Clinical Program, has his primary research space in Fremont, about three miles from campus (!) Some have their research space in other units (e.g. Dawson in the Medical School) or in Centers affiliated with Arts and Sciences, but far from Psychology (e.g. Meltzoff, Repacholi, & Sommerville in the Institute for Learning and Brain Sciences in lower campus, about a half mile away). At the moment, two of our faculty members (Diaz, Kenney) do not have research space at all.

Moving beyond research space we do not have enough faculty office space in one building (or even two buildings!) for all of us and we have no single room that accommodates us all for faculty meetings. (When we get a large turn-out, we have standing room only). There is extremely little common space for area meetings or brown-bags. We borrow space from other departments for our colloquium series and faculty talks. Some of our brown-bags are held in buildings far across campus. We have no common faculty lounge or coffee stand. We do not have enough space to house graduate students in a manner that does not put pressure on our research space. We have no study center for undergraduates or enough room to build the kind of undergraduate labs we would like.

Moreover, the physical fragmentation works against interaction, collaboration, and collegiality, and negatively impacts faculty, graduate students, and undergraduate students. Space wars erupt within areas, working against productive relationships between colleagues, and space wars between areas act against building the bridges that can benefit us all. The chair and administrator spend way too much of their time dealing with this single, and unsolvable, issue. When it comes to our physical facilities, the joke about re-arranging deck chairs on the Titanic comes too quickly to mind. That is exactly what dealing with our space issues feels like.

The lack of good quality space also disadvantages us financially, aside from the disincentives to write additional grants. In the last 4 years (1999-2003), the Psychology department has spent close to $400,000 refurbishing space for faculty. These have been mostly incoming faculty members moving into space that required a major overhaul for the kind of uses typical in modern psychology. But, it also includes upgrades in facilities in order to allow faculty already here to undertake new grant-funded studies. The cost of these upgrades and repairs was paid for entirely out of our ICR budget. These costs were in addition to whatever monies Psychology had already contributed to start-up funds. It is not entirely coincidental that $400,000 is about the amount that we are now in the red in our indirect cost recovery budget. Our budget simply does not provide for the cost of continually upgrading facilities which were not built with the needs of a modern Psychology Department in mind.

In contrast to our position at the top when it comes to national rankings, when our department's resources are examined, whether it be staff, or budget for staff, operations budget, total state budget, or research space, compared with other large, complex, grant-generating science departments, Psychology is at the bottom. This is especially remarkable because compared with other large science departments, we have a larger, often *much* larger, teaching profile, with an equivalent research profile. This imposes a tremendous burden on our faculty, on our staff, and on our department's administrative team. It is hard to imagine that our students, undergraduates and graduates, are immune from the pressure and the burden.

6. Balancing Strengths and Weaknesses: The Future of Psychology at the University of Washington

Ten years ago, the program review committee for Psychology wrote that they were "generally optimistic" about our future. We were a top-rated department, with commendable involvement in teaching and an impressive research profile. But, we were not without problems and some specific areas were targeted for improvement.

Areas needing improvement included the departmental culture, where a lack of community was observed; lack of broad training in our graduate program and the need for more graduate courses; and the need for greater attention to our undergraduate teaching, especially in terms of undergraduate research (499). During the ensuing years, these issues have all been tackled, with varying degrees of success.

Efforts to improve the departmental culture have included the institution of a yearly faculty retreat, which was held for the fourth time this past September. Retreats have provided us an opportunity to engage in conversations about progress in our undergraduate and graduate programs and new directions for research or faculty hires. There is an emerging interest in hires that could serve to work across and unite the various Areas within our department. Our expanded departmental colloquium series, funded with support of the Allen Edwards Lectureship Endowment, also works in that direction. We have also begun to talk about developing "brown bags" that cut across departmental areas and will inaugurate the first this year. A number of cross-area interest groups have already begun to meet informally. And, to a certain extent, the creation of the Institute for Learning and Brain Sciences, an independent interdisciplinary institute with heavy involvement of psychology faculty, also serves to foster cross-area collaboration and research.

Other relatively new departmental activities that bring faculty and students together across areas are the undergraduate recognition ceremony, held for the fifth time last year, and the Ph.D. hooding ceremony, which will be entering its fourth year. Although not all our students participate, the size of both of these ceremonies has consistently grown across the years. This year over 200 undergraduates and their guests attended the undergraduate ceremony and 13 new Ph.D.'s were hooded by their departmental mentors. Each ceremony was festive and touching, and our hope is that they will spark continued interest in the department from our alumni. They also provide a forum for gathering faculty across the department in a celebratory atmosphere.

As we describe later, the undergraduate program has been extensively revamped, with special attention to improving the quality and coherence of our offerings for majors. The first cohort of students who entered the major under the new program are about to graduate and all indicators suggest that the changes have had a positive effect. With more specific regard to undergraduate research, or 499, we now require undergraduate students and their mentors to develop contracts, outlining specific obligations on

both sides. This has improved research placements for both mentors and students. Crafting the contract requires mentors to proactively consider how to structure the research experience, improving it for students. Contracts also alert students to what will be required and expected of them beforehand, so they better know what they are committing to. As such, they are more likely to meet mentor expectations.

Changes in the graduate program have been in the works for several years, but are just reaching fruition. In the last few years, several new, jointly-taught, courses have been added to the graduate curriculum and we have instituted a pro-seminar that brings together first year students throughout the program to hear about research conducted by our faculty. We plan to add additional advanced seminars to the graduate program and to track changes and their impact upon graduate training.

Departmental efforts over the last decade also helped lead to the development of the two Neurobiology programs (described later) that we are partners in. During this time, we also made some superb new hires, some of whom are now tenured (Sean O'Donnell, Lori Zoellner). Unfortunately, others (Gerhard Van Emde, Theresa Jones, Jane Richards) did not stay long, as relatively poor salary and poor support and facilities made them vulnerable to better offers.

The promised 30,000 square feet in Cunningham Hall never materialized, but, as noted we did gain close to 9,000 square feet of space in various places across campus. The new space is mostly of poor quality and in "temporary" buildings, *but we are still very grateful for it*. We are also very grateful for the "match" promised by the College and central administration for an NIH (NCCR) construction grant which would upgrade the animal facilities on the third and fourth floors of Guthrie, renovating 6,664 square feet of space on the third and fourth floor and adding an additional 4,235 of square feet of space on the fourth floor.

Perhaps the greatest accomplishment of the last decade is the fact that we remain, despite our continuing infrastructure problems, a highly rated and excellent department. This has not come easy. And, to some degree, for the last few years, we have run on fumes and debt.

We enter this next decade with a projected shortfall of close to $400,000 in our indirect cost recovery (ICR) fund. This budget, based on monies generated from grant overheads, is used not only to pay for supplies for the grants generating the funds, but also for critical departmental functions, like grant monitoring and computer maintenance, for start-up packages for new hires, and for lab updates and re-models. This last biennium, we only managed to stay out of debt in our operating budget by eliminating a host of undergraduate classes we had hoped to offer. This not only led to disappointed undergraduates, but to the loss of excellent part time lecturers that may not be available should we want to offer these classes again in the future.

A major goal of the coming years is to re-consider our priorities, so that we can stay out of debt and better operate within our means. We must concentrate limited resources on those educational areas that are most central to our mission, the quality of our major and our graduate program – even if this means cutting back on our general education mission. We cannot maintain quality for our undergraduate majors and graduate students and offer our faculty the support they need to do quality teaching or research while the coffers are empty.

As a department we are committed to excellence and there is much we would like to do. We already mentioned developing more, small, high level, classes for our undergraduates and the development of a study center. We would also like to expand our lab-based offerings for undergraduates.

At the graduate level, we would especially like to see more cross-area and cutting-edge advanced seminars or classes. We would also like to be able to guarantee students in good-standing five years of funding, including funding during the summer. While more university fellowships would be ideal, this could also be accomplished through added teaching assistantships for our department.

We would like to better support the research of our faculty by developing joint-use laboratories with state-of-the-art equipment for human psychophysiology, observational research, and for animal surgery. We would like to have our own molecular genetics facilities that could be used for both human

and animal research. In the long run, we would like a neuroimaging center. These are the kind of resources that will make the difference between those departments that move ahead in the coming decade and those that slide back.

We would like to put more energy into development efforts, an area that has never been our strong suit. We are aware of the difference the Edwards endowment has made to us, and we can see what large private donations have done for other departments.

We would like not only to expand our research space, but to have our laboratories (and offices) in closer proximity to one another, so that we can more easily support the intellectual communities that are being developed across-areas. Short of new space, we would like to re-model the space we have available to us now to create better efficiencies and create some jointly used spaces. The nurturance of community is crucial to all our other plans.

Realistically, however, given the fiscal constraints affecting us, the College, and the UW, we cannot do it all. While our research productivity already suffers from lack of resources, it is unlikely to stop being a top priority. The goal of producing world class research is central to our mission and is the basis for the type of teaching that we do best. In addition, our ability, and success, in garnering external funds to support research, makes this one of the few areas where our efforts are consistently rewarded. The graduate program will remain a top priority because of its important role in both our teaching and research. But, if the fiscal climate does not change in the future, we will have to trim back the size of our undergraduate program to maintain quality in the Psychology major, our first priority for undergraduate education. We have already begun movement in the direction by cutting back on our general education offerings. Further cutbacks may be necessary in the coming years.

One especially knotty issue that we face is how much faculty growth we can, or should, support. Hiring is essential to keep our faculty "fresh" by bringing in new perspectives. As psychology expands, both in its scope of inquiry and methods, new hires are necessary for the optimal training of graduate students, and for the optimal effectiveness of area and cross-area research groups. New hiring also allows us to better maintain (or expand) our undergraduate teaching program. On the other hand, new hires entail the expenditure of funds for start-up, which requires us to fall further into debt. When new hires are not replacements for faculty who are leaving, it also requires coming up with new space, which puts new hiring in direct competition with meeting the needs of existing faculty. For the moment, we have decided to move forward with new searches which will replace faculty we have lost. In the case of such replacement hires, the pluses outweigh the negatives. But in light of our severe space, staff, and budgetary constraints, this decision was only reached after extensive faculty debate and not without hesitation.

Despite the many severe challenges we face, we remain optimistic about our future. We have become adept at getting the most out of what we have. Our faculty and staff are extremely resourceful. They have become, of necessity, masters of efficiency. The chair is also confident that we have the support of the College and University, although, at the moment, they are hard-pressed to provide more in the way of resources. Over the last decade, we have tried to do it all, a goal that is not feasible given present fiscal realities. It is for this reason that our department recognizes the need to cut back on some of what we do. Nonetheless, it is important to note that this is a department that has the desire, and the capacity, to excel even more if given appropriate resources and support. Our accomplishments thus far, and our present position, make us the best investment in the College for any resources that become available.

Section B: Teaching

1. Teaching Philosophy and Courseload Distribution

Our commitment to excellence in teaching and to dissemination of knowledge is best communicated in our mission statement, which is reprinted, verbatim, below:

The department of psychology is comprised of a faculty of scientists whose mission is to contribute to our knowledge of human and animal behavior; to disseminate this knowledge to students, other scientists, and the public at large; and to apply this knowledge to human health problems. Our graduate instructional mission is to train students in the methods, philosophy, and ethics of scientific inquiry so that they will become scientists capable of contributing to the base of scientific knowledge about psychology, and to train psychologists who will apply this knowledge in medical and therapeutic settings. Our undergraduate instructional mission is to provide a liberal arts education in the context of a research university: to help our students learn to think rationally, creatively and critically; to communicate clearly, correctly, and persuasively; to gather and interpret data; and to engage the arguments of others with understanding and respect

We offer four degrees: BA, BS, MS, and Ph.D. In addition, we are involved in the BS degree program in Neurobiology, contributing one of the four core faculty members (Jeansok Kim[7]) to this program[8].

In support of these degree programs, the faculty teaching load consists of three courses and a seminar. With some exceptions, faculty members typically teach two courses at the undergraduate level and one course and a seminar at the graduate level. (See Appendix I for the typical load of courses and credits taught by faculty members). Some faculty members, especially in the area of Clinical Psychology, where professional accreditation requires us to offer an extremely full graduate curriculum, teach one undergraduate course, two graduate courses, and a graduate seminar. But, all faculty members are required to teach at least one course identified as a "priority" course by the department. Priority courses are almost always 5-credit undergraduate courses that serve large numbers of general education students, large numbers of undergraduate majors, or core courses for majors with laboratory components. The exception is the core graduate statistics sequence which is also identified as a priority course.

Some level of course reduction is given to faculty members who participate in departmental administration, including the Chair, Associate Chairs, Assistant Chair, and Director of Clinical Training. Course reductions are also given to incoming faculty members so that they might have time to set up their laboratories and get their research programs underway. We also typically give one course reduction to faculty members in the year before they come up for tenure, to prepare their dossiers.

In looking over Appendix I, you will note numerous faculty members that are not involved in administration and still seem to have an incomplete teaching load. This is due to the fact that quite a number (apx. 40% of faculty in 01-02) use grant monies to "buy out" of a course, sometimes two courses[9]. Faculty members are only allowed to buy out of courses if and when we can identify an appropriate research faculty member or part-time lecturer (PTL) to take over their teaching responsibilities. We hold those who teach for us, but who are not on regular Psychology department teaching lines, to the same standards of teaching excellence that we expect from "regular" faculty. We only hire individuals who we believe have strong teaching records or abilities, and assign faculty mentors to them when appropriate. The cost of a one-course buy out is 50% of the faculty member's time in the quarter that he or she buys out. Because the salaries of our line faculty, especially senior faculty, are generally higher than that of PTL's, our buy out policy actually allows us to teach more courses than might otherwise be possible, especially at the undergraduate level. As long as we continue to maintain our high standards for teaching excellence, the buy out opportunity represents a "win-win" situation; faculty

[7] Kim's faculty line is through the Neurobiology program.
[8] Description of our undergraduate and graduate programs do not include students in Neurobiology.
[9] At the moment, we also have two faculty members (Brenowitz, Marlatt) on NIH "Career Awards" which require them to make a major commitment to research. These essentially represent buy outs in that they substantially reduce these faculty member's courseloads.

members gain more time to focus on their research (often involving undergraduates in their labs), and we gain more courses in our curriculum. We would simply not be able to maintain an undergraduate program as large or varied as ours without leveraging resources in this manner.

2. Interdisciplinary Teaching

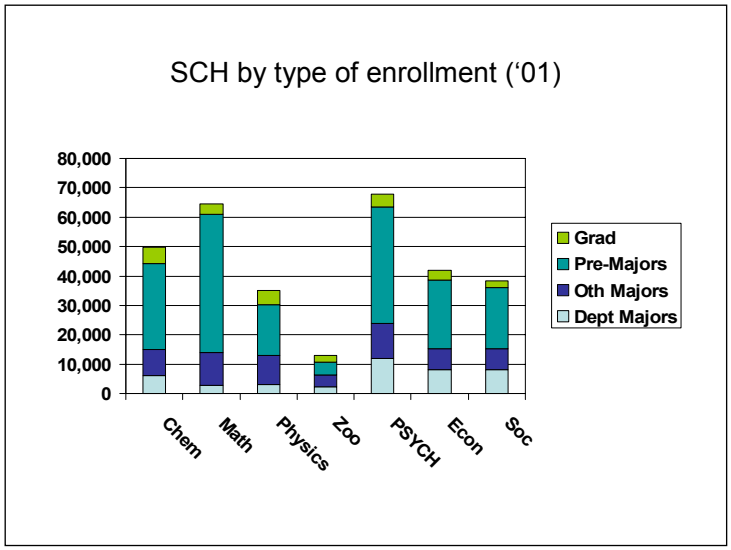
Our interest in teaching beyond the major is extremely high. But, due to the heavy demands placed on us by the size of the undergraduate degree program and our commitment to excellence within it, the last few years we have had to trim back all other teaching obligations. Thus, we have not participated as much in teaching in interdisciplinary programs as we would like. Nonetheless, this is something that we value and, whenever possible, we not only allow, but encourage our faculty to do so. One example is Ana Mari Cauce's participation in the interdisciplinary social science initiative between 1997 and 2000. As part of this initiative, which was funded by central administration through the *Tools for Transformation Fund*, Cauce helped to develop an interdisciplinary course called "The Family: An Interdisciplinary Perspective," that was co-taught with faculty in Sociology and Economics. The course drew close to 300 students, most still undeclared majors. The Psychology department supported this endeavor by allowing her to count this teaching as a regular part of her Psychology courseload.

A more recent example of our involvement in interdisciplinary teaching is Michael Beecher's participation in teaching through the UW Honors Program. Not only does Beecher's teaching count as part of his departmental courseload, but the Honors program acknowledges this contribution by providing funding for a graduate student Teaching Assistant in the department. In addition, next quarter Kim Barrett will be providing students with study abroad (Mexico) course options through the Comparative History of Ideas program. We are open to developing arrangements that allow our faculty to teach in interdisciplinary programs.

In addition to these ad-hoc arrangements, we are formal partners in the Neurobiology program as described. This involvement includes teaching two undergraduate core courses (Neurobiology 302, 403) for that program.

3. Size and Scope of our Teaching Program

The Psychology department is UW's top contributor to teaching from either the Natural Sciences or Social Sciences. As the chart below shows, we are unique in providing a great deal of teaching both for our own undergraduate majors and for majors in other departments. We surpass all comparison departments in these two categories. We are also a powerhouse in teaching pre-majors, or providing general education to students that are not majors, surpassed here only by mathematics, which has relatively few majors



Our contributions to teaching are also great at the graduate level. Looking at our teaching profile as a whole, one could say that we have a more balanced, or less charitably, a more demanding, teaching program than other comparable departments.

4. Teaching and Learning Outside of the Classroom

In addition to classroom teaching, faculty members in Psychology are expected to contribute routinely to the teaching mission of the department and College by sponsoring students in independent study and/or undergraduate research. As we note in the section on the undergraduate program, we were one of the first departments on campus to involve large numbers of undergraduates in our research, and we were one of first departments to

officially establish an internship program for students, which is an extension and elaboration of the service learning philosophy. Moreover, we have one of the UW's oldest Writing Centers, the only university resource outside of the classroom dedicated to helping undergraduates learn scientific writing. The Writing Center has been continuously open since 1991, and we have used departmental funds to keep it operating even after university level support for the center was cut back in recent years. We also offer a course in scientific writing at the graduate level, making us the only department specifically offering assistance in scientific writing to both undergraduates and graduates.

Evidence provided in the section on the undergraduate program demonstrates that, in comparison to those in other large majors, *students in psychology indicate the highest degree of satisfaction with faculty interaction outside of the classroom*. This is the element identified by the National Survey of Student Engagement as most important for engaged learning. In Psychology, much of our very best teaching happens when we work side-by-side with students in our laboratories or in the field.

In addition to our contributions toward general education and the teaching of majors, both in and outside the classroom, faculty members in Psychology have been involved in virtually every teaching program or initiative on this campus, including teaching in the Freshman seminar and Discovery seminar series. Nine of our faculty members were involved in the new 2003 Orientation program, introducing freshman and transfer students to teaching and learning at the UW. Three of our faculty members are members of the Teaching Academy (Cauce, Diaz, Kenney) and all three have facilitated sessions at the Faculty Fellows program, which provides new faculty hires with an introduction to the UW teaching mission and to UW resources in support of teaching. Diaz and Kenney have also facilitated sessions at the UW Institutes on Teaching Excellence and the Provost's Workshops on Teaching.

Diaz was one of the founders of the Provost's Faculty Workshops on Teaching, and three of our faculty members have attended one. He is also on the Advisory Board for CIDR (Center for Instructional Development and Research) and was appointed last year to the Carnegie Academy for the Scholarship of Teaching and Learning. His work with Carnegie and with CIDR has largely moved him in the direction of the study of how technology can be best integrated into higher education. Diaz has also played an instrumental role in UWired, a collaborative campus project to provide technological resources and support for the use of technology in teaching and learning at the UW. Last year UWired received the Educause Award for innovations in technology.

Cauce has been very involved with programming for the UW's top students, serving for three years as director of the UW Honors program. While there she co-wrote a *Tools for Transformation* proposal which provided seed funding for the Academy of Young Scholars, founded in 2001, and run jointly by Honors and the UW Robinson Center. The Academy for Young Scholars brings highly talented students to the UW after their sophomore year in high school. She is also a member of the UW's selection and mentoring committee for the university's nominees for national awards, like the Mitchell, Marshall, and Rhodes scholarships and is one of five members on the Western Regional Marshall Scholarship selection committee. Cauce was the invited speaker at the UW 2000 Freshman Convocation, she has been a keynote speaker at the 2001 UW Teaching Assistant Orientation, and more recently a facilitator at the newly instituted Annual TA Conference on Teaching and Learning.

Over the last few years, eight of our faculty members or part time lecturers (Chun, Kimpo, Kerr, Little, Manglesdorf, Olavarria, Passer, Zoellner) have participated in teaching workshops offered by the Office of Undergraduate Education or CIDR. These have included both the week-long summer programs, and the shorter week-end or day long programs during the year.

It is also worth noting that some of our faculty members have been nationally involved in research and/or policy related to education. This is most obvious in the work of Earl J. Hunt and Miriam Bassok, who have developed national reputations for their work on mathematics and/or physics education. Cauce has served on national workgroups targeted at reducing the achievement gap between White students and students of color.

Further information about our department's involvement in teaching and on innovations in teaching is provided in the sections on the undergraduate and graduate programs.

5. Teaching Effectiveness of Faculty

As befits a department in a discipline noted for its attention to assessment and evaluation, we keep close track of quantitative indicators of our effectiveness in teaching. These include tracking our student credit hours (SCH), SCH per FTE, number of majors, numbers of degrees and so forth. We track indicators of the quality of our teaching, both student course evaluations of individual faculty members and evaluations of our courses compared with those in other departments. We also monitor the results of course evaluations of our majors, post-graduation, conducted by the Office of Educational Assessment, and in 1993 we began to conduct our own exit questionnaires. We provide data from these sources, later in this document, in the sections on the undergraduate degree program and graduate program respectively.

While we are generally hard-nosed empiricists, we pay equally close attention to the qualitative indicators of our effectiveness. For example, the Director of the Undergraduate Advising Center and an Associate Chair read every single comment sheet provided by students in their exit questionnaires. Selected commentary, especially when negative, is also brought to the attention of the Chair. A report, noting both the good and bad, is distributed to all faculty members on a yearly basis with highlights discussed at the annual retreat. The Undergraduate Advising Center is an especially excellent source of information about our students, and we often hear about potential problems, with faculty or students, from them.

At the level of the individual, the Committee on the Improvement and Evaluation of Teaching assesses the teaching contributions of all assistant professors annually and conducts intensive reviews of teaching quality and effectiveness of all faculty at the time of renewal or promotion. Teaching contributions of all tenured faculty are reviewed at least once every three years. These assessments go well beyond looking at course evaluations. They include an examination of course syllabi for educational objectives, appropriateness of assignments, and currency of the reading list. The Teaching Assessment Committee also coordinates class observations, and, with the help of our Lead Departmental Teaching Assistant, commentary on teaching effectiveness and quality of graduate mentoring of faculty is actively sought from graduate and undergraduate students.

It is not uncommon for junior faculty members to work with CIDR to develop courses and fine-tune their teaching style. We do not have a formal mentoring system. Junior faculty members have indicated that they are not interested in having one.[10] Area Heads serve as sources of informal mentoring for junior faculty, working with them in constructing their courseloads, deciding upon appropriate courses for new faculty to teach, and developing a trajectory for their teaching schedules. A course reduction or two is standard for incoming faculty, so they have time to set up their laboratories, an do some grant-writing, before they move into a full schedule.

Faculty teaching is also evaluated at the time of raises to make sure that contributions to teaching are not unrewarded or overlooked. In years where we have had raises above the 2% minimum, a subset of the planning committee specifically evaluates each faculty member in terms of teaching merit.

As a back-up for the systems already in place to detect problems in teaching, and remediate them as early as possible, the Chair receives and reviews course evaluations for faculty members on a quarterly basis. She examines them closely, offering thanks and encouragement to those faculty members whose assessments are especially good. In the one case when a course evaluation was especially poor, she met with the faculty member to discuss the situation. It seemed like an anomaly, but it is being tracked carefully. Nonetheless, the main reason for reviewing course evaluations on a quarterly basis is to create a culture where faculty members know that teaching is valued.

