Message from the Chairman

In this issue, I am thrilled to highlight the vibrant and original accomplishments by members of the UW Medicine Department of Neurological Surgery.

This newsletter will showcase the conceptual origins of the UW Medicine Neurosciences Institute. Through extensive collaboration with other departments at the University of Washington the UW Medicine Neurosciences Institute has become a cutting edge comprehensive health care entity. We have assembled a group of renowned, highly-skilled clinical and research faculty to deliver and develop novel therapies to treat the nervous system. The specific publications presented within this newsletter are but a small portion of the academic contributions which are being generated by our faculty each year. We have chosen to feature the 2011 (to date) publications by Dr. Laligam N. Sekhar, Dr. Jeffrey G. Ojemann, Dr. Daniel Silbergeld, Dr. Nancy Temkin, Dr. Randall Chesnut, and myself. Future editions of this publication will highlight the publications of other faculty members performing basic and translational research, and clinical medicine.

I have noted upcoming lectures and seminars that may be of interest to our readers. One feature that makes our department a particularly attractive educational environment is the highly interactive, collaborative and supportive atmosphere. Just as the neurosciences are inherently multidisciplinary and integrative I invite each of you to join us for any of our upcoming lectures or seminars. In taking this a step further, I invite you to provide an educational lecture at one of our Grand Round sessions. Included in this edition are contact numbers, directions, and a map of the UW Medicine campus.

We now look forward to 2012...to continued collaboration with our colleagues...both outside of and within UW Medicine. Happy Holidays!

Sincerely,
Richard G. Ellenbogen, M.D., F.A.C.S.
Professor and Chairman, Department of Neurological Surgery
The UW Medicine Neurosciences Institute

The Concept …

Imagine a time more than 5 decades ago…a time when Dr. Arthur Ward was Chairman of the UW Medicine Department of Neurological Surgery (1948-1981)...a time long before most of us even began practicing medicine or surely even imagined the neurosurgical world of today…long before the creation of the Stroke Center, before the Gamma Knife was purchased, before the Movement Disorders and Multiple Sclerosis programs were begun...before programs in Neuro-Oncology, Epilepsy, and Substance Abuse were implemented. UW Medicine folklore tells us the idea of a Neurosciences Institute was initially proposed by Dr. Arthur Ward shortly after the Department of Neurological Surgery was created, although long time department faculty do not recall this. Regardless, the idea was never acted upon as the insular departmental approach was the prevalent approach of that day and for many subsequent decades to follow.

Dr. Ellenbogen, an outsider, without knowledge of Dr. Ward’s request and history, understood that the silos between the departments would have to be dissolved in order to create successful interdisciplinary programs that treat complex diseases and patients. Patients did not get sick according to departmental names.

New life is breathed into the concept of a UW Medicine Neurosciences Institute thanks in part to the unwavering support of Paul Ramsey, MD, CEO of UW Medicine. He agreed, as part of Dr. Ellenbogen’s recruitment to Chair position that Dr. Ellenbogen present the concept to his fellow chairs and then find the right leader. If they would participate enthusiastically, than the concept is re-born!

Chairs from the clinical neuroscience departments to include Medicine, Surgery, Neurology, Otolaryngology and Head and Neck Surgery, Psychiatry and Behavioral Science, Radiology, Anesthesiology and Pain Medicine, Pathology, Ophthalmology, and Rehabilitation Medicine rallied behind the Department of Neurological Surgery. On July 1, 2009, UW Medicine Neurosciences Institute became a reality after Dean Ramsey reaffirmed his commitment to the Institute concept at UW Medicine.

The concept of a multidisciplinary team of experts to include neurosurgeons, neurologists, rehabilitation specialists, psychiatrists, internists, neuro-radiologists, neuro-oncologists, and ophthalmologists focused on evaluating, treating and managing neurological disorders in patients had been taken to the next level.

Now, a strong leader was needed. Specifically, an organizational master with business insights and clinical accumen was required…

He would need to be a selfless, team player that was an active and respected clinician. It was unanimously agreed the sought after leader would need to possess the leadership skills necessary to

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UW MEDICINE NEUROSCIENCES INSTITUTE INCLUDES THE DIAGNOSIS AND TREATMENT OF NEUROLOGICAL DISORDERS TO INCLUDE:

- Aging/Neuro-Degenerative
- Epilepsy
- Headache
- Multiple Sclerosis
- Neuro-Genetics
- Neuro-Imaging
- Neuro-Muscular
- Neuro-Oncology
- Neuro-Ophthalmology
- Neuro-Psychiatry
- Neuro-Trauma
- Neuro-Rehabilitation
- Neuro-Spine
- Normal Pressure Hydrocephalus
- Parkinson’s Disease and Movement Disorders
- Stroke/Cerebrovascular
incorporate the existing neuroscience services, while at the same time be open to establishing new services and offerings. There were many interviews. There were many meetings. While a national search presented many highly qualified candidates…none were more perfect for UW Medicine than Anthony Avellino, M.D., M.B.A.

Anthony M. Avellino, M.D., M.B.A.

The Concept …The Creation…

Effective June 1, 2009 Dr. Anthony M. Avellino, a UW Professor of Neurological Surgery and Professor of Orthopaedics and Sports Medicine became the Director of the UW Medicine Neurosciences Institute.

Dr. Avellino is an attending neurosurgeon at Harborview Medical Center, UW Medical Center and Seattle Children’s.

He is Chief of Neurological Surgery at the University of Washington School of Medicine. Dr. Avellino is board-certified by the American Board of Neurological Surgery and the American Board of Pediatric Neurological Surgery.

The UW Medicine Neurosciences Institute is committed to achieving excellence in outcomes by placing the needs of our Patients First through accessibility, better coordination of care, cost efficiency, and scientific discovery. The institute capitalizes on UW Medicine’s academic healthcare system strengths of “bench-to-bedside” translational research -- taking work from the scientific laboratory “bench” to the patient “bedside” via cutting-edge diagnostics, treatments, and protocols -- and education of the next generation of healthcare professions.

By way of background, Dr. Avellino received his medical degree from Columbia University College of Physicians and Surgeons in 1992. After completing an eight-year residency in neurological surgery at the University of Washington and a one-year pediatric neurosurgical fellowship at Seattle Children’s, he joined the Division of Pediatric Neurosurgery as an assistant professor of neurosurgery at The Johns Hopkins University School of Medicine and Hospital in January 2001. He also was a member of the consulting medical staff at the Kennedy Krieger Institute in Baltimore, Maryland. He subsequently returned to the Division of Pediatric Neurosurgery at Seattle Children’s in January 2003 and served as chief of pediatric neurosurgery from 2007 to 2009. In addition, he was the UW Department of Neurological Surgery residency program director from 2005 to 2009.

In