6. Teaching Effectiveness of Graduate Student Teaching Assistants

Although it is rare in our department for graduate students to teach their own courses, they play an extremely important role in our teaching mission. Especially in our large courses, they are the ones that

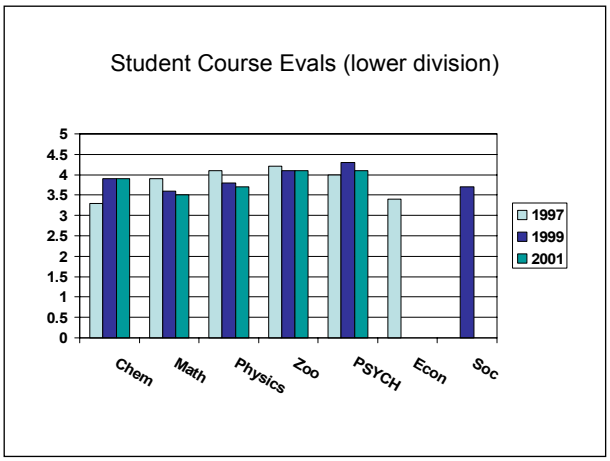
[10] Before preparing this report the Chair asked one of our junior faculty to conduct a "focus group" with other faculty and report back about what they saw as strengths and weaknesses of our program.

students interact with on a more personal level, and they serve as a link between the undergraduate student and the instructor.

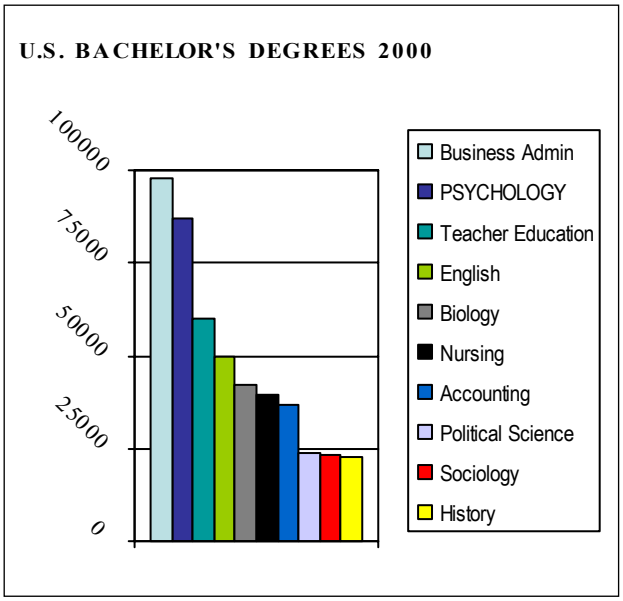
Required training for graduate students who hold teaching assistant (TA) positions is provided in several ways. First, new TAs participate in a university-wide orientation program held before the start of Fall Classes, the TA Conference for Instructional Development and Research, sponsored by the Graduate School through CIDR. This conference, inaugurated this Fall, was uniformly praised by our graduate students. TAs participated in 10 sessions, distributed over 3 days, with most sessions comprising workshops on topics related to teaching (e.g. Teaching Through Discussion; Presenting Information Effectively). Second, all incoming students in our department are required to register for and attend a multi-day orientation program. For the last decade, incoming students planning to be TAs participated in a microteaching session led by the Lead Departmental TA. During this session, students are videotaped presenting material and they receive evaluative, constructive feedback from the Lead TA.

Additionally, first-year graduate students attend a panel discussion on teaching led by faculty members. Throughout the year, the Lead TA holds several evening workshops for first-time TAs. Workshops deal with more psychology-specific teaching issues than the university-wide orientation (e.g., quiz sections, exam construction, constructing a teaching portfolio). Sessions also cover other issues that first year students typically encounter like time management and stress management.

In addition to these required TA training activities, the department offers one elective graduate course, Psychology 533, Teaching of Psychology, which was developed by Senior Lecturer Michael Passer. It is co-taught in spring by Passer and the Lead TA. This course, with enrollment limited to eight students, has two major goals. The first is to stimulate students' thinking about pedagogical issues that they will need to address throughout their teaching career, and the second is to develop specific skills that will enhance their effectiveness as a TA and, eventually, as a course instructor. The course includes three microteaching sessions per student, with extensive feedback and videotape analysis provided for each session.



The chart on the left presents the average student evaluation ratings (on a scale of 1 to 5) for TAs in lower division courses. Our efforts to prepare TAs are paying off. Student course evaluations of our TAs over the last 5 years have been the best among the set of departments we compare ourselves to. This is in spite of the fact that our class sizes are between 30 and 40% larger than that of departments whose ratings approximate ours (e.g. physics and zoology). Psychology remains one of the most highly rated departments when course evaluations of TAs in upper division classes are examined as well.



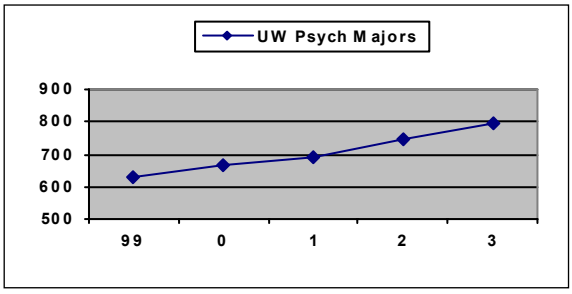
Section C. Bachelors Degree Program

1. Demand for the Undergraduate Program

Psychology is the most in-demand liberal arts major in the U.S. and the second most popular major overall (U.S. Department of Education Statistics, 2000). Various reasons have been offered for its popularity. Psychology is very practical and it asks questions that are of interest to most people: How does memory work? What is the function of a bird's song? How do visual illusions work? How do we learn? Why is my mother depressed and how can she be helped?

We not only ask interesting questions about the mind and behavior, we attempt to do so in a way that is precise. We are committed to asking questions and testing hypotheses in a way that is systematic, reliable, and accurate. In this sense, our field fosters deep critical thinking and healthy skepticism. Finally, as we noted earlier, the field is staggeringly diverse.

The things that make the major attractive across the country apply well to the Psychology Department at the University of Washington. Thus, it is not surprising that we are at the forefront of undergraduate teaching in the College of Arts and Sciences. We are extremely productive in both general undergraduate education and the education of psychology majors. Our Introduction to Psychology course (101) is *the* most popular course on campus, taken by about half of all undergraduates at the University of Washington. Last year more than 3,500 undergraduates were enrolled in Psychology 101. More than 7,000 undergraduate enrolled in one of our general education courses. We also served about 4,000 students in our upper level courses, most of them majors.



As the chart on the left shows, despite an attempt to decrease the size of the major in the early 1990's, the number of students majoring in Psychology has increased steadily over the last five years. We were the top department in the College in terms of the number of students graduated in 2003 (500), a much more meaningful measure of productivity.

Not only do we work with large numbers of undergraduates through general education and in the major, but we do so efficiently and at relatively low cost. In 2001, the average Natural Science expenditure per SCH was $134, with an average Social Science expenditure of $90 per SCH. The average expenditure per SCH in Psychology was $78.

2. Undergraduate Program Objectives and Instructional Quality

Our undergraduate program is one of the best in the country. The Princeton Review's Gourman Report of Undergraduate Programs in Psychology (1997) ranks us as number 19 in the nation, or at the 93rd percentile, awarding us an average quality rating of 4.44 out of a possible 5. (The most highly rated program, Stanford, was rated 4.66). One of the key challenges for our department is balancing the desire to provide access to students wanting to take psychology courses as part of their general education and meeting the needs of the many students who seek to major in psychology. With this in mind, our approach to crafting our undergraduate psychology curriculum is based on five key principles:

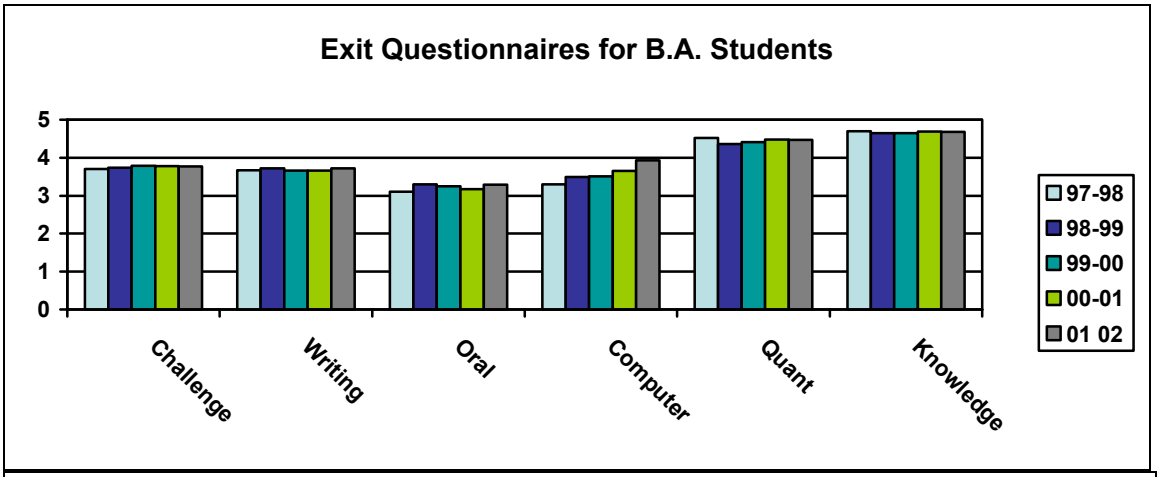
1. Explicitly addressing the diverse goals of general education students and majors
2. Offering courses in logical sequence
3. Developing small, interactive learning contexts
4. Providing undergraduates with opportunities to participate in the research discovery process
5. Making links between psychological principles and real-world human and societal problems

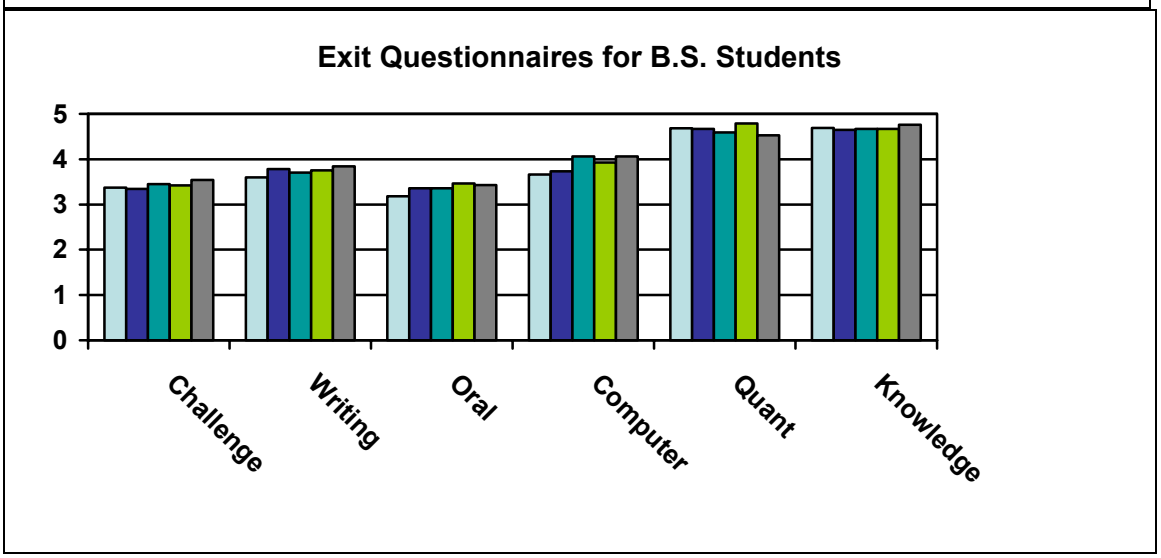
We strive to deliver a set of offerings to our undergraduates that strengthen the general education mission of the college and provide an appropriate introduction to the major for students who will go on to pursue a degree in Psychology. In order to do this best, over the last few years we have revised the undergraduate curriculum so that it differentiates and customizes courses for general education and major students with this end in mind.

These general goals for the undergraduate program are both consonant with the A&S goal of promoting a more student-centered and learning-centered model of undergraduate education and with results of departmental exit questionnaires.

The next two charts show selected results of exit questionnaires from Psychology majors over the last five years. Ratings represent six different quality dimensions: intellectual challenge, written communication skills, oral presentation skills, computer skills, quantitative aspects of research, and knowledge of human and/or animal behavior. All ratings were made on a five point scale, with 5 indicating "excellent. Ratings are fairly consistent over the five years, with a slight upward trend. Results suggest that majors are especially satisfied with their knowledge of human/animal behavior and with their

quantitative and computer skills. In contrast they were less satisfied with their education in writing and speaking effectively. There is also room to make coursework more intellectually challenging.





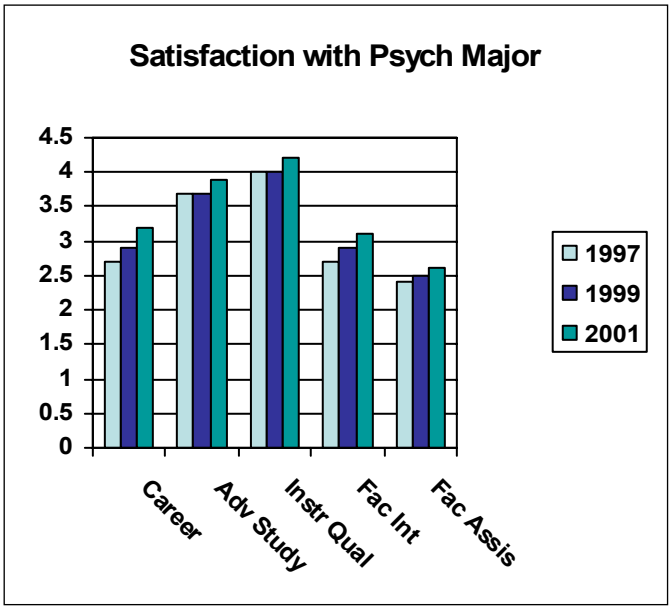
We have been working hard to improve the quality of the educational experience of our majors, especially in areas of relative weakness. Over the last few years, we have made significant progress in this respect, in part by streaming majors and general education students separately through core courses. This allows us to more readily offer a curriculum that is coherent and challenging.

We have also worked to strengthen training for all majors in research methodology and use of computer-based tools. We have added new components to the research methods class required for admission to the major (Psych 209, which was increased from 4 to 5 credits in Fall 2001). We also increased the challenge in core majors classes. This effort has entailed a substantial increase in commitment of both TA funds and reader monies to these courses. For example, we are now allocating one TA per 50 students in our majors 300 level courses, up from one TA for every 100 students.

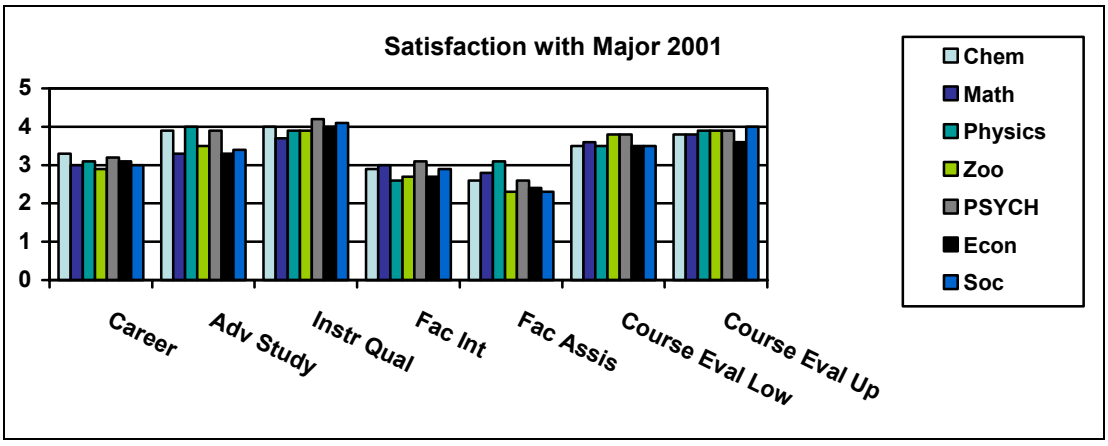
Buy out recapture funds have been used to create more advanced 400-level courses that are small and interactive. Such courses challenge and enrich our majors' education. Doing this is essential to our goals for undergraduate education, but expensive relative to the cost per SCH of large lecture courses. In addition, we have had to dig deeper into our buy out recapture funds to maintain our commitment to the Psychology Writing Center. We are also using recapture monies for reader funds to promote writing within our courses and increase the writing skills of our students. Yet, our ability to continue to do this,

while continuing to offer as many general education courses is at risk. Recapture funds have decreased considerably in the last biennium.

It is too early to fully assess the quality improvement efforts in the undergraduate program. Post-graduation surveys by the Office of Educational Assessment (OEA) and departmental exit questionnaires still largely reflect the educational experiences of students pre-dating full implementation of these changes. Nonetheless, we are happy to see the data from the most recent OEA surveys suggest that satisfaction with the major has been improving steadily over the last five years. The chart below shows student ratings of the psychology major, based on exit questionnaires conducted one year after graduation. Ratings are made in five key areas: readiness for a career, readiness for advanced study, instructional quality in the major, faculty interaction outside of the classroom, and faculty assistance in career planning. Data clearly indicate that we are on an upward trend in all areas. Our efforts to improve the major seem to be working.



The next chart compares student ratings of the psychology major, in these same five areas, with that of other large natural science departments. Sociology and Economics were also included in comparisons, as they are the two large social science departments most similar to us in having a quantitative orientation. Two additional indicators of quality, average student course evaluations for lower division and upper division courses are also included on this chart. As these results show, compared with departments most similar to ours, Psychology has the highest ratings for Instructional Quality within the Major, with an average of 4.2 on a 1 to 5 scale. Psychology is also at the top in terms of average student course evaluation ratings for lower division (100-200) courses. Most noteworthy, Psychology is at the top in Faculty Interaction with Students Outside of the Classroom, a measure considered the best proxy for engaged learning on the part of students (National Survey of Student Learning, 2002).



Our department's high ratings for our undergraduate program are especially remarkable since the average size of our lower division (88) and upper division (42)[11] classes are the largest of any of the departments we compare ourselves with. The only area where ratings of psychology are not especially high, compared with other majors, is in faculty assistance in pursuing a career. This is not surprising, since many of the career paths of our undergraduates (e.g., social service careers) are not those where our faculty members are best prepared to give advice. The relatively high ratings for career readiness, however, suggest that our undergraduate advising office is making up for this fact.

Anecdotal accounts from our instructors also suggest that changes to the major have been quite positive. They report greater enjoyment in teaching the majors-only core courses. In two classroom observations of majors-only cores that the chair completed this year, she was extremely impressed at the high skill level of students in these classes and with the way it enhanced the teaching and learning environment. For example, in one class that she observed, when the instructor was not sure of the answer to a student question, she asked if any students in the class knew anything more about the subject matter. Two students, who were completing 499 research, were not only able to answer the first student's question, but to add significantly to the classroom discussion.

Comments from students, in response to the Psychology exit questionnaires, also suggest that changes in the major have been positive. In particular, we are getting fewer comments than in the past about course content overlap, something we have worked hard to eliminate or reduce.

3. Innovations in Teaching

Many of the new and highly touted innovations in teaching that are only now being applied across campus have been a standard part of our curriculum for much of the last decade. For example, we are one of the first majors to consistently involve undergraduates in the research enterprise. Last year (02-03) we supervised more undergraduate student research than any other UW department, with 441 individual students participating in research for credit with our faculty members, accounting for over 900 total registrations across all quarters. We have worked hard in the last decade to make 499 a meaningful experience for students, and students develop contracts with instructors to ensure that they fully understand what their research participation will entail. Comments about 499 from exit questionnaires were almost uniformly positive including "Best experience I had at UW," "My experience was outstanding," "All positive!" and "I had an opportunity to present at a conference."

Psychology has also been at the forefront in terms of encouraging students to apply skills learned in the classroom to practical settings, either through Psychology 497 internships or through service learning components in our classes. Psychology 497, our internship program, was revitalized in 1997 as a regular part of our curriculum. The number of students participating in 497 has grown steadily over the years and last year we had over 100 students participating in the program. Students can choose from placements at agencies or centers like Planned Parenthood, Teen Feed, Seattle Mental Health Institute, King County Youth Services, New Beginnings, and the Center for Battered Women. Positions at these agencies include case aide, case manager, community outreach intern, crisis line phone worker, ESL tutor, life skills facilitator, and mentor program intern.

It is also worth noting that in 2002 Nancy Kenney, one of our Associate Chairs, won the first award bestowed by the UW's Carlson Center in recognition of her creative use of service learning opportunities in her large lecture classes. Various other faculty members in Psychology teach, or have taught, courses with such a component.

We were one of the first departments in the College to open a writing center (1991), the only resource outside of the classroom helping undergraduate learn scientific writing. The Psychology Writing Center (PWC) is open at least 20 hours a week and consists of a half-time faculty director and a graduate writing assistant. Writing assistants meet one-on-one with students enrolled in psychology courses with writing assignments. In these highly interactive meetings, tutors review the student's understanding of the

[11] The average size of our lower division courses may be larger now that we have developed major core courses at the 300 level and moved small labs for majors to the 300 level.

assignment, have the student explain the paper's logic and main arguments, evaluate the paper for clarity and accuracy, and serve as a general resource for related advice on, for example, searching the literature, structure and content, and citing sources. This past year, and consistent with previous annual averages, the PWC scheduled 578 appointments for 274 students from 53 courses, or over 10% of the students enrolled in psychology courses with writing.

The PWC also provides basic information on scientific writing in class lectures and via its web site (http://depts.washington.edu/psywc/), which, according to a Google search, is one of the most widely used Internet resources on scientific writing in psychology. On the site, you will find 20 writing guides, including ones on writing literature reviews and lab reports, presenting tables and statistical results, and citing electronic references); some have become required readings not only in our courses, but in courses across the country. In this last year alone staff or faculty at Harvard Graduate School of Education, University of Michigan, Colgate University, Purdue University, and University of Western Ontario have either requested to include a link to the PWC on their web pages or to use our materials in their classes.

In line with principles of engaged learning, we require all of our majors to take a course with a laboratory component, which requires them to actively participate in data collection and analysis. In these courses students learn how to apply the tools of the science of psychology in answering hypotheses that they generate, usually as part of a group project. In support of our desire to encourage student learning by doing, in 1999 we established an instructional laboratory (Statistics and Methodology Lab, SAMLab) for students in our undergraduate quantitative classes under the leadership of Assistant Chair, Laura Little.

A *Tools for Transformation award* (2001-2002) to Associate Chair Beth Kerr and Laura Little led to the development of a shared instructional website (Statistics and Methodology Archive for Research Training in Psychology, SMARTPsych, for psychology courses in research methodology and statistics (http://courses.washington.edu/smartpsy/). SMARTPsych includes computer tutorials for data management and analysis, lessons on a variety of methodological issues, menus for choosing statistical tests, and a cross-linked glossary of standard terminology for statistics and methodology in psychology. The centerpiece of the website is a series of nine short research vignettes that present research examples appropriate for undergraduates beginning coursework in the psychology major. Many of the vignettes take advantage of web technology to provide links and sample tasks that would not be possible with paper-based presentations. These vignettes stress different studies conducted by faculty members at the University of Washington, so they also introduce students to the varied experiences they may have if they take part in undergraduate research. The website improves coordination and communication among instructors of methodology and statistics classes and instructors in the upper division courses that follow these classes.

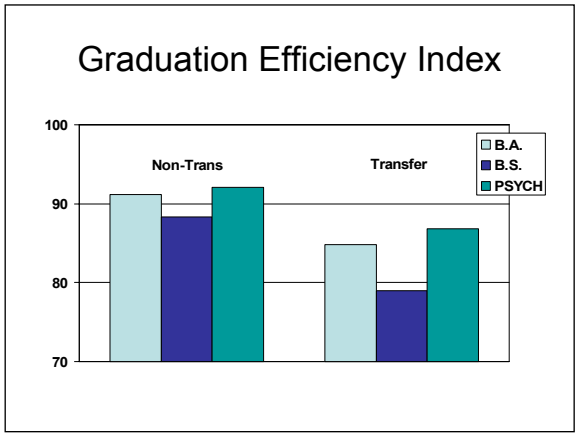
Some of the top students in our program, about 10 to 20 a year, are invited to participate in Psychology 496, Undergraduate Teaching Experience in Psychology. This experience, which is closely supervised by instructors, trains students as assistants in quiz sections or as supplemental tutors for undergraduate psychology courses. The 496 experience is designed especially for those students planning graduate work or education certification.

The type of engaged learning that we encourage throughout the curriculum, reaches its culmination in the Psychology honors program. In this program, our top undergraduates are afforded the opportunity to work very closely with faculty on a junior paper and senior thesis. This usually entails original, and often publishable, research. The program has been improved and considerably expanded in recent years, with a cohort of 25 students entering the program in 2003. Students in this program present their research, colloquium-style, at an end of the year Undergraduate Research Festival, that is typically attended by other students, their faculty mentors, and other faculty in the department.

All students in the department are eligible to compete for the two Guthrie Prize Awards. One Guthrie award is given for the top literature review paper in the department, the other award for the top empirical study. The Guthrie prize entails a small cash award and having the student's name engraved on a plaque in Guthrie Hall.

Another way in which we recognize and encourage high quality and/or innovative undergraduate teaching is by giving a cash award and diploma for a "Distinguished Teaching Award." This award goes

to the graduate student(s) best at enhancing the educational experience of our undergraduates. The Psi Chi organization, which has sponsored a graduation ceremony for our majors since 1999, also selects one of our faculty to deliver the keynote address. This is an honor in recognition of high quality undergraduate teaching.

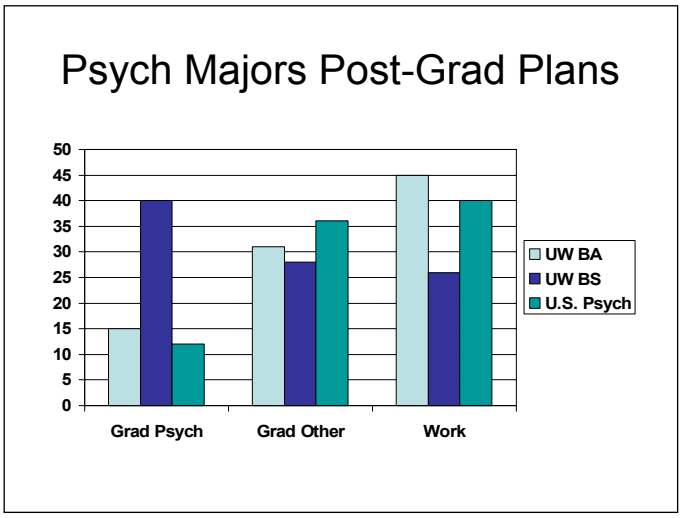


Finally, it is worth noting that six members of our faculty have won the university-wide Distinguished Teaching Award since its inception in 1970. Three of our graduate students have also won a UW Excellence in Teaching Award, an award that began in 1983.

4. Time to Graduation and Graduate Efficiency Index[12].

In Psychology, we work hard to eliminate any bottlenecks that interfere with moving through the major in a timely manner. Even in the face of the seemingly overwhelming demand for our major, our students graduate in a timely manner. In 2001 non-transfer students majoring in Psychology took, on average, 4.4 years to graduate, better than all science departments except Speech and Hearing Sciences, which has very few majors. This rate of progress toward graduation is also equivalent or better than that of most large social science departments.

The chart above compares the graduation efficiency index for Psychology majors (averaged across the B.A. and B.S.) with that of B.A. and B.S. recipients in the College of Arts and Sciences. Once, again, our majors fared well, both in general, and in comparison with other majors.



5. Career Options for Graduates

Data provided by the American Psychological Association suggests that psychology majors, when they seek full-time employment, typically do well on the job market, finding entry level jobs in everything from education and social services to business, government, and health care. The psychology major also serves as good preparation for graduate school. The chart at the left illustrates the post-graduation plans of psychology majors in our department (02-03) compared with those in comparable institutions.[13] This chart indicates that, in keeping with our goals for B.S. students, they are more likely to plan a graduate career in Psychology. And, in fact, both B.A. and B.S. majors here are more apt plan to pursue post-graduate study in psychology than is typical for their peers in other settings. This may reflect the heavy research orientation of our faculty and our program.

Many psychology majors also plan to purse graduate studies in other areas. According to national data, psychology majors pursuing graduate study outside of Psychology most often do so in law, social work, or education. In our program, students planning to pursue other graduate studies are somewhat more apt to obtain a B.A. than a B.S. degree.

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[12] Information about time to degree and GEI comes from the UW administrative factbook, not departmental profiles. We fare well in comparison to other departments in the College in both.. But, information from the departmental profile that indicates that our non-transfer students took, on average, 3.8 years to graduate in 2001 did not appear accurate.

[13] Data from 4-yr institutions with a graduate program as reported in APA survey of undergraduate department of psychology (APA Monitor, 11/02).

In keeping with national trends, data from our exit questionnaires indicate that almost half of our BA students plan to work right after graduation. National data suggest that the problem solving and interpersonal skills obtained by Psychology majors are especially sought after by employers, with the top job offers for graduating psychology majors coming in sales, management (as trainees), social work, teaching, and counseling. Surveys of our UW graduates suggest that they go into a range of jobs, including software test engineer, sales representative pharmaceutical sales representative, case manager, corrections officer, teacher, bank teller, and paralegal, among others.

6. Accomplishments of Undergraduates in Psychology

We have not kept especially good track of the career trajectories of our undergraduates, whether they go on to graduate school or straight to work. Nonetheless, all indications are that some of our students go on to do extremely well. A few examples of the accomplishments of our graduates over the last decade are provided below. There are many, many more.

An Honors undergraduate working with Professor Robert McMahon, **Roxana Marachi** completed an undergraduate senior thesis that led to a first-authored publication (Marachi, R., McMahon, R. J., Spieker, S., & Munson, J. (1999). Longitudinal assessment of the low-end specificity of maternal reports of depressive symptoms. *Behaviour Research and Therapy, 37*, 483-501). She went on to complete her Ph.D. at University of Michigan and is now an Assistant Professor in the Psychology department at California State University at Northridge.

Elva Arredondo immigrated to the U.S. from Mexico while in her teens. She entered the UW through the Equal Opportunity Program (EOP) and worked with Ana Mari Cauce on research examining street youth's sexual risk-taking. She received the Vice President's medal for her achievements while an undergraduate and went on to pursue a graduate degree in Psychology at Duke University. While at Duke she conducted research on women of color's risk for breast cancer, receiving a Dissertation Award from the Association for Women in Psychology. She is presently completing a post-doctoral fellowship at San Francisco State University Hospital.

Eric Uhlmman worked in the research laboratories of Professor Tony Greenwald, and served as an undergraduate teaching assistant for statistics with Professor Laura Little. A project he began as an undergraduate recently resulted in a first-authored publication (Uhlmann, E., Dasgupta, N., Elgueta, A., Greenwald, A. G., & Swanson, J.E. (2002). Subgroup prejudice based on skin color among Hispanics in the United States and Latin America. *Social Cognition, 23*, 198-226). He is presently completing his graduate degree at Yale University.

Jonathan Gray worked in the research laboratory of Professor Geri Dawson. As a 499 research assistant he created protocols and manuals for the Event Related Potential (ERP) lab, many of which are still in use. He is currently a Psychology graduate student at Boston University.

Erica Wood, was co-author on a journal article with Professor Lynn Fainsilber Katz (Katz, L.F., & Woodin, E.M. (2002). Hostility, hostile detachment, and conflict engagement in marriages: Effects on child and family functioning. *Child Development, 73,* 636-651) and is now in graduate school at the State University of New York at Stony Brook.

Kevin Bronson-Castain worked on research focusing on infant vision with Professor Davida Teller. This work led to several conference presentations and to his decision to attend graduate school. He begins at University of California at Berkeley this coming Fall.

Deidre Kolarick worked in the behavioral neuroscience laboratory of Professor Sheri Mizumori, where she served as co-author for a presentation at the Society of Neuroscience. She is presently working, with Mizumori, on a paper for publication and has started graduate school at Yale University.

While working with Professor Ellen Covey, **Katy Toreson** published an abstract, "Brain atlas of the big brown bat" in *Eptesicus fuscus*. She is presently completing a medical degree at Albany Medical College.

Jamie Gum is presently applying to Ph.D. program in developmental psychology. She worked in the developmental laboratory of Professor Stephanie Carlson as a Mary Gates Scholar. Based on this work she presented a poster on chidren's imaginary companions at the Jean Piaget Society (June, 2003) and at the UW Undergraduate Research Symposium. She will soon be so-author, with Carlson and a graduate student, on a professional publication.

Elisa Na completed her honors thesis under the supervision of Research Professor Douglas Fitts. She also worked in his lab as a timeslip technician. Her thesis was presented at meetings of the Society of Neuroscience and she is presently working on publishing its results. Elisa is now in graduate school at the University of Iowa.

Matthew Alexandar was awarded one of twelve 2002 George Mitchell Scholarships. This program, that identifies outstanding young Americans with the qualities of academic distinction, leadership and community service, provides a year of post-graduate study at universities in Ireland and Northern Ireland. Matt received an MA in Peace and Conflict Studies at the University of Ulster in Northern Ireland and this year he is studying in Columbia on a Fullbright Scholarship. Matt's accomplishments at the UW were impressive. The questions and concerns spawned by the World Trade Organization meeting in Seattle led Matt to create SAGE, Students Advocating Global Equality. SAGE educates students about global issues related to social justice, introduces them to local and international service opportunities, and stages forums where students learn to deliberate about radically differing positions. For his work with SAGE, Matt received a Mary Gates Leadership Grant. Matt also received the 2000 UW's Edward E. Carlson Student Leadership Award, given annually to a student who has demonstrated exceptional leadership and commitment to public service. Matthew's global vision has led him to serve across the world. During the summer of 1999, he tutored elementary students in Costa Rica. The following year he volunteered for several non-governmental organizations in Guatemala and Honduras, where he served as a translator for physicians and public health workers. In December 2000, Matthew was a human rights observer for Enlace Civil in Chiapas, Mexico. During the summer of 2001, Matthew attended a seminar on anti-racism in Havana, Cuba as a representative of El Centro de la Raza, a Seattle community organization.

7. Looking Ahead: Challenges and Constraints

Looking toward the future, the number of new admissions to the major continues to rise. All indications suggest that we will continue to be one of, if not *the*, largest major in the College. Our problems with growth may be further exacerbated as other majors, like Biology, tighten requirements for entry. Moreover, the percentage of Psychology undergraduates who plan to earn the B.S., compared with the B.A., is increasing. The B.S. degree is more demanding on our faculty and more resource intensive, as it requires two courses at the 400 level and a more extensive statistics sequence.

This year, in order to stay within our budgetary constraints, we offered fewer courses than in the past. We will enroll about 1,000 fewer students in our 100-200 level courses, while offering roughly the same number of slots in our 300-400 level courses to accommodate the enrollment bulge. Without additional resources, this trend is likely to continue. Also, with more students in the B.S. track, we fear that undergraduates may begin to have a more difficult time getting through our degree in a timely fashion, decreasing our efficiency index.

In this vein, it is also worth noting that our TA allotment was cut back while the number of undergraduates taking our classes, both through general education and the major, was increasing. During the last several years we have been, in essence cannibalizing ourselves. We rely especially heavily upon buy out recapture funds to supplement our undergraduate teaching and provide the classes necessary to allow our students to graduate in a timely fashion. But, as our faculty becomes younger, and recapture somewhat less frequent and at lower rates, we are becoming increasingly unable to meet the teaching needs of both our majors and other undergraduates interested in our courses. This problem is compounded by the fact that more of our majors are in the B.S. track, which is more teaching intensive.

The unceasing demand for our classes, at the same time that we are facing dwindling resources for student education, both externally and internally,[14] also threatens our ability to offer the type of student centered, lab-based learning experiences we have been working so hard to provide our students. Already our 400 level classes are getting larger as instructors try to accommodate graduating seniors.

[14] We discuss difficulties maintaining our present level of external funding in the section on Scholarship/Research.

Due to the strain on our resources, we fear that we may not be able to maintain the Psychology Writing Center in the years to come, perhaps. In addition, due to both budgetary and space constraints we are unable to meet one of our goals, the creation of an undergraduate study center that would integrate academic support services to entry-level, pre-major, and major students.

There is certainly room for improvement in our undergraduate program, but our major concern is how to maintain our present level of excellence is the face of competing demands. We have been able to keep majors running through it in a timely fashion, while performing a great deal of general education. But, we have been running on debt. We put every penny from our buy out recovery budget, and sometimes more[15], back into the classroom, rather than using some to support more basic infrastructure and support services, such as a T.A. coordinator, which we desperately need. It is not clear that identifying classroom teaching as such a high priority is a wise strategy, nor has it been a rewarded one.

D. The Graduate Program and Graduate Students[16]

1. Program Objectives

Our psychology graduate program is highly rated. In the last comprehensive ranking of Psychology Ph.D. programs, conducted by the National Research Council, we were tied at 12 with a quality score of 66 (compared to a high of 72 by Stanford). This put us in the top 5% of Psychology graduate programs in the country and in the company of outstanding programs such as University of Pennsylvania, Princeton, Cornell, UC Berkeley, UC San Diego, Carnegie Mellon and University of Wisconsin (all ranked between 9.5 and 14.5, with ratings from 65 to 67). Other national rankings, from the Gourman report (1997) to U.S. News and World Reports (2002) put us consistently in the top 20. The Clinical Psychology area, the largest in the department, was recently rated second in the country.

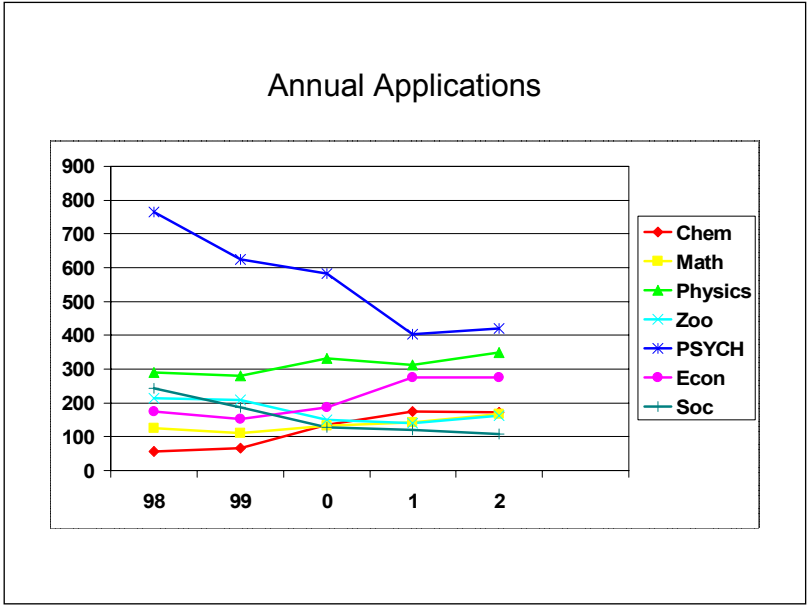
The mission of our Ph.D. program is to prepare future researchers and scholars who will be leading the field with innovative thinking and research. Our students gain the expertise and intellectual vigor not only to extend their advisors' successful lines of research but to identify new problems and new ways to tackle them. We seek to train our doctoral students also in the methods, philosophy, and ethics of scientific inquiry. We also seek to train psychologists who will apply this knowledge in educational, business, medical, and therapeutic settings.

We believe that graduate students will benefit most from a graduate program which moves them swiftly into research, teaching, and, for clinical students, clinical training. We take great pleasure in watching our graduate students develop scientifically and professionally. We also believe that graduate students will benefit most from a student culture that promotes innovation, collaboration, and the excitement of discovery. These objectives and values are quite similar to those of other highly rated, research-intensive graduate programs.

The presence of a relatively large, highly rated, Ph.D. program in Psychology has numerous benefits, both to our department and to the region. The presence of bright, industrious, and skilled students who strive toward the Ph.D. is essential to the research productivity of our faculty. Scientists no longer struggle in a garret by themselves; virtually all science is conducted by teams of investigators. Graduate students play a vital role on these teams. The presence of these excellent students also greatly

[15] This year almost the entire Chair's reserve ($5,000) was spent to pay for undergraduate teaching.

[16] Although the UW Psychology program offers both the M.S. and Ph.D. degrees, we do not offer a master's program.. Students may earn the M.S. degree enroute to the Ph.D., but we do not accept students who plan to complete the M.S. only. We offer no significant incentives to pursue the M.S. degree, we do not routinely track student progress toward an M.S., and award of the M.S. does not change a student's status in the program. For these reasons, the section on the Graduate Program and Graduate Students focus only on the Ph.D. program.



benefits our teaching programs where they serve as Teaching Assistants and sometimes offer their own courses.

While the lion's share of our graduate students go on to take positions out of state, some stay within the region, working in area hospitals, colleges, corporations, in private practice, or in research settings[17]. Over the last decade, we have placed students within the UW as research faculty in the medical school, nursing, and social work. We also have graduates on the faculty at Seattle University and Seattle Pacific University. These graduates contribute positively to the state economy, whether by strengthening local businesses or by bringing in external funding for research. They also contribute to quality of life in the state, through their work in providing services to individuals in need.

2. Demand for the Psychology PhD: Graduate Student Recruitment and Retention

There is a great deal of demand for the Ph.D. in Psychology. While there is no definitive source for the most popular graduate programs, since the inception in 2000 of GradSchool.com, the Internet's leading source of graduate school information, Psychology has dominated the list of most popular graduate programs. The number of "hits" for information about Clinical Psychology programs is usually among the top three, along with Business Administration and Engineering. Other subspecialties in Psychology are also well represented in the top 20.

Because of the strong interest in the Clinical Psychology Ph.D. we have not had to work too hard to recruit top applicants in this area. Due to the heavy demands of reviewing the nearly 800 applications we typically received in the early 1990's, we actually tried to discourage some applicants by better tailoring our materials to the types of graduate students we are most interested in admitting, those seeking careers in which they will contribute to the science of psychology. These efforts have paid dividends, and the number of applications has dropped off to more manageable levels, while increasing in terms of quality.

In other areas of the department, we have had to work harder to attract top applicants. In these areas, much of our recruiting is done at the level of individual faculty, either through colleagues or at conferences. More recently, we have also worked hard to improve our website in support of our recruitment efforts. And, we are planning to make our recruiting brochure available on the web and updating it in order to better highlight the strengths of our program. As the chart on the next page shows, we receive more annual applications to our Ph.D. program than do any of the UW departments we compare ourselves to, although 2/3 of them are for the Clinical program.

Given the volume of applications we receive, it should not be surprising that we generally deny admissions to about 90% of applicants. In keeping with our strong national ranking, we do a a good job of attracting the students that we make offers to. Over the last five years we have admitted between 62 and 67% of the students that we accept. This compares favorably with acceptance rates that range from 38 to 43% in the UW Social Sciences, and 45 to 47% in the Natural Sciences.

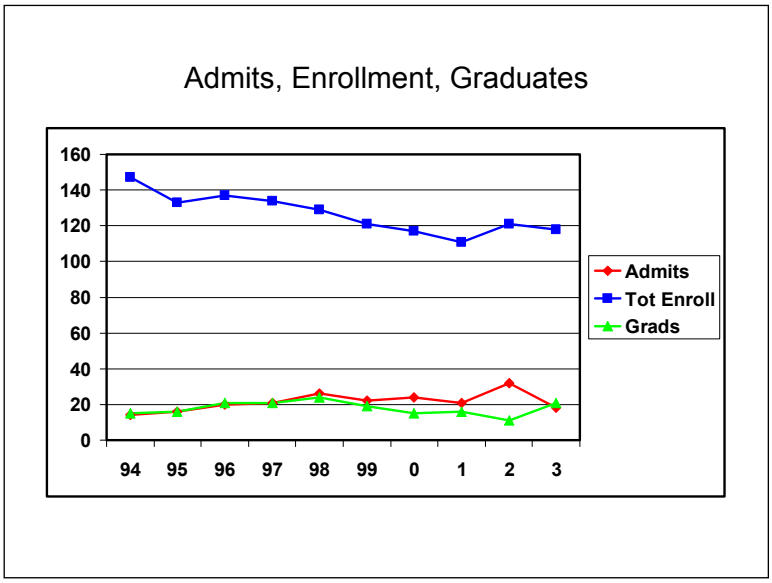
Once students are admitted to the program, we work hard to retain them. Over the last decade fewer than 5% have been lost to the program due to academic problems. Another 5-10% leave due to personal reasons or a change in interest. In order to minimize even this small attrition rate, we started assigning all students a secondary advisor three years ago. In this way, we ensure that all students admitted have a faculty member committed to assist them should things not work out with the primary advisor. This has been a successful way of making sure that students get to know multiple faculty, but

[17] We do not have good data on this, but after graduation about 20% of our students take a first position within Washington state.

because student and advisor matches are often highly specialized, it does not always ensure a back-up advisor in the student's primary area of interest.

3. Graduate Student Characteristics

Given the highly competitive nature of admissions to Psychology, the quality of students that we accept into the program is extremely high. Over the last five years, the average GPA of entering students was between 3.61 and 3.75, above the mean for the UW Social Science or Natural Science departments. Mean GRE scores of our entering students are likewise high. Over the last five years, average matriculant GRE was 605 Verbal, 682 Quantitative, and 687 Analytic. The Verbal score is about average for the Social Sciences, and somewhat higher than average for the Natural Sciences; the Quantitative score is about average for the Natural Sciences, and higher than average for the Social Sciences. The Analytic score is somewhat higher than average for both the Social Sciences and Sciences. Like our program, our students represent the best of both worlds.



The size of incoming classes has stayed relatively constant across the last decade, at between 20 and 25 new students each year. As the chart shows, we had an all-time high for new student admissions in 02-03, with 32 new students. That was followed by this year's smaller admission of 18.

When we examine the total enrollment of students in the program over the last decade, we see that the size of the program has decreased slightly. We have gone from a program of more than 130 graduate students through 1997, to one where typical enrollment dropped to about 120 from 1999 to the present. This is, in part, a result of our getting students through the program more quickly now than in the last decade.

About 2/3 of our students are female, and the percentage of female students in the program has increased over the years. In addition, about 20% of our students come from ethnic minority backgrounds. A more complete description of diversity amongst our graduate students is provided in Section G of this report.

4. Graduate Study Service Appointment and Funding

The vast majority of our students receive financial support throughout their graduate studies, and that has remained steady across the last ten years. This year, of the 118 students in our program, 108 of them enrolled fulltime, 112 are receiving financial support: 54 as Research Assistants (RAs), 47 as Teaching Assistants (TAs), 8 through Fellowships, and 3 through Traineeships.

The number of students supported through TAs was at a high of 68 in 95-96 and has been declining steadily since then. Starting in 1999 more of our students were supported by RAs than TAs, a trend that has continued to the present. Our pattern of student financing, both in terms of providing support for most of our students, and in terms of having more students on RAs than TAs, is quite typical for units in the Sciences. However, unlike the other Science programs we compare ourselves with, Chemistry, Mathematics, and Physics, for example, we are not in a position to guarantee students up to five years of support, or to guarantee support during the summer. It is also worth noting that while Psychology teaches more SCH's than any other department in the sciences, and indeed, almost a third more than Chemistry and Physics, these three departments have more TAs available to them than we do. This not only has implications for our funding, but also for the workload of our graduate students.

The duration of a graduate student service appointment is a quarter long, whether it is an RA or a TA. We do this, rather than making year-long appointments, to give our graduate students maximum flexibility in arranging for a mix of TA and RA funding. For example, it is not unusual for students to hold an RA for two quarters, and a TA for the remaining quarter, or vice-versa. Students are especially reluctant to commit to being supported on a TA for the entire year.

Our department has three levels of TAships: TA, TA1, and TA2[18]. Students are considered TAs their first year in the program, and, assuming adequate performance, they are promoted to TA1 at year's end. Students are promoted to TA2 once they have successfully completed generals. At this point, they also become eligible to teach their own courses if they have had adequate preparation otherwise.

TA funding is awarded on a priority basis, with incoming students in good academic standing ranked highest in priority, followed by others in Years 2 through 4. We have, throughout the last decade, always been able to fund students in these first two priority levels during the academic year through TAs, RAs, or fellowships. Students in their fifth year or beyond are at the lowest level of priority and the availability of TAs for them varies from quarter to quarter.

TA work assignments are made at the end of the quarter prior to actual appointment. This process requires students to complete a form on which they specify their requests for TA positions for the following quarter. TAs are then assigned courses by the Graduate Program Coordinator, according to the following criteria: (a) the student's qualifications to TA the course, (b) the student's priority ranking, and (c) the preferences of the course instructor and graduate students.

The average graduate student spends about six quarters as a TA, with students planning to pursue a teaching career spending as many as 13 to 14 quarters in this role. Each year perhaps one to two advanced students are assigned their own undergraduate course to teach. When this happens, a faculty member is assigned to mentor them. Thus, graduate students have the benefit of contact with an experienced faculty member in developing and teaching independent courses. We would very much like to expand this opportunity for our students.

Training for a position as a TA comes from several sources which were described in section B on Teaching. Supervision for TA assignments comes from the course Instructor. Supervising instructors complete evaluation forms for TA performance at the end of every quarter, and these, as well as student course evaluations, are closely monitored in determining future TA assignments. There is a progression of TA assignments within the department that leads to increasing teaching independence and mastery. The entry level of this progression is assignment to a course in which TAs play a mainly tutorial role, meeting with students one-on-one or conducting review sessions prior to exams. At the next level up, students are assigned to courses which require that they lead weekly quiz sections that are planned under the direct supervision of the course instructor. The next step involves teaching laboratory based courses. In these, TAs have the bulk of the responsibility for students' classroom experience, but they are guided by a common syllabus and supervised by a faculty member. The last step in the progression is the independent development and teaching of a course. Prior to this last step, the graduate student is expected to have passed his or her general exam and to have taken at least one course in pedagogy.

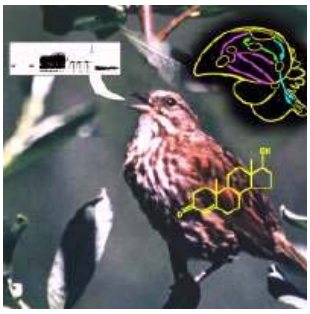
In order to stay competitive in recruitment of top graduate students and in recognition of the labor-intensive nature of TAs in the Psychology department, in 2000, we began to supplement the UW graduate school standard stipends for TAs. These supplements amount to an extra $450 a quarter for TAs, and $300 a quarter for TA1's and TA2's.

For graduate students holding RA positions, training is highly individualized, as each lab uses different techniques and procedures. As one can imagine, an RA working on research with Linehan on psychotherapy outcomes for individuals with borderline personality disorder would receive very different training than someone who works with Covey examining the physiological and neurological underpinnings of the echolocation abilities of bats. Because of the specialized nature of RA work, supervision for RAs is provided by the faculty member the RA is working for. Faculty members are asked to provide an evaluation of RAs at the end of the year and these are available in student files.

[18] There is no difference in funding between TA level 1 and TA level 2.

5. Training Model and Program Description

The doctoral program is organized into several disciplinary areas: animal behavior, behavioral neuroscience, clinical psychology (with a child clinical track), cognition and perception, developmental, and social and personality psychology.



The **Animal Behavior** Area is an interdisciplinary graduate training group that integrates psychological and zoological approaches to the study of animal behavior and behavioral ecology. Faculty and students are active in a broad range of research areas. Research opportunities involve field (both temperate and tropical), laboratory, and zoo environments. Participants can take advantage of a large departmental network of resources, as well as collaborations with other departments and programs. Current major theoretical emphases include animal communication, development, human ethology, and social behavior. Methodological approaches include neurophysiology and anatomy, and the development and analysis of molecular (DNA) markers.

The graduate program in **Behavioral Neuroscience** offers comprehensive research training in a broad range of research topics, with major emphasis on mechanisms of neuroplasticity as related to learning, memory and development and neurobiological mechanisms of sensory perception. Specific research areas include neural plastic mechanisms underlying spatial learning and memory, neural mechanisms of associative learning including conditioned taste aversions and fear conditioning, effects of aging and stress on neural plasticity, neurobiology of taste preferences, neural and genetic mechanisms affecting vulnerability to drug addiction, structure and function of the central auditory system, neural basis of echolocation, visual psychophysics, development of vision in infants, development of color vision, and factors determining the development of neuronal circuits and maps in the visual cortex.

The **Clinical Psychology** Ph.D. program, and the specialty track in Child Clinical Psychology, are among the most highly ranked in the country. Fully accredited by the American Psychological Association, it integrates academic, scientific, and professional training. Its goal is to develop competent and creative clinical psychologists who are capable of functioning successfully in academic, research, clinical, and community settings. For this multifaceted training, we select students who are interested in research careers and view our training program as an apprenticeship for a career that will contribute to the scientific advancement of clinical psychology. This training program places a strong emphasis on flexibility so that students can identify and work toward their own specialized clinical research goals while attaining the general knowledge and skill competencies required of clinical psychologists. The program has a specialty track in **Child Clinical Psychology**. This is a formal area of specialization and students must apply specifically for admission to this track. In addition to meeting requirements of the clinical program, students in the child clinical track gain special expertise in research and practice with children and adolescents. To gain an appropriate context for this work, they also obtain the equivalent of a minor in Developmental Psychology.

In support of student's clinical training, the program operates a clinic, the Psychological Services Training Center (described earlier) where students typically begin to work with clients in their second year. An effort is made to create a learning environment that capitalizes on students' inherent motivation to learn and develop, and one in which students and faculty work closely together in collegial relationships.

The **Cognition and Perception** Area stresses the scientific study of human information processing. Students in the program are assumed to be preparing for a research career, either in academic, private sector, or government laboratories. Students participate in active research programs from the beginning of their graduate careers in areas including learning and analogical reasoning, visual perception and color vision, cognitive neuroscience, psycholinguistics, autobiographical memory, attention, deductive and inductive inference and neural modeling of brightness. Advanced students pursue research problems that are increasingly under their own conceptualization and direction.

The **Developmental Psychology** area offers training in a broad range of research areas with emphasis in infancy and early childhood, including all aspects of social, emotional, and cognitive development. Students participate in research programs from the beginning of their graduate school careers. Training is geared to prepare students for successful research careers in academic and nonacademic settings. The developmental psychology program is closely tied in with other areas in Psychology that touch on developmental issues. It is also associated with a number of excellent departments and centers on campus, including the Institute for Learning and Brain Sciences, the Department of Speech & Hearing Sciences, Education, Nursing, the Information school, and the Center on Human Development and Disability.

The focus of the **Social Psychology and Personality** area is on the social determinants of thought, affect, and behavior, and the individual difference variables that influence people's characteristic responses to their life experiences. The program trains students for research careers in academic and nonacademic settings. The program's initial two years include courses in the theory and research literature of social psychology and personality, and in research methods and statistical techniques. Students participate, throughout the four-year program, in research projects that lead to convention presentations and journal publications. Informal program components emphasize training in the professional skills of report writing, proposal preparation, collaboration with colleagues, application of theory to societal needs, editorial reviewing, presenting research orally, and teaching in the classroom.

The Psychology department graduate program is flexible and designed to aid students in preparing for careers that emphasize research, teaching, or professional practice. Initially, students are assigned to a faculty advisor and co-advisor who assist them in selecting coursework, and guide their research. The student is expected to take equal responsibility for decisions relating to his or her individual program. To assure broad training as a Psychologist, the Department requires that students complete the following:

1. Statistics and General Methodology
2. Within-area courses
3. Outside-of-area courses

Statistics and Methodology. All Psychology graduate students must successfully complete Psychology 513[19] Introduction to Statistics and Data Analysis, and 514 Linear Models and Data Analysis with the accompanying statistical computing laboratories (Psychology 500 and 501) during the first year. Additional courses in Statistics and Methods are available but not required.

Within-Area Requirements. Each major disciplinary area has a block of designated courses, usually three, within the area that must be completed (for more program details, see http://web.psych.washington.edu/). This structured organization is most pronounced in the clinical and child clinical areas because of American Psychological Association accreditation requirements and preparation of students for professional clinical work. For clinical students, requirements usually include a core of 4-5 clinical training courses, clinical practica, field work in a hospital or clinical setting, and a year-long internship.

Outside-of-Area Requirements. To ensure breadth, students take a minimum of three out-of-area courses, consisting of approximately 12 - 15 credit hours of course work appropriate to the student's program of study and career goals. Students may select courses in any area of the department or of the university, but with approval from the student's Advisor(s), and/or Supervisory Committee. All course work should be completed during the first two to three years of study, before scheduling the General Exam.

[19] We are in the midst of changing course numbering as part of the graduate program re-structuring.

First Year Project. In support of our desire to involve students in research quickly, students complete a first-year (or second-year, for clinical students) project, typically including a literature review, data gathering, and data analysis. These projects generally entail original research and are comparable to a master's thesis. Students are required to orally present these projects at an annual departmental "Research Festival," held at the Waterfront Activities Center.

The Supervisory Committee. During the second year of study, the student, with the advice of his or her advisor, selects a Supervisory Committee. This committee generally consists of members of the Psychology faculty most familiar with the area of research in which the student is interested. The department then recommends to the Dean of the Graduate School that the student's committee be appointed. As part of this process, the Dean appoints a Graduate School Representative to the committee who is a faculty member not affiliated with Psychology. The committee then guides the student's training program with regard to course work, research, and the Ph.D. dissertation and conducts the General and Dissertation Examinations.

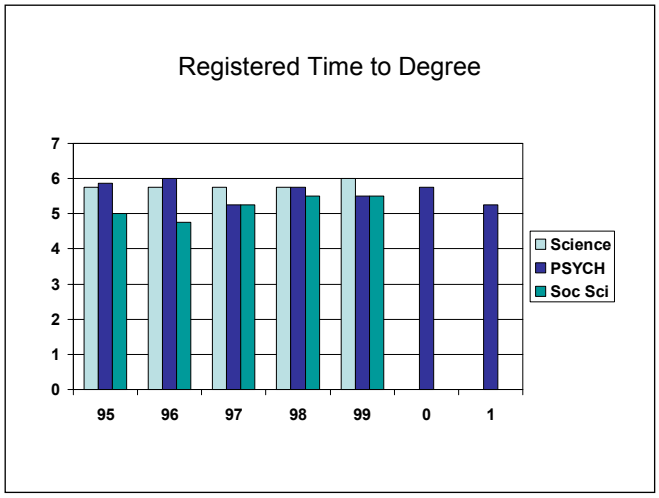
The General Examination. After completion of all course work, which is normally by the end of the third year, the student completes a comprehensive written examination or in some cases a literature review, depending upon the student's major area, followed by the oral examination required by the Graduate School. Both examinations are conducted by the student's Supervisory Committee. As a result of the General Examination, the Committee may recommend termination, further work and subsequent re-examination, or approval of the student's performance and candidacy for the Ph.D. degree.

Dissertation Research and Clinical Internship. Following the General Examination and approval of the student's dissertation proposal by his or her Supervisory Committee, most of the time during the student's remaining years of study is devoted to dissertation research. Clinical and Child clinical students have the additional requirement of completing a one-year, full-time clinical internship.

The Dissertation and Final Examination. When the candidate has concluded the dissertation research and prepared a draft of the dissertation acceptable to his or her Supervisory Committee, the Chair obtains approval from the Dean of the Graduate School to set a date for the Final Examination. The Final Examination is concerned principally with the subject matter of the dissertation, but may include the background and origins of the dissertation problem as well as its practical applications and contributions to the field of psychology.

6. Graduate Program Quality and Success

The quality and/or success of our graduate program can be measured by a number of indices, including our national rankings, our success in attracting top graduates, and our ability to fund them.

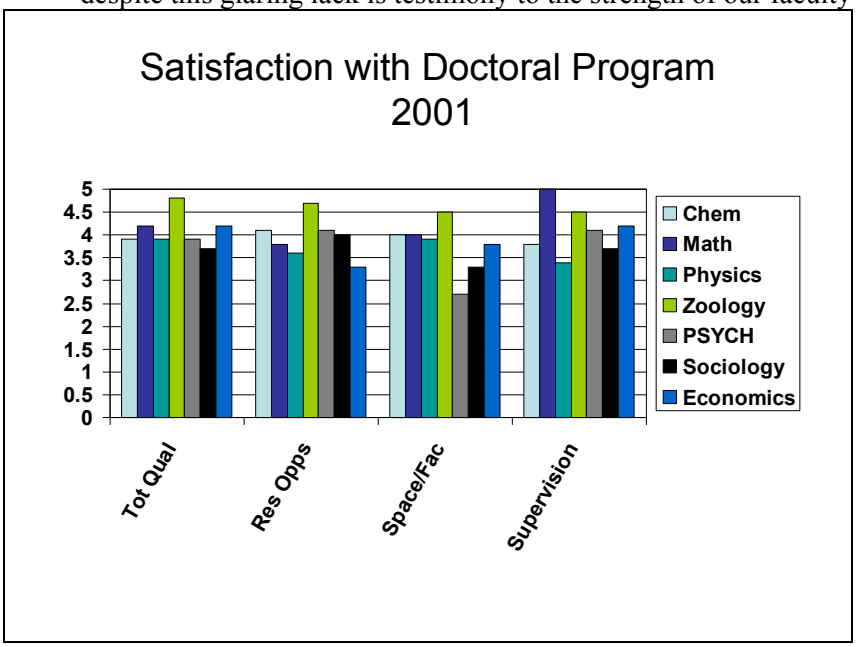


Once in the program, we can also track our success by our students' ability to attract external fellowships or traineeships, professional papers delivered, publications in professional journals, time to degree, and quality of professional placements after graduation. Surveys taken by the Office of Educational Assessment also allow us to look at our students' satisfaction with our program. Our students' success in the classroom, via their TAships, is another indication of our success at mentoring our graduate students.

There are various ways to measure time to degree, registered time to degree (RTD) and elapsed time to degree are the most common. We prefer to use the former as our indicator for two reasons. First, it is the measure identified by the National Research Council as most meaningful. Second, it does not penalize us for the fact that all students in the clinical program are required to complete a year-long clinical internship prior to graduation. This artificially inflates their time in the program. Using RTD as

the indicator, graduate students generally take between 5 and 6 years to complete the program. This is a little longer that the average social science Ph.D., and on average, just a tad shorter than Ph.D.'s in the Natural Sciences.

Graduate student satisfaction with the program, reported one year after graduation, is presented on the next page. Graduate student satisfaction with various aspects of the doctoral program is neither markedly better, nor markedly worse, than that of comparison programs. Student ratings of the overall quality of the program and their satisfaction with the supervision they get from mentors, averages 3.9 and 4.1 respectively, indicating that students are "mostly" satisfied with these aspects of their training. This level of satisfaction puts us right in the middle of the pack of the programs we compare ourselves to. Student satisfaction with research opportunities available to them (4.1) is above average, second only to Zoology and tied with Chemistry. The only rating markedly lower than that of students in other programs is satisfaction with space, facilities, and equipment. Here, the mean rating (2.7) indicates that our students are not even somewhat satisfied with these aspects of our program, the lowest level of satisfaction in any of the programs examined. This dismal rating is not surprising given our severe and continuing space and infrastructure problems. The fact that our students are relatively happy with other aspects of the program despite this glaring lack is testimony to the strength of our faculty and training model.



Full results from the OEA Graduate Survey (2001) paint an even more positive portrait of our program (see Appendix J). Of the 11 areas examined, graduates of the doctoral program in Psychology rated their satisfaction as higher than that of other A&S graduates, or other Natural Science graduates, in seven areas. There ranged from "critically analyzing the research literature in your field" to "Applying quantitative principles and methods to problems in your field." In two other areas, "understanding the interaction of society and the environment" and "recognizing your responsibilities, rights and privileges as a professional" psychology student mean ratings were higher than those of others in the Natural Sciences. The only areas where ratings in Psychology were below those in A&S and below those in the Natural Sciences were "writing effectively in your field," and "working cooperatively in a group."

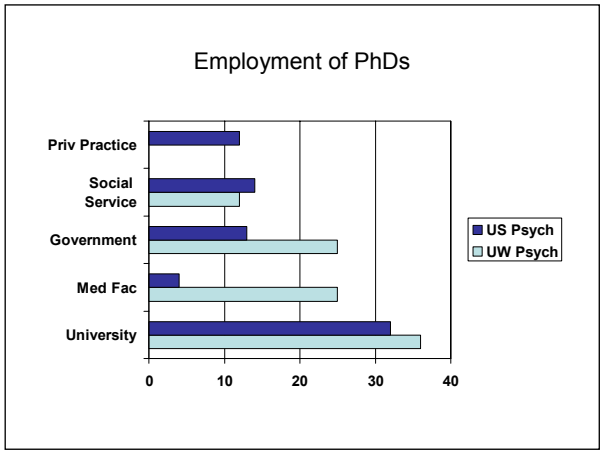
But, we did not fare quite as well in satisfaction with other areas of the program examined in the OEA survey. While Psychology was rated well above the mean in terms of "quality of instruction in your major field," and at, or close to, the mean on "interaction with faculty outside of the classroom," it was clearly below the mean on "assistance by faculty in pursuing your career," "assistance in finding employment," and "advising and other student services." This is, in part, a reflection of a faculty already stretched too thin in light of limited staff support. But, whether this is the explanation for these comparatively lower ratings or not, while students are generally satisfied with their experience in our program, there is still considerable room for improvement.

Other indications of the success of our students support their relatively high satisfaction with the research and training opportunities here. Almost all of our graduate students present papers at regional or national conferences and most author or co-author one or more publications based on work they have

conducted in graduate school. Some of our most productive graduate students present papers at three or four conferences and author multiple papers with their research advisors prior to graduation. For example, in the last year we have had at least three students with multiple articles accepted for publication. Other honors that our students have received since 2002 include two National Science Foundation fellowships, two Social Science dissertation fellowships, three National Research Service Awards from NIH, a Ford Foundation Predoctoral Fellowship, two Stanley Foundation Student Fellowships, two American Psychological Association Minority Fellowships, the Margaret Hadley Scholarship, a grant from the Cetacean Society International, the American Society for Primatologist Conservation Grant, two Gatzert Child Welfare Fellowships, an award for the Best Scientific Poster during the Society of Behavioral Medicine, and an award for the Best Student Poster at the Association for the Advancement of Behavior Therapy. In fact, although the most current UW statistics indicate that 8 of our students have outside fellowships, the number rose to 17 last year (02-03), a testament to our new emphasis on fellowship applications and grant writing.

7. Careers of our Graduate Students

Job prospects for Ph.D.'s in Psychology are generally good. Surveys by the American Psychological Association in 1999 and 2001 suggest that over 90% of new doctorates are employed within one year of graduation, over 79% within the first three months. The OEA survey of our own graduate students found that all our graduates were employed one year later. Moreover, 88% reported that they were employed "at an appropriate level." This is comparable to other graduates in the natural sciences and more favorable than A&S graduates generally.



The chart at the left shows the employment settings of our 2001 graduates compared with data collected by the APA research office on 2001 Psychology PhDs in the U.S. UW graduates are somewhat more apt to be working in university settings (80% of those as faculty, 20% as post-docs) or as faculty in medical settings than other U.S. graduates. This is keeping with the aims of our program. Our students who take jobs in applied, practice settings are also more apt to do this in government settings than in private practice.

While we do not keep as good track of our graduate student placements as would be ideal, there are other indicators that suggest that we do a good job of placing our students in academic settings. In 2000, an article "On the origins of clinical faculty: Who is training the trainers?" rated our graduate program third in the country (three-way tie) when it came to producing clinical psychology faculty. Our other areas also do well in placing students into academic positions. In the last decade, we have had graduates take jobs at Yale University, Indiana University, University of Nevada at Reno, Alabama University, Clark University, University of Montana, Arizona State University, University of North Carolina at Greensboro, University of Massachusetts, Wayne State University, and the University of Miami, to name a few that come immediately to mind. Our students also took positions at smaller, more teaching-intensive settings such as Seattle University, Pepperdine, Kenyon College, Hamilton College, Indiana State University, University of Texas at El Paso, Seattle Pacific University, and San Francisco State University. Several have also taken research jobs at Microsoft or other private companies.

Of the 18 students in our most recent cohort of doctoral graduates, nine started postdoctoral fellowships in Fall 2003. Three went directly into careers as tenure track faculty members and two have positions as research scientists. Of the remaining three, one will serve as a Vicar in the Roman Catholic church, one will serve as a forensic psychologist, and one will serve as a therapist and researcher on the Tulalip Indian Reservation.

While a key objective of our program is to graduate psychologists who will continue to use their research skills, we prepare students to be successful in a range of settings. Since some of our students have expressed an interest in positions at teaching colleges, this year we invited one of our graduates, now teaching at Hamilton College, to give a talk on "Teaching in a Liberal Arts College." We routinely invite psychologists working in industry or in government settings from around the area to talk to our students at area brown-bags. Within the clinical area, students have exposure to affiliate faculty members who primarily work in practice settings, either social service settings or private practice. We are also very fortunate that the American Psychological Association provides wonderful information to students about various careers in Psychology. They publish a monthly e-zine (http://gradpsych.apags.org/) that focuses on graduate education and post-graduation careers. The job search of one of our recent post-docs, Melanie D. Rodriguez, now at Utah State, was featured on this site.

Given our growing student interest in careers at teaching-intensive colleges, much of our discussion about graduate education in the last year has focused on how to best help our students build teaching portfolios. Our newly appointed Associate Chair and Director of Graduate Training, a winner of the UW's Distinguished Teaching Award, is making this one of her top priorities.

8. Recent Innovations in the Graduate Program and Future Directions

Our highly ranked clinical program has provided its students with a set of structured learning experiences, in part as a response to American Psychological Association requirements, but this has not been uniformly the case for other areas. This year we are nearing the completion of an extensive revision of graduate program requirements under the auspices of the Graduate Training Committee, spearheaded by Professor Davida Teller. Revisions that have already been instituted include a more clearly articulated yearly planning process between each graduate student and his or her primary and secondary advisor. We have completed our second year of a colloquium/proseminar series and are offering additional workshops devoted to NRSA fellowship application submissions. Last summer we offered our first scientific writing workshop for graduate students.

In addition, all areas within the department have identified "Core Concepts" classes for their graduate students. These classes will also serve to provide breadth to students in related areas. Instructors have also been encouraged to develop intensive "Advances" seminars in all areas. A number of these classes will be collaboratively taught to ensure broad coverage of material in each area as well as multiple perspectives on key issues. All graduate courses are in the process of being re-numbered to ensure a parallel structure across areas and to better allow students to structure a coherent program. Because of the amount of time it takes to get new courses officially on the books, this new structure will not be formally in place until at least 04-05, but some of these courses will be offered this year under temporary titles. This year, renovation of the new graduate student space in Johnson Annex was completed. The infamous graduate student "pit" has been closed down.[20]

9. Grievance Procedures

The Grievance Procedures described here are spelled out in the Graduate Training Manual, which is provided to all incoming graduate students. The Psychology Department is committed to supporting graduate students and working to resolve problems or conflicts that may arise. Students are encouraged to address situations proactively. We recommend that students first attempt to resolve problems or conflicts informally.

[20] There were many student complaints about the basement level windowless chamber in which graduate student offices were housed.

Depending upon the nature of student concerns, the appropriate avenue for addressing the situation may vary. Within the department it may be best for students to confer with their advisor or co-advisor. When this is not appropriate, or when a satisfactory resolution is not found, the student can consult with the Area Representative to the Graduate Training Committee, the Area Head, the Director of Graduate Studies, or finally, the Department Chair. At any time, the student can also contact the Departmental Ombudsperson(s) for advice.

When necessary, students are directed to make a formal complaint in writing. Once a statement is made in writing, it becomes part of the record and, at that point, is available to anyone with an appropriate interest in the subject, including others involved in the situation. This can be done either within or outside of the department.

If a student fails to resolve the difficulties within the department, there are avenues available outside the department, for example, the Human Rights Office and the Ombudsman for Sexual Harassment. Students are urged to consult with those offices if they have failed to resolve their difficulties within the department.

Over the last decade, various complaints have been handled within the department. One especially successful example of this involved clinical students complaints about the requirement to register, and pay for, classes during their internship year in order to keep their insurance active. In 2000, a clinical student brought this to the attention of his advisor, who then spoke with the Director of Graduate Studies. The problem was then brought to the attention of the Graduate School and its Dean. Dean Landolt responded to the situation, making self-pay insurance available to students while on internship. The situation ended with clinical students sending a group thank you note to Dean Landolt, to the Director of Graduate Studies, and to the Graduate Coordinator.

Another complaint that came to our attention involved the number of hours that TAs were working. We urged TAs to keep a daily log of their hours and discussed at a faculty meeting the need to make sure that TA workloads did not exceed an average of 20 hours a week. This intervention seemed to work, and no further complaints were received.

A third complaint involved "carry-over" issues from TAships, that is, with complaints about grades, unfinished assignments and so forth, from one quarter, which carry over into the next quarter. After discussion of this issue at the Graduate Training Committee, it was decided that TAs would continue to deal with carryover issues for the first week of the following quarter. After that, carry-over issues would be directed to the course instructor, unless they were a result of TA error.

These are but three examples of the issues that have emerged over the last three years and have been resolved effectively, within the department, without "official" complaints being lodged. We are also aware of one student complaint that was handled at the level of the Ombudsman's office and the University Complaint Investigation and Resolution Office (UCIRO). Details related to that grievance remain confidential.

10. Inclusion in Governance and Decision-Making

Graduate students have always played a role in departmental decision-making. For example, areas generally consult students about area requirements. Graduate students are also routinely assigned to all departmental search committees. While they are not allowed, by UW rules, to have a formal vote on such personnel issues, the graduate student search committee representative is invited to the departmental meeting where a vote on hiring takes place and where student assessment and feedback about each candidate is provided. In addition, there is generally a graduate student representative to all departmental committees, except the Planning Committee, where personnel discussions often take place. The Graduate Training Committee has two student members, and this arrangement has provided a particularly important channel of communication between faculty and graduate students.

In the last year there has been an attempt, on the part of the chair, to have graduate students take an even greater role in departmental governance and decision-making. For the first time in a decade, graduate student representative are routinely invited to faculty meetings and they were invited to our Fall faculty retreat. Graduate students in Psychology have formed their own organization, the Graduate

Program Action Committee (GPAC). This organization has been highly effective in articulating the needs of graduate students, and in fostering two-way communication between students and faculty, to the great benefit of all concerned. The chair and associate chair and graduate student coordinator have been meeting with GPAC on a semi-regular basis. Search committee and other committee assignments for graduate students are now being made with input from GPAC, rather than having these students selected by committee chairs. This change took place as a result of graduate student input. A student survey, coordinated by students in GPAC, was conducted in conjunction with this self-study, see Appendix K.

11. Challenges for the Graduate Program

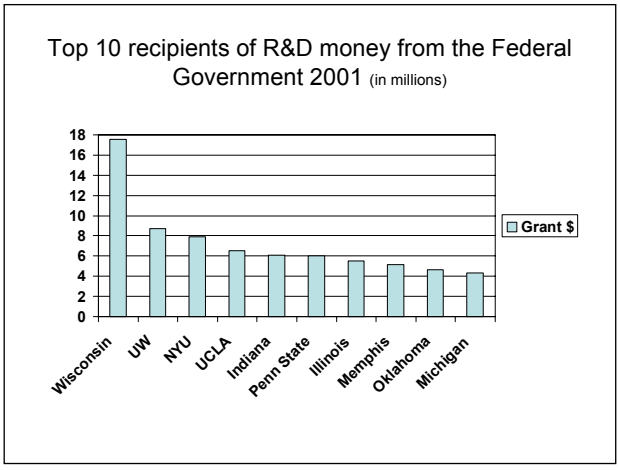
Although we continue to admit excellent students into our graduate programs, we routinely lose some of our top candidates, especially in areas such as Behavioral Neuroscience and Cognition and Perception. Our faculty and training program in these areas are extremely strong and some of our students are lost to programs that are clearly inferior to ours. But many other programs offer stronger financial aid packages. Our financial aid offers are simply not competitive with many others. The limitation of our relatively weak funding package is magnified by the heavy teaching demands of our undergraduate program. This translates into TAs that are extremely labor-intensive. The Psychology Department has been using internal funds, including grant recovery funds, to supplement UW TA funding packages, but our ability to do so is threatened by budget cuts. Recent support funds (the Eleanor Carlson Endowed Graduate Fellowship and the Earl Hunt Graduate Support Fund, the Robert Bolles Fund) for graduate fellowships are helpful in this respect, but more fundraising is necessary for the impact to be significant. We must also seek out better ways to provide summer support for our graduate students. Our ability to maintain high levels of faculty productivity and our excellent undergraduate program depends on maintenance of a strong graduate program.

E. Research and Productivity

1. Faculty Research Productivity and Impact

When it comes to scholarship and research, we are an amazingly productive faculty. Our remarkable research productivity is reflected in the NRC rankings of quality, which are largely based on faculty performance. It is also reflected in our consistently high level of grant funding.

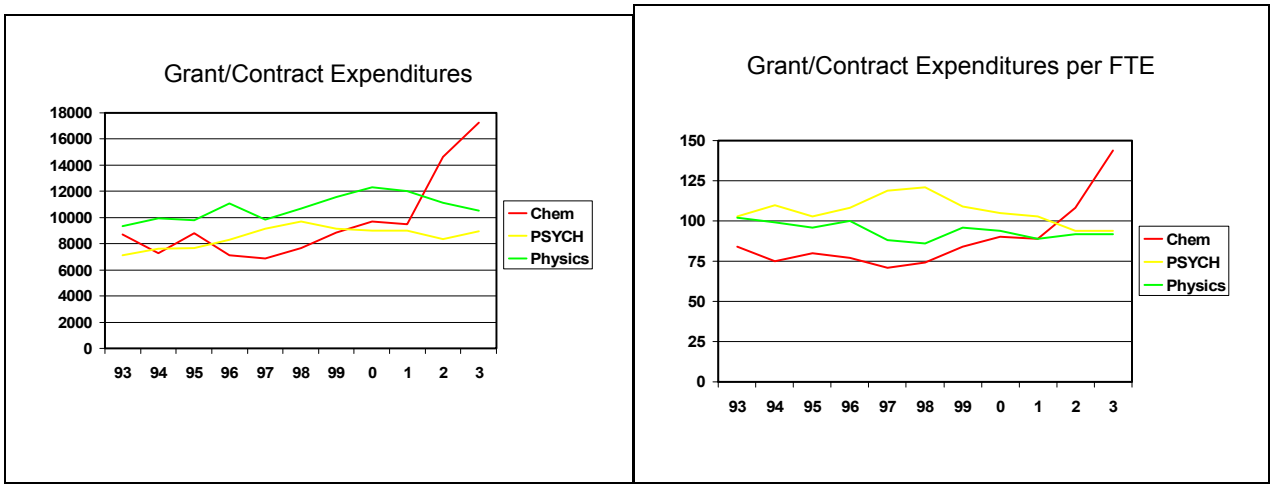
The chart below shows the top ten recipients of federal research and development dollars among psychology departments. Federal funding provides an indirect measure of the quality of faculty research as grant proposals undergo a rigorous peer review process. Receipt of a federal grant indicates both that the research is important from a national perspective, and that it is of the highest quality. The high level of departmental grant funding signifies that our scientific community of peers has an extremely high regard for our faculty and their research programs.



Throughout the last decade, we have not only been one of the top psychology grant recipients in the country, we have also been one of the top Natural Science grant recipients in the College.

The two charts on the next page show totals for grant expenditures in thousands of dollars. The one on the right shows grant expenditures per FTE. These figures demonstrate that, for the last decade, we have been competing for first position in grant expenditures, neck and neck, with top research departments such as Physics and Chemistry, where grant sizes are often extremely large because of instrumentation needs[21].

[21] Now that it is a consolidated department, Biology will join us as part of a four-way elite.



Whether in actual dollars or dollars/FTE, grant funding for Psychology is above average for the Natural Sciences as a whole. Moreover, as we noted in the introduction to this report, about $18 million grant dollars, generated by one of our faculty members, Geri Dawson, is not even included in these calculations. These grant expenditures (and related overhead) are credited toward the School of Medicine where her main research labs are located.

A noteworthy aspect of our grant record is its evenness. There are no marked highs or lows. This is remarkable since we are a more junior faculty now than a decade ago.

The tables at the end of the report list tenure/tenure-track faculty members in the department with indicators of their research productivity. We chose to highlight publications in 2001 and 2002, rather than 2003, because those were complete years. Numbers in parentheses are for non-peer reviewed publications, such as book chapters. As this table indicates, our faculty is extremely productive, not only in terms of grants, but also in terms of published work. Our Full Professors averaged between 5 and 6 publications a year, and virtually all held an external grant during this period, with about 70% holding multiple external grants. Associate and Assistant Professors in our department also had, on average, more than two publications in each year, with more than 60% holding grants from external funding agencies. (UW Research Royalty Fund (RRF) awards are listed, but not counted as external grants).

Further perusal of faculty CVs indicates that most of our publications are in top tier journals in their respective fields. And we produce high impact work. Examining the citations of every fifth Full or Associate Professor (by alphabetical order; Cauce, Linehan, Mizumori, Brown, Kohlenberg and Olavarria) we found that their work had been cited an average of 1619 times, ranging from 379 to 3563 citations each (median was 1102 cites). Another indicator of our influence on research and scholarship is the fact that 80% of our Full Professors are presently on the Editorial Board of a journal, more than 80% are Fellows of at least one professional organization (some are Fellows of two or three), and over 70% have served as a member for an NIH Grant Study Panel Review Group.

In further recognition of the high level research accomplishments of our faculty, in the last three years alone four of our faculty members (Brenowitz, Greenwald, Linehan, Marlatt) have held Research Scientist Awards from NIH, and two (G. Loftus, Meltzoff) have held Merit awards from NIH. The latter are awarded to less than 1% of funded NIH researchers. Two faculty members have recently completed terms as Presidents of major professional associations, Michael Beecher of the Animal Behavior Society and Marsha Linehan of the Association for the Advancement of Behavior Therapy. During this same time, two major postdoctoral training grants have been administered out of our department. Last summer Psychology faculty members organized two conferences (one regional, one international) that brought greater visibility to our department, the College, and the UW. Moreover, our faculty is often in both the local and national news. Most noteworthy, this past year, was the highlighting of Eliot Brenowitz's work in *Science*, and Geri Dawson's and Andy Meltzoff's labs both appeared on PBS' "*Scientific American*

Frontiers." An overview of the news stories coming out of research in our department can be found at: http://web.psych.washington.edu/news/.

In sum, our faculty members are productive by any and all the typical markers used to judge top scientists: grant awards, publications in top journals, editorships of major journals, etc. Their contributions additionally have a major impact on a broader stage. Below are just a few examples from different areas in the department. Many, many more are available.

- Over the last 30 years Davida Teller has carried out many studies of the development of visual functions – acuity, color vision, temporal resolution, and so on – in infants. Thanks to her work and those of her colleagues, we now have a remarkably good picture of the developmental time course for many of these visual functions. Teller also developed the Teller Acuity Cards, a clinical technique for testing the vision of prelinguistic infants and toddlers. They are commercially available and widely in use, and help in identifying infants and toddlers who are at risk for below normal vision.

- Tony Greenwald is the creator of the Implicit Association Test (IAT), an internet-administerable technology that can reveal ordinarily hidden stereotypes and biases such as those that occur in response to race, gender, and age groups. The IAT has proved useful both as a self-education device that has allowed self-discovery of one's own hidden (and often undesired) biases and as a research procedure that has made these ordinarily invisible biases accessible to scientific investigation. The IAT is being used in research across not only the U.S., but the world. As an example of the wide-ranging impact of the IAT, it is available on the Southern Poverty Law Center's website.

- Marsha Linehan's research over the last several decades has resulted in the development and assessment of the "gold standard" treatment for seriously suicidal individuals with severe borderline personality disorder, a group who constitute up to 40% of the highest utilizers of mental health services. One of her books, on behavior therapy, published 10 years ago, has been translated in many different languages and *remains* the top seller at Guilford Press (the publisher of most academic therapy books). It is also the top seller in its category at amazon.com. Her treatment is practiced throughout the western world.

- David Barash was one of the initiators of the conceptual revolution known as sociobiology, and now often called evolutionary psychology, in the course of which he has written 23 books. Some of these have involved applying evolutionary biology to the understanding of animal and human behavior; others have focused on issues of war and peace, always with a biological perspective. Barash was one of 500 people invited by Mikhail Gorbachev, then leader of the Soviet Union, to a Conference on Nuclear Weapons. Georgi Arbatov, National Security Advisor, noted that one of Barash's books had "greatly influenced" Gorbachev's view of nuclear weapons and his decision to end the arms race with the US. He is a frequent contributor to the *Chronicle of Higher Education*.

- Throughout the last decade, Ronald E. Smith and Frank Smoll have been conducting basic research on coaching behaviors and their effects on young athletes' psychosocial development. This work had resulted in the development of a coach training program that has been empirically validated and presented to more than 20,000 youth coaches across the country. The work was recognized as one of the top 200 scientific-technology contributions in the history of the UW in "Pathbreakers: A Century of Excellence in Science and Technology at the University of Washington," 1996.

- In the past 20 years scientists demonstrated that infants are the 'greatest learning machines on the planet,' with implications for lifelong learning, computer science, neuroscience, and philosophy. Andrew Meltzoff is one of the key scientists in this intellectual revolution. His work on infant's exposure to television contributed to a policy shift by the American Academy of Pediatrics. Meltzoff devotes substantial energy to communicating psychological science to the public. His co-authored book, *The Scientist in the Crib,* has been translated into more than a dozen languages and provides useful linkages between laboratory research, governmental policy, and early education. He is on the Board of Director's of the Foundation for Early Learning — established by a

gift from the Gates Foundation — where he disseminates funds for enacting evidence-based programs for children. He is also Co-Director of the UW's Institute for Learning and Brain Science, an interdisciplinary center dedicated to innovative research on lifelong learning and the brain. The Institute attracts international students for intensive training both at the graduate and postdoctoral levels. The Institute provides research space and interdisciplinary collaborations for several faculty and students in Psychology.

- Working with experienced Physics teachers, Earl Hunt (now emeritus) developed the DIAGNOSER, a WWW based tutorial in physical science, based on psychological principles of learning. The DIAGNOSER has been offered on a world wide basis, but is specifically targeted towards the State of Washington Essential Academic Learning Requirements. Last year 10,000+ students, worldwide, enrolled for DIAGNOSER instruction. Evaluation of the program within the state of Washington showed that students who had used this program performed well on relevant questions in the Washington State Assessment of Student Learning (WASL) examination. The mean for students using DIAGNOSER was approximately 15 percentile points higher than the state mean, and comparably higher for the relevant district mean.

- Eliot Brenowitz's research involves the integration between mechanism and function in animal behavior, with an emphasis on acoustic communication in birds and frogs. The principal current focus is on the song control system in the brains of songbirds. He emphasizes a comparative, evolutionary approach to this system, and combines behavioral studies in the field with laboratory techniques in neuroendocrinology, neuroanatomy, moleclular biology, and signal analysis. He is currently pursuing two major topics of study in the song system. One concerns the physiological and molecular mechanisms and behavioral consequences of seasonal plasticity observed in the morphology of song regions of the brain. The second stems from the observation that neurons in song control nuclei receive input from auditory regions, and respond selectively to the presentation of conspecific song. He is one of seven members of the Songbird Neurogenomics Initiative, whose goals include establishing a database for genes expressed by zebra finches and to publically release economical microarrays of the unigene set. His work was recently featured in the journal *Science* and he is a consultant on "The Body Changers" part of a documentary series produced by *Nature* for National Geographic Television.

- Robert McMahon is one of the Principal Investigators on theFast Track Project, a collaborative, multisite comprehensive 10 year intervention project designed to prevent serious antisocial behavior andrelated adolescent problems in children selected at high risk when entering first grade. It has been funded since 1990 by NIMH, and more recently with additional funding from the National Institute on Drug Abuse, the Department of Education, and the Center for Substance Abuse Prevention. The intervention is guided by basic developmental research and theory. Almost 900 children (more than 200 of them in Seattle) are participating in an evaluation of Fast Track, half of them receiving the comprehensive intervention. Initial results are extremely promising and have led to Fast Track's implementation in several school systems across the country, as well as in several schools in Great Britain, Australia,and Canada. Although there are a number of chronic violence prevention programs, Fast Track is one of the most rigorously evaluated. Current plans are to follow the children though at least age 20. An economic evaluation of Fast Track, funded by NIMH, is now underway.

Our full-time instructors are also extremely productive, with an emphasis on teaching and program development. One example is the work of Laura Little, our new Assistant Chair for Curriculum Development.

- Laura Little has spent the last five years coordinating our department's quantitative methodology courses. During this time, she has not only taught key courses in the area, but has also worked to update the curriculum in quantitative methodology. Key courses have been revamped to offer skills based sections and computer training. Because of these improvements, students participating in our department's laboratory courses have the knowledge and skills to design an independent research study, collect, manage, and analyze data, and interpret results. In short, they are able to function as beginning level scientists.

And, while research and scholarship is not a formal part of their jobs, full-time lecturers Kimberly Barrett, Susan Joslyn, and Michael Passer have all published books or journal articles in recent years.

2. Balancing Obligations

Our high research profile is in keeping with the goals of a highly rated department within a top research university. But, there is some tension between maintaining this high research profile and meeting the teaching and administrative needs of the department, college, and University. Our teaching profile is also quite high, but quite a number of our classes are offered by PTL's who we pay from monies generated by faculty grant buyouts (e.g. grants buyout faculty member's teaching time). In general, this is a win-win strategy, as it allows us to offer more courses, while providing faculty the time to focus on their research. Our PTL's are of very high caliber, and undergraduates are generally pleased with having them as instructors. In addition, our graduate students benefit from the high level of faculty grant funding through Research Assistantships. Nevertheless, graduate students report that they, at times, feel cheated of the opportunity to take classes with some of our most renowned faculty members. Graduate students report that they would like to see faculty teaching more formal graduate classes and seminars open to students across the department.

An additional problem in balancing our obligations is that there are few real incentives for faculty members to participate in departmental or college administrative functions, such as committee service. Such service takes faculty members out of their labs and away from their research. Competition for grant awards is fierce and our faculty competes for grant funding with faculty in medical schools and research institutions where no teaching is expected or required. So, there is an understandable reluctance to engage in activities that draw one away from research. Moreover, rewards that come from research are much more directly under the control of individual faculty members than are rewards from teaching or service.

In Psychology, decisions about faculty salaries, promotions, and retention are made by a combination of full faculty input, and input from the Planning Committee. In years where raises above the 2% floor have been given, all faculty are invited to rank other faculty at their rank or above. Faculty members are expressly asked to consider research, teaching, *and* service in their rankings. In addition, the Planning Committee conducts its own rankings, and faculty members' contributions to teaching and service are commented on explicitly.

A strong teaching record is considered essential for promotion to any rank. Relatively little service is expected of Assistant Professors, but a solid record of service becomes important for promotion to Full Professor. Exceptional records in teaching and/or service can also offset somewhat lower levels of research productivity for promotion to Full Professor. In addition, beginning last year, strong teaching and service records became essential for faculty to receive competitive offers for retention purposes.

But, despite our general emphasis on a diverse and full portfolio of faculty productivity, in a setting where our salaries are *more than 16% behind our peers*, and have remained almost stagnant for the last three years, the incentives for productivity lie almost exclusively in the research realm. The UW system that allows for sizeable raises only for faculty with competitive offers from other universities, subverts the reward system for teaching or University service or administration (at any level below Chair). Faculty are not wooed by other universities, and do not receive outside job offers, on the strength of their teaching or service; outside offers are almost entirely dependent on faculty research and grant records. Moreover, grant funds can be used by faculty members to supplement their nine-month incomes. Thus, the incentives for a faculty member wishing to be paid fair-market wages are primarily in research. The commitment of our faculty to teaching and service is quite remarkable in the face of the disincentives for making these priorities. Still, to a significant extent, we are products of the reinforcement contingencies that surround us.

3. Disciplinary Advances and Changing Paradigms in Psychology

As we noted in the introduction, the field of psychology is essentially integrative. Our field seeks to explain behavior from both a social and biological perspective. While this goal is not new, the last decade has been an especially exciting and fruitful one for advances in the biological realm. An examination of the most recent introductory Psychology textbooks indicates that they generally contain a much more expanded coverage of the biological bases of behavior, including discussions of neural

networks and neurotransmitters and behavior. Greater emphasis is also given to the endocrine system and to genetic factors as they affect personality and behavior disorders.

These days, cutting-edge research in our field is much more apt to integrate the biological into standard experimental paradigms. For example, while we have long examined dyadic (e.g. parent-child, husband-wife) interactions using behavioral observations, we would now be likely to also monitor heart-rate during these interactions. When examining the effects of pubertal development on affective lability and the emergence of depression, we have, in the past, classified pubertal development using "Tanner stages" which essentially involve self-reports of physical development. Today, we are much more likely to perform hormonal assays as part of a standard protocol or to measure cortisol levels in saliva when examining stress.

Neuroimaging techniques have made the brain more accessible to study and it is no surprise that, with our department as a notable exception, the top grant-getting psychology departments in the country have invested heavily in developing their own neuroimaging laboratories. Several of our faculty members are using this technique in their work, and we are planning to add another cognitive neuroscientist to our department, but we need to rely on the equipment in the Radiology department in the School of Medicine, where our faculty must stand in line behind others of higher priority.

Molecular genetics is another area of rapid growth that has important implications for the work we do as psychologists. Several faculty members in our department are doing work in the area, this time borrowing equipment from the Biology department. But we cannot get as much access to these facilities as would be optimal, and once again, we are at the back of the bus.

Psychology has always been a diverse discipline without any one standard technique or one standard laboratory configuration. But not that long ago, the main method used by many psychologists was the questionnaire. This would occasionally be augmented by behavioral observations. A fairly standard lab set-up might require a couple of rooms with a one-way mirror between them, several computers, and videotape equipment. Even as little as a decade ago, start-up packages of forty to fifty thousand dollars were considered generous, and some cost considerably less than that. Today, it is not unusual for start-up needs to be in the $200,000 range and one of the candidates we recently interviewed, but did not hire, had another offer which provided him with close to $600,000 in start-up. In addition, new hires often have larger and more specialized space needs than in the recent past.

Another area of change in Psychology is an increasing emphasis on how culture and gender factors affect our understanding of behavior. Various NIH institutes now require researchers to have specific plans for how they will ensure that their research addresses the needs of women and how it is culturally inclusive. Given the demographics of Seattle and Washington state, this has required those of us conducting human research to work especially hard to obtain appropriately diverse samples and to create settings that are comfortable for them. We have risen to this challenge and believe it has improved both the quality, and generalizability, of our work.

These two advances, the increasing emphasis on biological factors in our research, and the increasing emphasis on how culture affects behavior, are not the only areas of change within our field. They are only two of the most noteworthy. The increased emphasis on biological factors, in particular, has major implications for our infrastructure needs.

Psychological insights are also increasingly being applied to education and new partnerships are emerging between cognitive and developmental psychologists conducting basic research and those working in applied educational settings. Psychologists are creating increasingly sophisticated techniques for describing and assessing the natural environments of humans and animals, and new statistical techniques, such as latent growth curve analysis, are making it more possible for us to examine the development and maturation of individuals, as opposed to our reliance on the description and assessment of normative (group) growth patterns. These are but a few of the new trends that we are tracking, both as individual scientists and as a department. They have implications for decisions we make about hiring and for materials that we incorporate into our degree programs.

4. Unit Heterogeneity

As we noted earlier, Psychology is a very diverse discipline. We are so diverse that the last team of reviewers suggested that we should consider becoming two departments. But, in general, we consider our diversity a source of strength and have worked hard over the last decade to, where possible, build bridges across areas. The area structure was described earlier, in the section on graduate education. Communication among individuals across areas is good, and there is some, albeit limited, research collaborations across areas.

At times the heterogeneity among areas makes it difficult for any single one of us to appropriately evaluate the work or merit of individuals we are considering for hire, for promotion, or for raises. We deal with the first two issues (hire and promotion) by carefully constructing search or promotion committee to ensure both depth (within the area) and breadth (across areas). We deal with this when evaluating merit by ensuring broad area representation on the department Planning (Executive) Committee.

Nonetheless, some individuals believe that the area structure can obstruct optimal inter-area collaborations and the best training for our graduate students. For example, the area structure can get in the way of admitting students with strong inter-area interests. Others, however, believe that a clearly defined area structure is essential to the appropriate professional training of graduate students and for making students maximally attractive on the job market. There is some merit to both positions, and the challenge is to find ways of accomplishing the latter without standing in the way of the former. Some aspects of the area structure are probably necessary to ensure high quality training within our graduate programs and the efficient operation of the department. But, the boundaries between areas can certainly be softened. We have discussed moving away from the practice of assigning positions to specific areas, and although this might not be entirely possible,[22] the new position we have set aside for someone with quantitative/statistical expertise is an example of a hire that is not area-specific and was developed as a result of cooperation across areas.

The area structure is certainly not the greatest barrier to departmental unity, or to a sense of community within the department. The greatest obstacle to these, as we described earlier, is the dispersion of our faculty and our labs across campus and across the city. We do not all have offices in one building, much less research space within close proximity of each other. And we are so cramped for research space, that we do not have any common space to encourage informal interactions among faculty, or between faculty and the students.

5. Impediments to Faculty Productivity

The primary impediment to faculty productivity is the lack of resources to support our work. As we highlighted in the section on infrastructure, lack of space and staff support are major problems. Faculty members do much of their own photocopying, they spend hours squaring grant budgets, and arranging meetings. Quite often, when our labs are being moved, or re-furbished, we pack and carry boxes, books, and desks, across campus ourselves. This detracts from time that could be spent in the lab or in the classroom. Lack of staff resources is also a disincentive to departmental service, since committees are not generally staffed.

We are over 16% behind in salary from the UW's peer comparisons, which we are largely ranked above. Low salaries also act as a major impediment to productivity. Virtually every faculty member in the top quartile of the departmental salary distribution has received a competitive offer in the last decade. Even when these offers are presented to us, and we do not spend time seeking them out, they are very disruptive. Not only does it take time to explore other job options, it is emotionally draining and it inevitably causes morale problems within the faculty member's lab, area, and the department at large. The process of negotiating for an outside offer can take several months to a year, whether a faculty member stays at the UW or whether the faculty member leaves for a new department. It can be hard to optimally concentrate on work during this period. And, there is the inevitable dead time between the decision to leave and the actual leaving.

[22] The Clinical Area, for example needs to maintain the area structure due to American Psychological Association accreditation requirements.

The biggest impediment to our productivity at the department level is the loss of faculty to outside offers. The table on the next page shows faculty who we have lost over the last decade. Of the 31 faculty lost, 24 were line faculty, 7 were research faculty. Two were lost to deaths, one extremely untimely, nine were lost to retirement (one, Gottman, while "technically retired," in essence took another offer), 1 was denied tenure, and 19 (13 line faculty) resigned to take competitive offers. All in all, over the last decade, the equivalent of more than a quarter of our line faculty turned over due to competitive offers. In almost all cases, the UW made some attempt at a counteroffer. But, in some cases, by leaving, faculty members doubled their salaries and all got more and better lab space. Faculty members who initially did not want to leave, ended up doing so.

What has been especially dispiriting in the last few years is the loss of four first-rate Assistant Professors. The loss of junior faculty is especially costly because of the heavy investment we make in new hires. The hiring process requires a big investment of faculty time, and a non-trivial departmental expense. Start-up packages offered to hires entail an expense of $50,000 to $100,000 in departmental costs. We also offer new faculty members course reductions their first few years. These are worthwhile investments; they are also necessary ones if we are to have new faculty thrive in our department. However, when faculty members leave in their first few years, we never see the investment pay off.

During this same time period, two of our most high visibility senior faculty members (Gottman, E.Loftus) were also lost to better offers. Adding to the pain is the loss of three of our Research Faculty members to the UW Medical School. And, last year we almost lost Geri Dawson to the medical school. It is bad enough when other institutions see us a target for recruitment, when we are raided by other units within the university, the pain is especially great. It is hard to defend ourselves against such raids. Moreover, these raids speak not only to the economic position of the University, but to the difficulties and shortages specifically within our department.

We acknowledge that the College and Provost's office have been extremely helpful in various retention situations. Without their help our losses would be far worse. But when you have a department rated in the 93rd-96th percentile nationally that is 16% behind UW's peer institutions in salaries, losses are inevitable. The inevitability of these losses, due to our poor salaries, is magnified by our infrastructure problems. In fact, the last faculty member to leave reported doing so more because of space and staffing issues than because of salary. And, the last job candidate we failed to hire, after making an offer, did not come primarily due to problems with our research infrastructure (e.g. uncertainty about access to neuroimaging equipment). As much as we would like to think otherwise, it is hard to imagine that losses will not accelerate. It is hard to build a cohesive unit with the kind of turnover experienced this decade and with the likelihood it will continue.

6. Staff Productivity

We have a highly productive staff. But, as we noted in the earlier section on infrastructure, our department is incredibly under-staffed. Whether one looks at Staff FTE per Faculty FTE, Staff FTE per Grant Budget, or Staff FTE per total budget, we lag other top science departments. The fact that we manage to get our work done, that classes are offered and scheduled, that bookkeeping is done on time, that computers generally run, and payroll goes out is a testament to the productivity of the staff members we have. But, in the last six months alone, we have lost three staff members. In two cases (Paul Bernard, administrator; Jackie Molenda, Program Coordinator) frustrations related to heavy work demands and/or working with difficult units at the UW (e.g. classroom scheduling) directly led to relatively early retirements. A third staff member (Kathy Wong in Advising) left for a job elsewhere in the University where she was offered higher pay and more hours.

Moving beyond the problems of understaffing, we work hard to preserve the productivity and morale of staff. One of the main ways in which we recognize staff is by promoting within. Michele Jacobs was recently promoted from Associate Administrator to Administrator when Paul Bernard retired and, after an open application and interview process, Phil Burger, Grant Monitor, was promoted to Associate Administrator.

Faculty losses between 1993 and 2003

Year	Faculty Member	Title	Action	Destination
1993	Fred Fiedler	Professor	retirement	last year of mandatory retirement
1994	Robert Bolles	Professor	death	
	John (Jack) Keating	Professor	resignation	University of Alaska
	Sandy Andelman	Res Assist Professor	resignation	Nature Conservancy of Washington
1995	Wayne Duncan	Assistant Professor	tenure denied/resign	
	Thomas Nelson	Professor	resignation	University of Maryland
	Leigh Thompson	Assistant Professor	resignation	Northwestern University
1996				
1997	Richard Gonzalez	Assistant Professor	resignation	University of Michigan
	Mark Greenberg	Professor	resignation	Pennsylvania State University
	Nona Phillips	Res Assist Professor	resignation	UW Comparative Medicine - Professional Staff
	Randy Seeley	Res Assist Professor	resignation	University of Cincinnati
1998	John Simpson	Professor	resignation	UC - Santa Cruz
	Stephen Woods	Professor	resignation	University of Cincinnati
	Dom Finocchio	Res Assist Professor	retirement	
1999	Philip Dale	Professor	resignation	University of Missouri-Columbia
	Neil Jacobson	Professor	death	
2000	Robert Douglas	Associate Professor	retirement	
	Barbara Sarason	Research Professor	retirement	
2001	Joseph Brown	Assistant Professor	resignation	Stanford University
	Earl Hunt	Professor	retirement	
	Theresa Jones	Assistant Professor	resignation	U Texas-Austin
	Virginia Gunderson Batterson	Res Assist Professor	resignation	UW Comparative Medicine-res associate professor
	Mary Larimer	Res Assoc Professor	resignation	UW-Psychiatry & Behav Sci
2002	John Gottman	Professor	retirement	Private Foundation
	Joan Lockard	Professor	retirement	
	Elizabeth Loftus	Professor	resignation	UC-Irvine
	Gene Sackett	Professor	retirement	
	Irwin Sarason	Professor	retirement	
	Gerhard von der Emde	Assistant Professor	resignation	University of Bonn-Germany
	Dianne Lattemann	Research Professor	resignation	UW-Psychiatry & Behav Sci
2003				
	Jane Richards	Assistant Professor	resignation	U Texas-Austin

In addition, staff is not only allowed, but actively encouraged, to take advantage of the many opportunities at the UW to take classes to expand upon, or improve, their skills. These classes might range from those on fiscal matters to how to use computer software. We have also tried to be flexible about vacation times, as long as they do not interfere with high-demand times. In part because we have so few staff members, we are very aware of just how much they do for us and we try to make the work environment a supportive one.

Nonetheless, as is the case with faculty, staff members are relatively underpaid compared with those in other departments of this size. In addition, salaries have remained stagnant in the past few years. There is no form of recognition or reward that can substitute for fair market salaries.

A Note about Staff. Our staff is stretched too thin and they are already asked to do too much. We are so severely understaffed that we have had to shift all, or some, of the salaries for some personnel onto our Indirect Recovery Cost budget. In fact, salaries for support personnel consume about a quarter of that budget every year. Given that we are still required to do the things with the ICR cost budget that other departments do, including providing supplies for grants, paying our share of start-up costs, repairs to lab, and so forth, it is not altogether surprising that this budget is encumbered by close to $400,000. However, failure to do this would likely result in the loss, or plummeting productivity, of the staff we already have. It would also severely and negatively impact the productivity of our faculty and the excellence of our teaching and research.

Section F. Relationship with Other Units

Some of the most interesting, and vexing, questions that psychologists ask cannot be answered with a sole disciplinary focus. Identifying the genetic predisposition to schizophrenia or autism, understanding the way in which the brain processes information about language, or early childhood memories, or unraveling the mechanisms through which trauma affects emotional and social functioning requires a community of scientists with skill sets that do not lie in psychology alone. Many of our top faculty and graduate students come to the University of Washington precisely because of the opportunities to collaborate across disciplines that exist here. It would be impossible to fully document the many relationships that faculty and students in our department have with those in other units. These collaborations are ever-changing and ever-developing as faculty members come and go and as interests change and develop.

In this section we will not attempt to capture the full range of collaborations and relationships that exist. Instead we will focus primarily on those that are most formalized and those that most directly impact our curricular offerings. We will then present a few examples of the many that exist.

1. Graduate and Undergraduate Program in Neurobiology

The Psychology Department is a full partner in the undergraduate Neurobiology Program with one of our faculty lines attached to it. This program will graduate its sixth class in 2004. The program consists of coursework in various aspects of neurobiology taught by faculty in the departments of zoology, psychology, physiology, pharmacology, and biological structure. Each year approximately 100 students apply to the undergraduate neurobiology program and 40 to 50 are admitted. In 2002, two of our neurobiology undergraduates shared the Franco Prize, an undergraduate prize for excellence in biology research. Another neurobiology student won the UW President's Medal, an award recognizing the student with the most distinguished academic record of all graduating seniors. Many neurobiology undergraduates go on to medical school or Ph.D. programs. Our department is pleased to have participated in the inception of this program and we are pleased to continue our participation in its maintenance.

The Graduate Program in Neurobiology and Behavior (N&B) offers training in molecular, developmental, cellular, systems, and behavioral neuroscience. Ten of our faculty members contribute to this Ph.D. program. They make key contributions by supervising N&B graduate students and by providing the curricular and research grounding in behavior and systems biology that are a hallmark of

the program. Our graduate students participate in N&B classes and interact with N&B graduate students on research and scholarly endeavors in Psychology laboratories and classes. Both faculty and students in Psychology, and in other participating areas, benefit from the cross-disciplinary interactions built into N&B program activities.

2. Interdisciplinary Curricular Collaborations

Members of the Psychology department have also been involved in collaborative teaching or research with the Department of Linguistics, Department of Biology, Department of American Ethnic Studies, Department of Women Studies and the School of Nursing, the School of Social Work, the Bloedel Hearing Research Center, and the School of Medicine.

Four faculty members have joint appointments with other departments: Beecher in Biology, Brenowitz in Biology, Cauce in American Ethnic Studies and Dawson in Psychiatry.

Among the courses, taught by Psychology faculty members[23], that have been routinely cross-listed in other departments are Psych 257: Psychology of Gender, offered jointly with Women 257, Psych 347 Psychology of Language, offered jointly with Linguistics 347, Psych 357 Psychobiology of Women, offered jointly with Women 357, Psych 408 Mechanisms of Animal Behavior, offered jointly with Biology 408, Psych 409 Sociobiology, offered jointly with Biology 409, Psych 424 Vision and Its Physiological Basis, offered jointly with Perception and Biology 424, Psych 447 Psychology of Language II, offered jointly with Linguistics 447, and Psych 457 Language Development, offered jointly with Linguistics 457.

In addition to teaching interdisciplinary courses, our faculty have given invited lectures or participated in speaker series across campus in the School of Nursing, School of Medicine, School of Social Work, and School of Education. They have served as speakers at functions for Gear-Up, ADVANCE, Freshmen Orientation, and at the Teaching Academy. Last year 3 of the 5 speakers in the successful "The Art and Science of the Brain" speaker series were from the Psychology department.

3. Interdisciplinary Scholarly Collaborations

Faculty members in Psychology have been active in numerous cross-College and cross-University research collaborations. Two prime examples are Geri Dawson who serves as Director of the Brain-Behavior Relations Core at the Center for Human Development and Disability and Director of the UW Autism Center and Andrew Meltzoff, Co-Director of the Institute for Learning and Brain Sciences.

Another good example of a faculty member working in an interdisciplinary fashion is is Bob McMahon, who is collaborating on grants with faculty in the School of Nursing and the School of Social Work within the UW. Outside the UW, he collaborates on a grant (Fast Track) with collaborators at Penn State, Duke University, and Tufts, to name but a few. He is also one of 13 core members, from various disciplines, on the Tobacco Etiology Research Network, funded by Robert Wood Johnson Foundation.

As the section on scholarly productivity and an examination of our vitas clearly indicate, faculty members in our department are involved in collaborative interdisciplinary research with individuals throughout the United States and in many countries throughout the world. We sit on National Academies of Science panels, participate in McArthur Foundation study groups, sit on editorial boards of multidisciplinary journals, and on interdisciplinary review boards at NIH and NSF. Science is increasingly a group enterprise and there are few of us in the department that do not collaborate with others, including non-psychologists, on our research.

4. Within-Department Organization and Governance

Overall responsibility for administration of the Department of Psychology rests with the Chair, who is assisted by two Associate Chairs and an Assistant Chair. One Associate Chair also functions as Director of Undergraduate Studies (Beth Kerr), the other as Director of Graduate Studies (Nancy

[23] Psych 257 and 357 are taught by Nancy Kenney whose line resides in both Psychology and Women studies; all other courses listed are taught by faculty whose sole line is in Psychology.

Kenney). The Assistant Chair (Laura Little) also coordinates our teaching offerings and scheduling. The department also has an elected Planning Committee which consists of six members. The committee advises the Chair on various issues such as policy and personnel. New appointments, changes in departmental policy, and decisions about retention or competitive offers are all voted upon by the Planning Committee before recommendations are brought to the full faculty.

Guidance regarding the administration of the department is provided by the faculty as a whole. Faculty meetings are held as needed to discuss and vote on appointments, policy issues, and new business. The department has a number of committees which play active roles in influencing the department's activities. These include the Graduate Training Committee, which reviews all requests for additions or changes in graduate course and is especially concerned with graduate students and their progress; the Graduate Admissions Committee which deals with the entire admissions process (for over 700 applications per year), the Undergraduate Curriculum Committee, which oversees admissions into the major and makes decisions about additions to the undergraduate program, and the Web/Technology Committee which oversees the departmental webpage. We are in the process of putting together a Space and Facilities Committee, which will likely be composed of Area Heads. And, we hope to put together a Visiting Committee for development purposes.

The department is organized around six disciplinary area (area coordinators in parentheses): animal behavior (Michael Beecher), clinical (Robert Kohlenberg), cognition and perception (Davida Teller), developmental (Andrew Meltzoff), behavioral neuroscience (Ilene Bernstein), and social psychology and personality (Yuichi Shoda). The clinical area is further divided into adult clinical (Jane Simoni) and child clinical (Bob McMahon). These areas are primarily concerned with assuring quality training of graduate students, and setting standards and program requirements for students in each area.

The department also has a staff of administrators and program coordinators who perform diverse administrative functions including the review of grant proposal budgets, scheduling classes, payroll, and building maintenance. Other staff members assist with animal care, technology related to teaching, web and computer support, and the Psychological Clinic. The staff is supervised by an Administrator, who provides supervision to other staff and who coordinates key financial functions and well as building maintenance. An Associate Administrator has overall responsibility for budgets (academic and research) and payroll. Our Advising Office provides information, advice, and consultation to a large number of undergraduate students. General staff meetings are held on a quarterly basis or more often if needed.

After a long period of relative stability in key positions, we begin this year with a brand new Administrator (Michele Jacobs, appointed in 10/03) and a new Associate Administrator (Phillip Burger, appointed in 10/03). As of mid-December 2003, we are searching for a new Fiscal Specialist, a new Program Coordinator (in charge of class scheduling) and a new undergraduate Advisor.

Section G. Diversity

A first-rate psychology department must be diverse to ensure that the full range of research topics of importance to American society is represented, that the widest range of perspectives is included, and that all students are appropriately educated to work in an increasingly diverse society. While psychology seeks to identify general principles of behavior, too often it has been decidedly provincial, with little attention focused on how psychological theories and research might apply to non-Western cultures or to ethnic minorities (or sometimes, women) in this society. Fortunately, in recent years, psychologists, in and out of academia, have increased their attention to culture as a determinant of human behavior. They are also working to better understand how cultural groups are affected by prejudice, racism, and discrimination.

Efforts to study racial, ethnic, and cultural groups that had been understudied, to ask and to apply new perspectives to enduring questions, expands our discipline. American society is becoming more diverse. An important challenge facing us is to develop an understanding of how best to embrace the multiple dimensions of diversity, and to actualize this understanding in ways that foster common goods

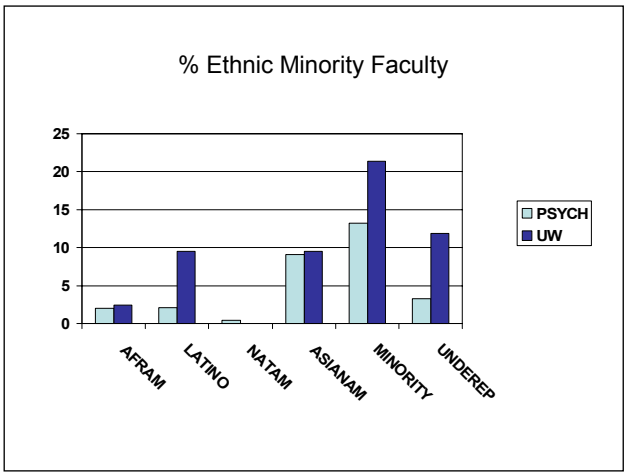
and establish diversity as a human strength. The field of Psychology is well suited to address this challenge and to exert leadership.

Diversity benefits us all, both those that represent diverse backgrounds and those from more mainstream backgrounds. Nonetheless, we recognize that some racial and cultural groups (e.g. African Americans, Latinos, Native Americans, Pacific Islander) in our society remain underserved by, and underrepresented in, higher education. We must work especially hard at recruiting and retaining students and faculty from these backgrounds. Given the relatively small number, especially of minority faculty, and the fierce competition for top candidates, the task of recruitment is not easy.

The UW Psychology Department has a long and rich history of diversity, especially with respect to its faculty and graduate students. For example, Stanley Sue and Carolyn Atteneave, seminal figures in Asian American and Native American psychology, respectively, were faculty members here in the 1960's and 70's. Claude Steele, perhaps the most eminent African American psychologist today, was here throughout the 70's and into the early 80's. Among the talented underrepresented minority graduate students that this department has produced in the last ten years are Nancy Gonzales, associate professor at Arizona State University; James Cordova, associate professor at Clark University; Jianping Zhang, assistant professor at Indiana State University; Jaslean LaTallaide, assistant professor at University of Illinois at Champagne Urbana; Khanh Dinh at University of Massachusetts, Diane Graves, assistant professor at Northern Texas University and Ayanna Thomas, posdoc at Washington University . We seek to maintain, strengthen, and extend the tradition of having strong faculty and graduate students of color at the University of Washington.

1. Faculty Diversity

As of March 2003, nine faculty members out of 47.2 Faculty FTE and 42 Ladder faculty were of ethnic minority background. Of these, one is African American, four are Latino, and four are Asian American. The chart at the left shows that, compared with UW ladder faculty as a whole, we have a higher percentage of ethnic minority faculty in each category, with the exception of Native American. The total percentage of both ethnic minority and underrepresented faculty is about twice that of the UW more generally. (Since March, we have added two faculty members, one Asian American, one Latino).



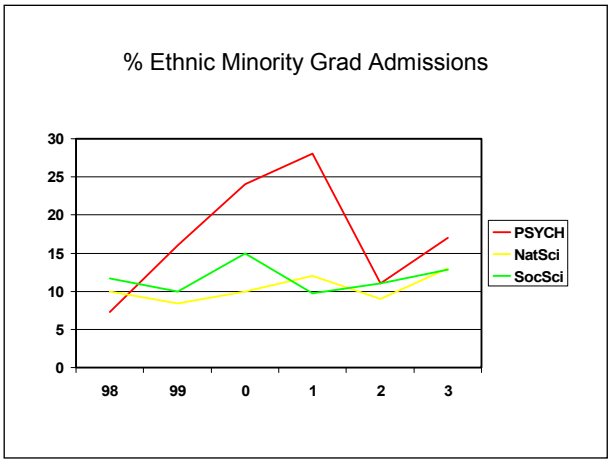
An examination of the Equal Opportunity Office's utilization and goals report (October 2002) for the Department of Psychology indicates that, based on analyses of job market availability, the Department has met affirmative action goals for the total number of minority faculty. In fact, we are above goal by 2-3 positions. On a more specific level, targets for Asian American, American Indian, and Latino faculty have all been met in terms of ladder faculty, but we are still below our target (by 1) in terms of African American faculty. In contrast, we are below our target (by 2) in terms of minority faculty amongst our non-ladder faculty. While we would prefer to be at or above target in both areas, the fact that we are above target in ladder faculty suggests that we are not placing our minority hires in (non-ladder) positions that might be considered lower status. In this vein, an examination of the course loads of our faculty did not reveal any differences between minority and majority faculty.

It is also worth noting that 43% of our ladder faculty is female, as is 74% of our non-ladder faculty. In both cases, this meets or exceeds affirmative action goals for women. Indeed, our department has the third highest proportion of women faculty in the College. However, while numbers are small, some concern might be raised about the relatively higher percentage of women faculty amongst the non-ladder ranks where course loads are typically higher. Somewhat offsetting concerns about women being placed in the department's lower status positions is the fact that for the first time in the department's

history, since January 2003 the Chair of the department is a woman (and Latina and openly lesbian). Thus, the tone for inclusivity and diversity is set at the top.

2. Graduate Student Diversity

As the chart below indicates, compared with other units in the College, the Department has had some success in recruiting minority students. Between 1998 and 2003, the percentage of entering ethnic minority students in the Natural and Social Sciences has hovered between 7% and 15%. Although Psychology had one year in which our entering class of students was less diverse than that (1998), since that time, we have had above average ethnic diversity, with a couple of classes where more than 20% of our entering students have been ethnic minorities. This has allowed us to provide an environment for our ethnic minority students in which they are not overly isolated. While numbers in each individual entering class are small, in 2002-2003, 33 out of 158 (21%) of our graduate students were of ethnic minority background; 2001-2002, 31 out of 146 (21%) were minorities; and, in 2000-2001, the figures were 29 out of 142 (20%). The percent of minority students in our program has hovered at about 20-25% for most of the decade.



The situation is not as positive when focusing on under-represented minorities, defined as African Americans, Latinos, and Native Americans[24]. Here, numbers are so small that we examined the full cohort of enrollees from 1998 to 2003 and found that only 8 of our 140 (5.7%) newly enrolled graduate students fit into one of these categories. Nonetheless, this is better than average for the Natural Science or Social Science divisions; 61 of 1421 (4.3%) of enrollees in the Natural Sciences and 47 of 1105 (4.5%) of Social Science enrollees were underrepresented minorities during this same time period

As the table below shows, despite being above average with respect to diversity, there are many excellent minority students we would like to recruit to our program who do not come. The Department of Psychology received many applications from minority students throughout the 1990's. The numbers dipped appreciably in 2000 and 2001, but appear to be rebounding. This relatively large volume of minority applications is due to the strong reputation of the Department, to the efforts of our current minority students, and to collaborative efforts with the Graduate School, especially Go-MAP (Graduate Opportunities and Minority Achievement Program).

A substantial number of these applicants are of extremely high quality, as indicated by GRE's, GPAs, and letters of recommendation. In fact, despite I-200, Washington State's anti-affirmative action initiative, within our department over the last five years the percentage for offers is somewhat higher for minorities than for the pool as a whole.

Graduate Admissions and Minority Representation

Number/Year	1998	1999	2000	2001	2002	2003	Mean
# applicants	619	578	403	451	442	525	503
# offers	36	38	34	47	29	35	36 (7%)
Min apps	114	117	59	49	80	88	84
Min offers	8	6	7	11	3	5	7 (8%)
Min entering	3	4	5	9	2	4	4

We have not been able to recruit all the minority students we wish to admit into the program in large part because other programs often provide them with offers of financial aid with no strings

[24] Pacific Isladers are also considered underrepresented, but UW data collection does not allow us to separate them out from Asian Americans.

attached[25]. Many other top programs in psychology offer these outstanding minority graduate students full fellowships or scholarships, rather than teaching or research assistantships, requiring 20 hours a week of work. For at least the last decade, we have only had one minority student whom we have offered a full GOP (Graduate Opportunity Program) fellowship decline admission to our program. This is despite the fact that GOP fellowships only last for a year.

3. Specialty Group in Psychology of Diversity

Presently, several faculty members are involved in the early stages of establishing a "Psychology of Diversity" Specialty Group within the department. The intellectual objectives of this group are to "develop an understanding of how best to embrace the multiple dimensions of diversity and to actualize this understanding in ways that foster common good and establish diversity as a human strength." For the purposes of this group, human diversity refers to groups of people who experience themselves as different on one of more of the following dimensions: race, culture, ethnicity, sexual orientation, economic class, gender and disability status. Thus, diversity is defined in a way that is inclusive of much more than ethnic minority status.

While the mission of the group is primarily intellectual, social objectives include fostering a departmental climate that stimulates scholarly exchanges about diversity and cultivates mentorship of students from diverse backgrounds and students interested in diversity studies. The primary activities of the proposed Specialty Group will likely include holding brown bag seminars, maintaining lists of pertinent coursework and research projects available in the department, and sponsoring Edwards's lectures for visiting scholars addressing diversity-related topics. This year, for example, Nancy Gonzales, a graduate of this program, and Associate Professor at Arizona State University, presented an Edwards lecture focusing on her work with Mexican American families.

This group was established, in large part, to bring together the interests of our faculty and students, many of which are nationally recognized for their expertise on the psychology of diversity. Examples include:

* At last year's APA (August 2003), Ana Mari Cauce was recognized with the Minority Fellowship Program's Dalmas A. Taylor Distinguished Contribution Award "for her outstanding contributions to understanding the psychosocial dynamics of children, adolescents, and families of color, and the application of this knowledge to improve mental and physical well being of ethnic and racial minority people." She is also director of training and mentorship for the National Hispanic Science Network.

* Bill George directs the Seattle site of a multi-site project by Dr. Gordon Nagayama Hall (University of Oregon) entitled "Culture-Specific Models of Men's Sexual Aggression" in which approximately 1/3 of the participants are Asian-American men. He recently completed a project regarding racism and perceptions of rape. He is also director of the Institute for Ethnic Studies in the U.S. Together with Kimberly Barrett, George recently co-authored a book on race, culture, Psychology, and the law. They are presently working on a second book, focusing on teaching about multicultural issues.

* Jane Simoni is currently PI or Co-PI on three NIMH grants, one addressing the health needs of Two-Spirited Native Americans and the other two involving medication adherence interventions among primarily low-income people of color who are living with HIV/AIDS. Her postdoc, Kim Balsam, is working on a stress and coping suvery of sexual minorities. Last year Simoni was honored with two awards from the Association of Women in Psychology: The Lesbian Unpublished Manuscript Award and the Women of Color Psychologies Award.

* Jason Plaks has applied for support from the UW Simpson Center for the Humanities to establish a new, interdisciplinary Research Cluster dedicated to research on stereotyping, prejudice, discrimination, and intergroup relations. The proposed Research Cluster, featuring a lecture series of nationally and internationally-regarded

[25] The same applies to our majority students.

speakers and a coordinated program of allied seminars and workshops, aims to create a vibrant group at UW that will stimulate fresh ideas and innovative interdisciplinary approaches to these topics.

* Ron Smith and Frank Smoll's current project, Youth Sport Social Systems is concerned with the development, evaluation, and dissemination of interventions for coaches and parents of youth sport athletes that will assist them in providing a more positive psychosocial environment. It involves the first work of this kind done with female and minority coaches, parents, and children. Students involved in the project will gain valuable experience in community-based intervention and program evaluation research with diverse client populations.

* Tony Greenwald is the creator of the Implicit Association Test (IAT), an internet-administerable technology that can reveal ordinarily hidden stereotypes and biases such as those that occur in response to race, gender, and age groups. The IAT has proved useful both as a self-education device that has allowed self-discovery of one's own hidden (and often undesired) biases and as a research procedure that has made these ordinarily invisible biases accessible to scientific investigation.

Our preference is to both integrate education about individual and cultural diversity throughout the curriculum and to highlight its importance by offering coursework with specific diversity content. Moreover, we require all clinical students to enroll in Minority Mental Health or Community Psychology. Every two or three years, there is a seminar on Working with Gay/Lesbian/Bisexual Clients., and last year we offered a brief seminar focusing on research with diverse populations. Many of our students take one these courses. In addition, the spring quarter clinical colloquium series focuses on doing psychotherapy with diverse populations and is required of all second year clinical students

The Psychology Services and Training Clinic, which is the primary clinical training site for our students, actively recruits a diverse client population. Assessment of client demographics indicates that of the 70-100 clients seen annually, the percentage of those who identified themselves as minorities ranged from 20% to 27%, a figure which equals or exceeds the minority population of Seattle, according to King County Census figures. The Clinic also serves other traditionally underserved groups such as low-income children and families and sexual minorities. All clinical students are encouraged to work cross-culturally, and every effort is made to match minority clients with supervisors who have demonstrated cultural competence as well as clinical competence. Students seeing clients in the Clinic are also given the opportunity to participate in the Clinic's program evaluation which includes filling out Ponterroto's (1997) Multicultural Counseling Awareness and Sensitivity form. Students' responses will be pooled and correlated with clients' responses to outcome and satisfaction measures. If a relationship is established between students' multicultural awareness and either client outcome or satisfaction, that could provide important feedback to the training program and guide future program changes.

Below are only a handful of examples of recent student research that speaks to their development and continuing interest in topics related to diversity.

* Lisa Thomas is working on one project with urban Indian adolescents in the Seattle area and on another with Alaska natives throughout the state of Alaska. The first is involved in identifying innovative interventions for Native adolescents at risk for or involved in substance abuse. The second is a qualitative oral life history with Alaska natives centering on non-problem drinkers and those who have been sober for five-plus years.

* Bryan Cochran, who recently accepted an academic appointment at the University of Montana, conducted a multi-phase study of the outcomes of gay, lesbian, bisexual and transgendered individuals receiving chemical dependency treatment services. Together with Angela Stewart, Bryan recently published a paper in the American Journal of Public Health on the victimization experiences of sexual minority homeless youth. This paper was highlighted in various newspapers across the country.

* Jean Yi, is currently working on an examination of the Recollections of Racism Project, interviewing students of color about their racial socialization experiences, in relation to ethnic identity development and bicultural competence and coordinating a review of university-wide grant proposals related to the study of ethnic minorities.

* Sally Moore is working on developing a study that will examine play and creativity among Native American children. This study will explicitly be addressing what is considered a strength in this population.

* Alison Wilhelm and Mary Plummer are designing a study to assess sexual satisfaction among gay and lesbian couples.

* Heidi Montoya will be applying for an APA minority predoctoral award to study health disparities with a focus on Latinas.

4. Diversity in the Undergraduate Program

Unlike our graduate program, that is somewhat more ethnically diverse than the UW as a whole, our undergraduate program is somewhat less diverse, although not markedly so. In 2003, 35.2% of the UW student body consisted of students from ethnic minority backgrounds. Underrepresented minorities made up 8.2% of the student body. In contrast, among psychology majors[26], 19% were from ethnic minority backgrounds. However, among underrepresented minorities, we were a little above average, at 9%. An additional 2% of our students reported being of "mixed" race, although we did not ask them to designate this more specifically.

Nonetheless, as is the case in our graduate program, we view diversity as much more than having ethnic minority students in our programs. Diversity also has to do with the way that we conceptualize the discipline of psychology and think about our curriculum. There is generally some emphasis on ethnicity/culture, gender, and/or related concepts like prejudice, in many of our courses. In addition, we offer various courses that focus specifically on ethnic diversity or gender. They are briefly described below:

PSYCH 250 Racism and Minority Groups. Overview of the causes, contexts, and consequences of racism and its effects upon minority groups and society. Emphasis on cultural history, political and socioeconomic structures that contribute to racism. Examination of current issues in race relations and cultural pluralism in U. S. and selected international topics.

PSYCH 257 Psychology of Gender. Major psychological theories of gender-role development; biological and environmental influences that determine and maintain gender differences in behavior; roles in children and adults; topics include aggression, cognitive abilities, achievement motivation, affiliation. Offered: jointly with WOMEN 257.

PSYCH 357 Psychobiology of Women. Physiological and psychological aspects of women's lives; determinants of biological sex; physiological and psychological events of puberty; menopause; sexuality; contraception, pregnancy, childbirth, and lactation; role of culture in determining psychological response to physiological events. Offered: jointly with WOMEN 357.

PSYCH 380 Cross-Cultural Competence. Facilitates development of multicultural competence; focuses on mental health/social service needs of ethnic and linguistic minorities, and developing personal/interpersonal skills to reduce barriers, enhance effective service provision to cross cultural groups, sexual minorities and disabled people.

5. Staff Diversity

In some key ways, staff members are the "face" of our department. For example, when a student walks through the front door of Guthrie, he or she is mostly likely to first encounter a staff member. Thus, staff members play an important role in our cultivation of an inclusive and diverse climate. Unfortunately, compared with our faculty and students, relatively few of our staff members are of ethnic minority background. Of the 14-15 staff members funded from our permanent budget, only 2 are ethnic minorities: Margaret Cheng, fiscal specialist and William Kaplan, our office manager who is African American. Until recently, one of our undergraduate advisors was Asian American (Kathy Wong), but she has taken a full-time job in Economics. (Her job in Psychology was 75% time). As staff jobs become open and are filled, it is incumbent upon us to make sure that we interview as diverse a pool of applicants as possible.

[26] Information on the ethnic background of psychology majors is based on exit questionnaires over the last five years. Our response rates for these are about 70% and they may underestimate the number of ethnic minority students in our sample. Data collected by OEA suggests that minority students are somewhat more likely to be non-respondents than majority students.

6. Creating a Climate of Inclusion within the Department of Psychology

In support of creating and maintaining a climate that is inclusive and values diversity, for most of the last decade, the Department of Psychology has maintained a Minority Concerns Committee now named the Multi-Ethnic and Cultural Association (MECA). This association primarily comprises faculty and graduate students, although staff members are welcome and we are considering involving undergraduates. MECA provides graduate students with a forum for sharing experiences, voicing problems and concerns, and networking. One of MECA's functions is to organize social events for all members of the psychology community, but with a special emphasis on the diverse nature of the department. For example, in past years MECA has sponsored an "ethnic potluck" where students and faculty were encouraged to bring goods that were representative of their upbringing and background. A second function is to be active in the recruitment process of minority students so that these students know the committee exists. In short, MECA views itself as providing a community for minority students to share experiences with and to remind themselves that they are not alone.

The members and supporters of MECA work very hard to provide minority students with mentoring and support. By all accounts, these efforts have proved to be helpful to our minority students. Nonetheless, a recent review of the department, in conjunction with the Chair search, revealed that some minority students do not think the department is as sensitive to issues of racial, ethnic, and gender diversity as it could be. Addressing these concerns will be a priority in the years to come. In large part, due to the efforts of MECA, retention has not been an issue for underrepresented minority graduate students in our department. Once they enter, they almost always graduate and most go on to successful careers in research and teaching. Over the last decade, only one underrepresented graduate student did not finish her degree.

7. Challenges to Creating and Maintaining a Diverse Department

There should be little question about the commitment of our department to diversity, both broadly and narrowly defined. This commitment is there at all levels, beginning at the top. For example, a postdoctoral training program that the Chair co-directed for many years (The Family Consortium on Culture and Ethnicity) was cited by the National Academy of Sciences as a "model program" for increasing diversity within the field, and she recently received a commendation from the "Study Group on Culture and Ethnicity" a network of young faculty that she helped to launch. She is now playing a similar mentorship role through the National Hispanic Science Network. Thus, it has been frustrating to see such a relatively small, albeit above average, representation of minority students within our graduate program. The lack of connection between MECA and our undergraduate student population is also worrisome, and is an obvious area for development.

However, it is naïve to think that these areas can be improved without added resources. For example, in order to successfully recruit and retain the very best minority graduate student candidates, there is no substitute for the incentive of financial support in the form of 4 to 5 year fellowships. Although, even an increased number of one year fellowships would help. In addition, there was a time when the department had the resources to provide TA/RA support for a graduate student to help run MECA (then called MCC, the Minority Concerns Committee) and to provide graduate student mentorship to our undergraduates interested in research on minority populations. But, given staff and TA support cuts, we have not been able to provide this funding for most of the last decade and there is little reason to anticipate being able to do so in the near future. The Department of Psychology could be, and desires to be, a leader in diversity on campus, but we cannot do so without financial support devoted specifically for this purpose.

We are also trying to pursue the NIH pre and postdoc minority supplements which each of our faculty members with an R01 can obtain. The problem is the "catch 22" inherent in these award: they can not be awarded until a candidate is identified and it is difficult to recruit a candidate without the award.

Finally, we would like to attract more minority faculty to our program, especially African American and/or Native American faculty. Many of our minority faculty (e.g. Ana Mari Cauce, Jaime

Diaz, Bill George) were recruited with special positions earmarked for underrepresented minorities. The challenge is to continue to recruit and retain minority faculty now that such resources are not available.

Section H. The Future of Psychology at the University of Washington

The Department of Psychology at the University of Washington is noteworthy for the scope and quality of its research, teaching, and service. What distinguishes and unifies us is an emphasis on the integrative study of the behavior *and* brain of complex organisms, whether human or animal. The most exciting and important future advances in our discipline will require close interactions among researchers working in traditionally separate areas of psychology. As a full spectrum department, with a wide range of expertise, we have an unparralled opportunity to flourish in the coming decade.

We are already a highly rated program, both at the undergraduate and graduate level, but to enter the ranks of the truly elite programs will require us to garner more resources, forge a stronger identity as a department and foster more inter-area communication and collaboration. In light of our fragmented physical facilities and internal competition over our (inadequate) space and facilities, this will not be easy. But, we are committed to this goal, and we have already made noteworthy strides in that direction by establishing a department-wide graduate pro-seminar, a department-wide colloquia series, inter-area "brown-bags" and jointly-taught graduate courses. We are also supporting more department-wide social activities.

The next step in suport of our vision for the future will entail developing more cross-area research facilities, which might include a genetic molecular biology facility, laboratories equipped for human psychophysioligical recording, a neuroimaging facility, observation and coding facilities and more shared space for animal surgery. We are already working toward this goal by developing proposals to external funding agencies that would support these efforts.

This vision is in support of two key goals: 1) to enhance the current strengths of our department, and 2) to build new and vigorous programs relevant to 21st century psychology, including continued support for research on the biological and social aspects of behavior and the links between them. Accomplishing these first two goals, will result in meeting our third goal -- to build upon our already strong national reputation and competitive position among our peer institutions. With some strategic investments from the College and/or University and the strong commitment on our part to both aggressively seek out and seize every opportunity we have to help ourselves, these goals will become a reality.

Below we list some more specific steps that we would like to take in the next 5 to 7 years. Not all these steps require the infusion of new resources, although some do. It the absence of new resources, we will need to focus on our core mission and re-prioritize, downsizing the scope of our general education teaching as we have already noted. Many of the goals we list here have already been discussed, in more detail, in other parts of the report. Some are listed here for the first time.

Enhance Support of Faculty, Faculty Collaborations, and Faculty Productivity

- **Encourage more cross-area collaborations.** As noted previously, we need to support more cross-area interaction and collaboration. To do so, we must build upon the steps we have already taken in the direction. One way the department can facilitate this is by supporting more joint teaching at the graduate level. Another is to more seriously consider the impact of hires on the whole department, not just one area. A third is to work on mechanisms that would better allow us to bring graduate students into the program with interests that span our area structure. Finally, we need to support and expand those structures already in place, like the annual faculty retrest, that bring together the faculty as a whole.

- **Provide faculty with more staff support for grant and service activity.** As we have shifted to a more junior faculty, we need to move quickly to provide them with more staff support for grant writing. If the faculty is to remain as productive as they are, they need to spend more time on the conceptual aspects, and less on the secretarial and budgetary aspects of grant preparation. In the same vein, if we want faculty to assume more responsibility for departmental service, we need to provide major committees and area heads

with staff support. Until funds for these are available, we need to be diligent about keeping bureaucratic demands on our faculty to a minimum.

- **Continue to make headway on the space crisis**. We recognize that we are not about to get a new building and we might not even get a substantial amount of space in an "old" building near us, although we continue to have our eye on Cunningham, the Chemistry Library, and Architecture Hall, which are all in close proximity. But, we need to move aggressively to capture any space that might become available due to remodeling or additions in other areas. Moreover, as we move out of debt, renovation of the space we have now to create better efficiencies must be one of our highest priorities

- **Develop state-of-the-art joint research facilities.** The re-furbishing of space in support of facilities that can be used for cross-area ventures should be a top priority. Hand in hand with this is a commitment to seek external funds, and prioritize the use of internal funds, for this purpose.

Upgrading the Graduate Program

- **Continue to work toward initiation of the new graduate program.** The graduate program is in the middle of major re-amping, including the addition of "Core Concepts" courses in all areas, and the development of "Advances" seminars that would typically span areas and focus on new integrative developments in the field. We want to support and encourage continued movement that has begun in this direction. The full program will be on line by Fall 2005.

- **Track improvements in the graduate program.** It is important that we assess the effect of curricular reform on graduate student learning. We can do this both through focus groups with students and through web-based assessments. The plan is to do so regularly until at least 2012, when the first classes that enter with the "new" program in place have graduated.

- **Continued improvement of graduate student space and offices**. We recently moved graduate student offices out of the "pit" (Guthrie basement) which many considered unsafe, and into Johnson Annex. We hope to upgrade the graduate computing facilities in Johnson Annex and the Clinic through funds from the student technology fee. We have submitted a proposal for this purpose.

- **Stabilize funding for graduate students.** Through the addition of TA resources (needed to upgrade the undergraduate program) and development activities, we would like to be able to promise all incoming students five years of funding, including funding for at least 2 summer months. This is crucial if we are to remain competitive for top students with other Psychology departments in the country.

- **Maintain our commitment to enhancing the writing skills of our Graduate Students.** We have been offering a course in the summer focusing on scientific writing. This course is extremely well received and we would like to add a section during the year.

- **Provide more independent teaching opportunities for graduate students**. We should provide a clearer pathway for students interested in teaching their own courses to gain the experience they need to do so. Hand in hand with this, we should seek to create more opportunities for students to teach, both during the school year and in the summer.

- **Continue to support students applying for fellowships.** We have been offering workshops for students in support of their applications for various fellowships, most notably NIH NRSA funds and NSF Graduate Fellowships. *This has resulted in a 100% increase in student fellowships over the last five years*. We would like to maintain, and possibly expand, this workshop program.

- **Add diversity to the Graduate program**. This department was once known for the diversity of its graduate students, but in face of I-200 and stiff competition for the best and the brightest, we have fallen behind. We must rededicate ourselves to building a diverse student body.

Upgrading the Undergraduate Program

- **Continue to track and evaluate changes in the undergraduate program**. Early indications are that changes in our undergraduate curriculum have been successful, but the first students going through the fully re-vamped program are just graduating. We would like to conduct focus groups with majors and track a group of students through the major so we can better understand pathways and decision points for our majors. We also look forward to examining feedback from the post-graduation assessments.

- **Continue to improve writing in the major**. We are tracking changes that might be instituted at the College level related to writing in the major. Until clearer directions emerge from that effort, we hope to maintain the Writing Center, which we presently fund on our own. We will also be exploring ways to encourage faculty to make better use of the Center as a resource.

- **Develop and offer departmental workshops in support of undergraduate teaching**. One of the by-products of our decentralization is that we find it hard to find a space to talk about our teaching, and about how our courses fit with each other. Some potential topics for workshops include "writing in the major"and "skills to be included in the major."

- **Add more laboratory classes and small, advanced 400 level classes to the curriculum**. We have added several new 400 level classes to the curriculum in the last few years, but we need even more. We would also like to resuscitate the social psychology laboratory class that has not been offered for several years.

- **Develop an undergraduate study center and/or a lab facility for undergraduate teaching and study**. Most science departments have rooms and lab spaces they control and can schedule. We would like to develop our "own" room with 25 computers that we can use to support sections for Psychology 209, 317, and other similar courses. We could also use this space to set up demonstrations for other classes. Because scheduling rooms for sections is low priority, we have trouble getting the kind of rooms we need for this purpose through room assignments, and we have no place at all for the demos.

- **Assign more staff and TA resources to support our undergraduate teaching mission**. **In conjunction with this, we would like to explore ways to use technology to enhance our teaching.** We need additional staff support to help set up demonstrations in our larger classes, to handle instructional equipment, and to help us better harness technology in support of our teaching mission. We also need to add senior, lead TAs to classes such as 202 (Biological Psychology) and 209 (Research Methods). This would greatly help us continue to upgrade these important entry-level classes to our majors. These classes also serve an important general education function for the College.

Department-wide Activities

- **Enhance our Development efforts**. This report says little about our development efforts because this has not been a key focus for us. We do not have an external committee and we have not kept good track of alumni. In the coming years we must invest more resources in this area. The appointment of Steve Buck to head our efforts in this direction is a good first step. The updating of the webpage to make it more user-friendly and interesting for alumni is a good second step. But more steps need to follow.

- **Invest more in Staff Development**. Too often we do not think about staff in formulating our goals and agenda. Yet their efforts are crucial to everything we do. We have many fabulous staff members and they are every bit as overloaded and overworked as our faculty. We must find better ways of communicating how much we value them. We must also find additional ways to enhance their skills sets and professional development.

- **Investment in Instructional Technology**. To continue supporting the department's educational mission, the Media lab must maintain pace with an increasingly technology-savvy student body. In the last decade, the internet, computer labs, and personal computers have become ubiquitous, and technologies like broadband internet access, DVD, mobile computing, and increased capacity for multimedia are poised to

join them. As these technologies become the norm, we much assist instructors in preparing materials to take advantage of them. The Media lab needs to be able to provide support for video editing, DVD and multimedia authoring, and distance education systems, and continue to upgrade their workstations to include scanners, printers, cameras and presentation equipment available for checkout or for use in the lab.

- **Enhance our internet presence**. The department's website has become an important access point for both internal and external audiences. It provides directory information, faculty profiles, event listing and resources for current and potential students, staff, and supporters. Our website is already configured so that faculty and staff are able to enter much of the information themselves, without intervention from a traditional webmaster. Additionally, we need to establish workflows to ease the transition of departmental information from traditional paper version to new media.

Summary

Psychology is a diverse and dynamic discipline and the University of Washington Department of Psychology is one of the best in the country. A powerhouse in undergraduate teaching, we consistently produce more Bachelor degrees than any other department at the UW[27], and produce more student credit hours than any other social or natural science department. Despite the large size of our undergraduate classes, both at the lower and upper levels, all indicators suggest that our teaching is of extremely high quality, consistently amongst the *very* best in the College[28]. The quality of our undergraduate program is also nationally recognized. We are rated at the 93rd percentile in the nation, a quarter of a point behind Stanford, which is rated first.

Our graduate program is also large and highly rated. National rankings place us at between the 94th and 95th percentile, with the Clinical Training Program, the largest Area within the department, rated 2nd in the nation. The quality of our graduate students ranks among the best in the nation, and they accomplish remarkable things while they are in the program and after they graduate. One year after graduation, they rate their experiences in the program as very good, especially in terms of quality of instruction and research opportunities. Their main area of dissatisfaction is with department facilities and equipment, which we agree are in desperate need of attention.

Our faculty is extremely productive. We are 2nd in the nation among Psychology departments in federal grants, a testament to the importance and quality of our research. We are active in publishing our work in top tier peer-reviewed journals. Our publications are widely cited and of high impact.

As a discipline with a long history in the applications of basic science, Psychology contributes a great deal to the University's service mission. Seattle and Washington State residents receive a higher standard of mental health and substance abuse care because of our presence in the community. They also have access to state-of-the-art early intervention and prevention programs. Moreover, in part due to efforts by our faculty, the state is fast-becoming a national leader in theory and practice concerning the importance of early child development, a topic featured in campaigns from the statehouse to the White House.

Members of our department are also extremely active on the national level, serving on major grant review panels, editorial boards, and on the boards or panels of important private and public agencies. At the university level, we have been active in the Faculty Senate, in the Teaching Academy, the Honors Program, and the Office of Undergraduate Education. Faculty in our department direct or co-direct three University or College-wide centers or institutes, the Autism Center, the Institute for the Study of Learning and Brain Sciences and the Institute for Ethnic Studies in the U.S.

In many ways, we are the victims of our own success. The inherent interest in our subject matter and the high quality of our undergraduate and graduate programs leads to an extremely high, and at times

[27] Based on number of graduates in 2001 and 2002.
[28] Amongst department graduating at least 50 students, only Anthropology, History, and International Studies got higher ratings than we did for "Instructional Quality in the Major" (2002)

seemingly unrelenting, demand for our courses, for our major, and for graduate admissions. The cutting-edge nature of our research demands new equipment and improved laboratory facilities to accommodate psychophysiological measurements, molecular genetics facilities, and, ideally, in the long run, a neuroimaging center.

In the face of such demands, we are desperately in need of further investments in our infrastructure. On a yearly basis, we produce, in grant overheads, an amount that equals about half of our *entire* departmental budget (including the cost of faculty lines). But, we not only make do with far too little space, our space is often of woefully poor quality. Unless we get the funds from the NIH capital project grant, where the College and UW have stepped forward with matching funds, we are in danger of losing our ability to conduct animal research. We are not even allowed to upgrade much of our human research space, because most of the buildings we are in are labeled as "temporary" spaces. As such, they are not eligible for soundproofing, air-conditioning, or for the upgrade of electrical facilities. In some rooms we can only have computers by running electrical cords under doorways. We have, in fact, been "taught" how to do so by the same staff members who say they cannot install new outlets because the electrical wiring is close to overload (!).

Over the last several decades, promises for space improvement have come and gone, undermining our confidence and the sense that there is any real institutional support for our endeavors. *The sense that the College and central administration are aware of our accomplishments, and our centrality to their mission, is absolutely essential to the morale of this department*. On some very fundamental level, we need to feel valued. There is no better way to show that than through resource allocation.The perceived failure of administration to reinvest, at the departmental level, more of the proceeds that come from our own grantsmanship has been especially demoralizing.

When our productivity and accomplishments across teaching, research, and service are examined in toto, the Department of Psychology has a track record of performance unparalleled in the College. With the teaching excellence and cost effectiveness of a top social science (or humanities) department and the external funding record of a top natural science department, there is simply no other unit like ours. Given the popularity of our courses and our major, the draw for graduate students and quality of our department, it is hard to imagine a truly excellent College of Arts and Sciences without an excellent Department of Psychology.

With research strengths and expertise that span both the social and biological aspects of behavior, we are extremely well positioned to remain leaders in the College and in our discipline throughout the next decade. We have the desire, the vision, and the human capital to join the ranks of the truly elite Psychology Departments in the nation. To do so would bring gains back to the College and University, in terms of even greater grant funding, higher impact research, and better quality graduate and undergraduate programs. Given our department's high quality and amazing reach, we represent one of the College's and UW's very best opportunities for strategic investment. An investment in the maintenance and improvement of the Department of Psychology will have an impact that his both significant and broad.

PROFESSORS	Pubs 2001	Pubs 2002	Editorial Boards 01-present	Grants 01-present	Awards in 2001-present
David Barash	4 (7) 3 books	2 (2) 3 books			
Michael Beecher*	2	2		NSF 96-01 NSF 02-07	President, Animal Behavior Society
Ilene Bernstein	4	3	Editor, Appetite Board, Physiology & Beh	NIH, 96-02 NIH, 98-05	
Eliot Brenowitz	6	6	Board, Brain, Behavior, & Evolution	NIMH, 95-05	Virginia Merrill Bloedel Hearing Research Scholar
Steven Buck*	3	1	Assoc Ed, Visual Neuroscience Proceed Ed, Int Color Vision Soc	NIH, 95-01	
Ana M Cauce*	4 (2)	6 (3)	Board, Child Development Developmental Psychology	NIMH, 99-04	Distinguished Contribution, Community Psychology and Minority Fellowship Program
Ellen Covey	2	1	Assoc Editor, Journal of Neuroscience	NIH, 02-07 NIH, 00-05 NIH TG[29], 02-07	Visiting Prof, Institute of Neuroscience, University of Salamanca
Geri Dawson	3 (2)	15 (4)	Assoc Ed, Journal of Autism and Developmental Disorders	NICHD/NIDCD, 97-02;NICHD, 98-02; NICHD/NIDCD, 02-07	NICHD, NIDCD award for Collaborative Program of Excellence in Autism
Jaime Diaz	1	-			Carnegie Scholar for the Scholarship of Teaching and Learning
A. Greenwald	6 (1)	8 (1)	Assoc Ed, Experimental Psychology; 5 Boards incl. Psychology Science, Journal of Personality and Social Psy	NIMH, 98-04; NIMH, 98-04	Research Scientist Award, NIH; Thomas M. Ostrom Award, Person Memory Interest Group
Marsha Linehan	4 (4)	3 (2)	Board, CRISIS, Psychotherapy in Practice, Encl. of Behavior Modification and Therapy	NIDA, 03-08 Lily, 00-02	Distinguished Fellow, Ac of Cognitive Therapy; Dist Scientist Award, Soc for Science of Clinical Psych, Dist Cont to Psych, Cal Psy Assoc
Geoff Loftus	(1)	1	Assoc Editor, Cognitive Psychology; Board, Psychological Science	NIMH, 99-04 CMBL, 01	
Alan Marlatt	8 (4)	6 (2)	11 Boards, incl. Journal of Clinical Psych, Journal of Substance Abuse	NIAAA, 03-05 Robert Wood Johnson, 01-03 NIAAA, 01-02	Robert Wood Johnson, Innovators Combating Substance Abuse
Bob McMahon	3	10 (1)	5 Boards, incl. Behavior Therapy, Journal of Child Clinical and Adolescent Psych	NIMH, 98-03, 03-08;NIMH, 02-07; NIDA, 04-08	Fellow, Society of Clinical Child and Adolescent Psychology
Andy Meltzoff	1 (2)	4 (3)	Assoc Ed, Developmental Science; Board, Infancy, Dev. Psychobiology, Cognition & Development	NICHD Merit, 03-08; NICHD, 02-07; Santa Fe Institute, 02-05	
S. Mizumori	6	2 (1)		NIH, 98-03; NIH, 04-08	
Ronald Smith	2 (2), 1 book	(4), 1 book	Board, International J. of Sports Psych, Rev de Psicol de Deportes	William T Grant, 02-07	
Frank Smoll	2(2)	(3), 2 book		William T Grant, 02-07	Distinguished Prof. Practice, American Assoc of Applied

					Sports Psychology
Davida Teller	2	4	Board, Journal of Vision	NIH, 00-04	
MEANS (all pubs combined)	4.95	5.58		89% hold grants; 53% multiple grants	
ASSOCIATE PROFESSORS	**Pubs 2001**	**Pubs 2002**	**Editorial Boards**	**Grants**	**Awards**
Miriam Bassok	1 (1)	1	Board, Journal of Experimental Psych	NSF, 99-02; RRF, 99-01	
J. Brown	2	3	Consulting Ed, J. Personality & Social Psych		
David Corina	3	3		NIH, 97-03	
Bill George	1 (1)	3	Board, Psychology of Women Quarterly	NIAAA, 01-06 NIMH, 97-03	
Nancy Kenney*				RRF, 01-02	Carlson Center, Service Learning Award
Beth Kerr*				Tools for Trans, 02-03	
R. Kohlenberg*	1	2 (2)		NIH, 97-03	
Liliana Lengua	2	2	Board, Developmental Psych	NIMH, 99-04 CMBL, 03-04	
John Miyamoto	1	-	Board, Org Beh and Human Decision Processes; Med Decision Making, J Math Psy		
Sean O-Donnell	7	3 (2)	Board, Insuectus Sociaux	NSF, 99003; NSF/ROA 01; Nat. Georgraphic, 03-04	
J. Olavarria	3	1		RRF, 02-03	
L. Osterhout	1	4	Assoc Ed, Memory & Cognition; Board, Brain & Language, Mem & Cognition	NIH, 99-04; NIH, 03-05, NICOCD, 00-05	
Yuichi Shoda	3 (1)	3	Consulting Ed, Psych Review, J Personality & Social Psych	NIMH, 00-04	
Jane Simoni	5	3	Health Psych & AIDS Behavior	NIH, 01-02 NIMH, 02-06 CDC, 01-04	Women of Color Psych Award Lesbian Manuscript Award
Means	2.35	2.46		69% held ext grants	
ASSISTANT PROFESSORS	**Pubs 2001**	**Pubs 2002**	**Editorial Boards**	**Grants**	**Awards**
T. Beauchaine	3	3		NIMH, 02-07, Children's Hosp Endowment,02-03	
S. Carlson	2	2		NICHD, 02-04; CMBL, 01-02	Jr. Fac Development Award
Jeansok Kim	5 (2)	5 (1)	Cons Ed, Beh Neuroscience	NIMH, 02-07	Korean Brain Pool Award
Jason Plaks	3	-		RRF, 03	Society Exp. Social Psychology Diss Award
B. Repacholi	1			RRF, 03-04	
Michael Rudd	2			RRF, 01-02	
Sisneros	1	2	Arrives in March	NRSA Postdoc	Capranica Award, Most Unique paper in Neurobiology
Lori Zoellner	4 (2)	7 (1)		RRF, 02-03; NIMH, 03-08	Anxiety Disorders Association Jr. Faculty Grant

Means	3.12	2.62		62% hold ex grants	

***** Held an administrative position within department between 00 – 03
Note: Numbers in parenthesis are for publications that are not peer-reviewed, like book chapters.

Department of Psychology

Self-Study
December 2003

List of Appendices

Selected Performance Indicators among A&S Programs Ranked in the Top Twenty by the National Research Council or US News & World Report

Program	NRC Rank	%	USNews Rank	%	G&C/ FacFTE	USCH/ FacFTE
Psychology	**12**	**94**	**17**	**95**	**140**	**1150**
Biological Sciences	**		20	92	142	650
Physics	14	91	16	91	146	750
Sociology	10	90	16	85	23	1300
Classics	20	56			<10	1100
Comp Lit	14	77			<10	1050
Geography	10	80			22	1100
German	12	75			<10	<500
Linguistics	17	70			<10	750

% Percentile Rank; G&C= Grant Dollars **in thousands** (140 = 140,000 per FacFTE); USCH = Undergraduate Student Credit Hours; FacFTE= Faculty Full-time Equivalent;

Note 1: There is no overall NRC rating for Biology, but the UW is highly rated in various sub-areas of the Biological Sciences -- 7 (95%) in Evolutionary Biology/Ecology, 8 (95%) in Cell Biology, 17 (92%) in Molecular Biology and Genetics, and 18 (90%) in Biochemistry.

Note 2: In order to include Biology in the comparisons, we drew information from the A&S 2003 database. Here Undergraduate SCH per Fac FTE is only provided in graph form, rather than in exact numbers. When USCH per FacFTE was between 1000 and 1100, it was counted as 1050, when between 500 and 700, it was counted as 600, and so forth.

Note 3: Not all departments are rated by the NRC or US News & World Report. Criteria for ranking departments varies, but typically includes number of degrees awarded, number of programs in the country, etc.

HEC Board Summary

A. Name of unit authorized to offer degrees

Department of Psychology

B. College

College of Arts and Sciences

C. Degrees offered

B.A., B.S., M.S., Ph.D.

D. Year of Last Review

1993

E. Brief Description of the Field and History at the University of Washington

The term psychology comes from two Greek words, *psyche* which refers to the soul or mind, as distinct from the body, and *logos*, which refers to the study of a subject. Psychology was first the study of the soul or mind and a subset of philosophy.

In its earliest incarnation as a separate discipline, psychology became the scientific study of conscious experience. What made it distinct was its emphasis on the techniques of science and on experimentation or empirical investigation. As the field both emerged and evolved, tension erupted between the imperative of science, with its focus on the directly observable, and the study of mental processes, which are observable only indirectly. So, over time, and especially in the United States, the focus of scientific psychology shifted from an examination of the mind to the study of behavior, both human and animal. Another aspect of psychology that marked it as unique, both from philosophy and from the basic natural sciences, which it sought to emulate, was an emphasis on the practical applications of science. This is most apparent in terms of Clinical Psychology, which seeks to develop appropriate treatments for individuals with mental health problems.

The evolution of the field at large is echoed in the history of our own department and is best epitomized by Edwin R. Guthrie, after whom our building is named. The Department of Psychology at the University of Washington was founded in 1917, when it separated from Philosophy. Guthrie, who had a Ph.D. in Philosophy, came to the UW in 1914 as an instructor in that department, but moved to Psychology 5 years later, and he remained there throughout his career. He is most famous for his theory of learning based on association, which grew out of experiments he conducted with cats. On the practical side, Guthrie nurtured a lifelong interest in teaching, education and behavioral interventions. Together with his wife, he translated a book on psychotherapy from French into English.

Psychology began with an emphasis on the mind and moved to a focus on behavior. As the "behavior of the mind" becomes increasingly observable through techniques like fMRI, which make it possible to obtain high resolution pictures of the brain in action so that researchers can determine the areas of the brain involved in certain cognitive processes, an interest in the mind has increasingly returned to our field. Today the field is essentially *integrative*. Retaining its emphasis on scientific study and experimentation, and on the practical applications of science, psychology not only looks at mind, brain, and behavior, but also seeks to explain the links between them.

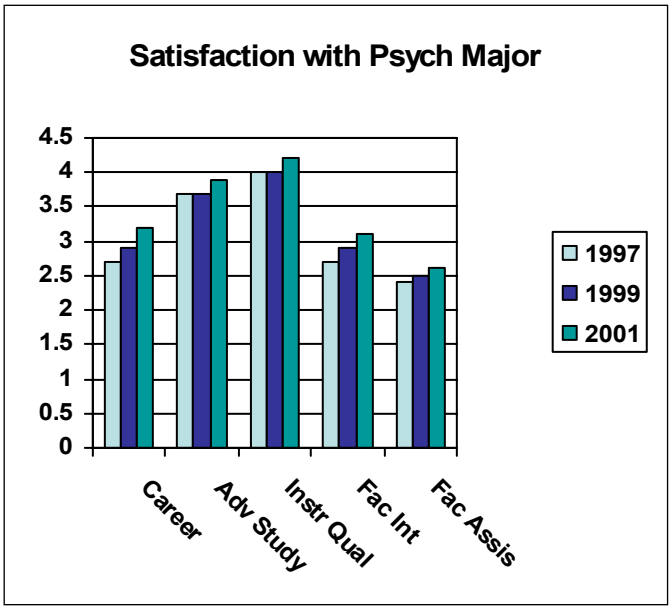
Modern psychology is the study of cognitive processes, behavior, and development, their social, cultural, physiological and genetic causes, and their pathologies and dysfunctions. In keeping with an emphasis on integration, psychology is unique in its desire to understand both the social *and* biological influences on behavior. We stand at the interface of the social and natural sciences, and most comfortably define ourselves as a life science.

F. Documentation of Continuing need for Program

Psychology is one of the largest, and most popular undergraduate programs at the University of Washington. In 1993, 500 students graduated with a major in Psychology, more than with any other major

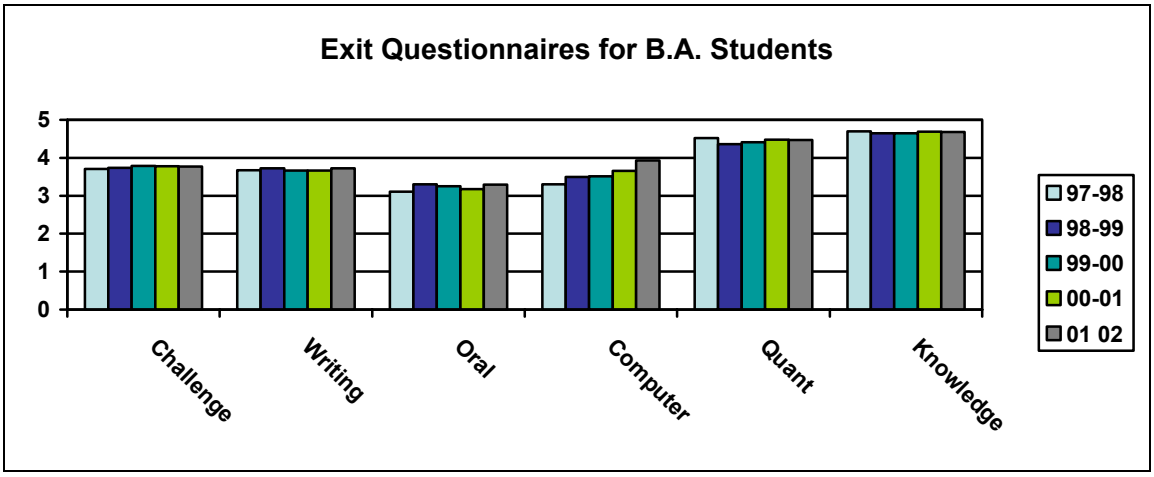
in the College of Arts and Sciences. All indicators suggest that the demand for the Psychology degree will continue. Interest in the doctoral degree in Psychology is also high. We routinely receive upwards of 400 applications a year to our Ph.D. programs, and generally admit between 20 and 25 doctoral students on a yearly basis.

G. Assessment Information Relating to Student Learning Outcomes and Program Effectiveness



All indicators suggest that our undergraduate program is highly effective and that students are satisfied with the quality of instruction that they receive. The chart at the left presents information about student satisfaction over the last five years, rated on a scale of 1 to 5. This information was obtained from one year post-graduation surveys conducted by the Office of Educational Assessment. Results from these surveys suggest that students are especially satisfied with the quality of the instruction they receive, and with the degree to which the psychology major has prepared them for advanced study. Ratings of preparation for a career and interaction with faculty outside of the classroom are also relatively high, with most students at least "somewhat" satisfied with these aspects of the major. Nonetheless, there is room for improvement in our provision of students with faculty assistance with career planning.

The chart below presents information from exit questionnaires administered at the time of graduation through the department of Psychology. Ratings represent six different dimensions related to program quality and to student learning objectives: intellectual challenge, written communication skills, oral presentation skills, computer skills, quantitative aspects of research, and knowledge of human and/or animal behavior. All ratings were made on a five point scale, with 5 indicating "excellent. Ratings are fairly consistent over the five years, with a slight upward trend. Results suggest that majors are especially satisfied with their knowledge of human/animal behavior and with their quantitative and computer skills. In contrast they were less satisfied with their skills in writing and speaking effectively, although they still, on average, describe their satisfaction with skills acquired in these areas as between "good" and "very good."



Results from assessments of our graduate program also indicate that students are highly satisfied with the quality of their education and with the contribution that our program has made to their professional growth. One year after graduation, they are, on average, at least "mostly" satisfied with their education in the following areas: speaking effectively in the field, critically analyzing technical writing in the field, learning independently, critically analyzing the technical literature in the field, applying research to problems in the field, applying quantitative principles and methods, and defining and solving problems in the field. On average, they were between "somewhat" and "mostly" satisfied with their skills in working cooperatively with a group, preparing for a career, preparing for further education in their field, understanding differing philosophies and cultures, understanding the interaction between society and the environment, and recognizing their responsibilities, rights, and privileges as a professional. Finally, it is worth noting that both our undergraduate program (Gourman report, 1997) and graduate program (National Research Council, 1993; US News and World Report, 2001).

H. Degrees Awarded

	2000-01	**2001-02**	**2002-03**
Number of undergraduate majors graduating	468	471	500
Number of master's degrees granted	11	15	14
Number of doctoral degrees granted	16	11	18

I. Plans for Improvement

The Planning Committee of the department, together with the Chair and Associate Chairs, continually assess, re-assess, and fine-tune program goals. This is done most explicitly at the end of every year, when we prepare our annual report for the College of Arts and Science and at the beginning of each year at a departmental Faculty retreat. The latter is a full half-day meeting of the faculty with goal setting and planning as the main activity. Our goals for the next 5 to 7 years are summarized below:

Enhance Support of Faculty, Faculty Collaborations, and Faculty Productivity

- **Encourage more cross-area collaborations.** As noted previously, we need to support more cross-area interaction and collaboration. To do so, we must build upon the steps we have already taken in the direction. One way the department can facilitate this is by supporting more joint teaching at the graduate level. Another is to more seriously consider the impact of hires on the whole department, not just one area. A third is to work on mechanisms that would better allow us to bring graduate students into the program with interests that span our area structure. Finally, we need to support and expand those structures already in place, like the annual faculty retreat, that bring together the faculty as a whole.
- **Provide faculty with more staff support for grant and service activity.** As we have shifted to a more junior faculty, we need to move quickly to provide them with more staff support for grant writing. If the faculty is to remain as productive as they are, they need to spend more time on the conceptual aspects, and less on the secretarial and budgetary aspects of grant preparation. In the same vein, if we want faculty to assume more responsibility for departmental service, we need to provide major committees with staff support. Until funds for these are available, we need to be diligent about keeping bureaucratic demands on our faculty to a minimum.
- **Continue to make headway on the space crisis**. We recognize that we are not about to get a new building and we might not even get a substantial amount of space in an "old" building near us, although we continue to have our eye on Cunningham, the Chemistry Library, and Architecture Hall, which are all in close proximity. But, we need to move aggressively to capture any space that might become available due to remodeling or additions in other areas. Moreover, as we move out of debt, renovation of the space we have now to create better efficiencies must be one of our highest priorities

- **Develop state-of-the-art joint research facilities.** The re-furbishing of space in support of facilities that can be used for cross-area ventures should be a top priority. Hand in hand with this is a commitment to seek external funds, and prioritize the use of internal funds, for this purpose.

Upgrading the Graduate Program

- **Continue to work toward initiation of the new graduate program.** The graduate program is in the middle of major revamping, including the addition of "Core Concepts" courses in all areas, and the development of "Advances" seminars that would typically span areas and focus on new integrative developments in the field. We want to support and encourage continued movement that has begun in this direction. The full program will be on line by Fall 2006.
- **Track improvements in the graduate program.** It is important that we assess the effect of curricular reform on graduate student learning. We can do this both through focus groups with students and through web-based assessments. The plan is to do so regularly until at least 2012, when the first classes that enter with the "new" program in place have graduated.
- **Continued improvement of graduate student space and offices**. We recently moved graduate student offices out of the "pit" (Guthrie basement) which many considered unsafe, and into Johnson Annex. We hope to upgrade the graduate computing facilities in Johnson Annex and the Clinic through funds from the student technology fee. We have submitted a proposal for this purpose.
- **Stabilize funding for graduate students.** Through the addition of TA resources (needed to upgrade the undergraduate program) and development activities, we would like to be able to promise all incoming students five years of funding, including funding for at least 2 summer months. This is crucial if we are to remain competitive for top students with other Psychology departments in the country.
- **Maintain our commitment to enhancing the writing skills of our Graduate Students.** We have been offering a course in the summer focusing on scientific writing. This course is extremely well received and we would like to add a section during the year.
- **Provide more independent teaching opportunities for graduate students**. We should provide a clearer pathway for students interested in teaching their own courses to gain the experience they need to do so. Hand in hand with this, we should seek to create more opportunities for students to teach, both during the school year and in the summer.
- **Continue to support students applying for fellowships.** We have been offering workshops for students in support of their applications for various fellowships, most notably NIH NRSA funds and NSF Graduate Fellowships. *This has resulted in a 100% increase in student fellowships over the last five years*. We would like to maintain, and possibly expand, this workshop program.
- **Add diversity to the Graduate program**. This department was once known for the diversity of its graduate students, but in face of I-200 and stiff competition for the best and the brightest, we have fallen behind. We must rededicate ourselves to building a diverse student body.

Upgrading the Undergraduate Program

- **Continue to track and evaluate changes in the undergraduate program**. Early indications are that changes in our undergraduate curriculum have been successful, but the first students going through the fully re-vamped program are just graduating. We would like to conduct focus groups with majors and track a group of students through the major so we can better understand pathways and decision points for our majors. We also look forward to examining feedback from the post-graduation assessments.
- **Continue to improve writing in the major**. We are tracking changes that might be instituted at the College level related to writing in the major. Until clearer directions emerge from that effort, we hope to maintain the Writing Center, which we presently fund on our own. We will also be exploring ways to encourage faculty to make better use of the Center as a resource.
- **Develop and offer departmental workshops in support of undergraduate teaching**. One of the by-products of our decentralization is that we find it hard to find a space to talk about our teaching, and about how our courses fit with each other. Some potential topics for workshops include "writing in the major"and "skills to be included in the major."
- **Add more laboratory classes and small, advanced 400 level classes to the curriculum**. We have added several new 400 level classes to the curriculum in the last few years, but we need even more. We would also like to resuscitate the social psychology laboratory class that has not been offered for several years.

- **Develop an undergraduate study center and/or a lab facility for undergraduate teaching and study**. Most science departments have rooms and lab spaces they control and can schedule. We would like to develop our "own" room with 25 computers that we can use to support sections for Psychology 209, 317, and other similar courses. We could also use this space to set up demonstrations for other classes. Because scheduling rooms for sections is low priority, we have trouble getting the kind of rooms we need for this purpose through room assignments, and we have no place at all for the demos.
- **Assign more staff and TA resources to support our undergraduate teaching mission**. **In conjunction with this, we would like to explore ways to use technology to enhance our teaching.** We need additional staff support to help set up demonstrations in our larger classes, to handle instructional equipment, and to help us better harness technology in support of our teaching mission. We also need to add senior, lead TAs to classes such as 202 (Biological Psychology) and 209 (Research Methods). This would greatly help us continue to upgrade these important entry-level classes to our majors. These classes also serve an important general education function for the College.

Department-wide Activities

- **Enhance our Development efforts**. This report says little about our development efforts because this has not been a key focus for us. We do not have an external committee and we have not kept good track of alumni. In the coming years we must invest more resources in this area. The appointment of Steve Buck to head our efforts in this direction is a good first step. The updating of the webpage to make it more user-friendly and interesting for alumni is a good second step. But more steps need to follow.
- **Invest more in Staff Development**. Too often we do not think about staff in formulating our goals and agenda. Yet their efforts are crucial to everything we do. We have many fabulous staff members and they are every bit as overloaded and overworked as our faculty. We must find better ways of communicating how much we value them. We must also find additional ways to enhance their skills sets and professional development.
- **Investment in Instructional Technology**. To continue supporting the department's educational mission, the Media lab must maintain pace with an increasingly technology-savvy student body. In the last decade, the internet, computer labs, and personal computers have become ubiquitous, and technologies like broadband internet access, DVD, mobile computing, and increased capacity for multimedia are poised to join them. As these technologies become the norm, we much assist instructors in preparing materials to take advantage of them. The Media lab needs to be able to provide support for video editing, DVD and multimedia authoring, and distance education systems, and continue to upgrade their workstations to include scanners, printers, cameras and presentation equipment available for checkout or for use in the lab.
- **Enhance our internet presence**. The department's website has become an important access point for both internal and external audiences. It provides directory information, faculty profiles, event listing and resources for current and potential students, staff, and supporters. Our website is already configured so that faculty and staff are able to enter much of the information themselves, without intervention from a traditional webmaster. Additionally, we need to establish workflows to ease the transition of departmental information from traditional paper version to new media.

I. Assistance Meeting Goals

The department of Psychology is stretched too thin already. It is hard to realistically imagine meeting our goals without increased budgetary resources. Given the scope, quality, and effectiveness of our teaching and research programs, an investment in us will have impact across the University. If increased budgetary resources are not available, it would help immensely if we could be relieved of part, or all, of the debt in our indirect cost recovery budget. This debt, which is close to $400,000 makes it very difficult for us and plan for the future with confidence.

Our greatest need, however, is for more research space, preferably in close proximity to Guthrie Hall. Short of acquiring new space, we need to be able to make improvements to our space, both to meet the requirements of the methods now common in modern psychology, and to gain efficiencies in operation. Because much of our space is located in so-called "temporary" buildings, there is reluctance to sound-proof the space, provide air-conditioning, etc. Without these, it is difficult to use the space to accommodate new research laboratories.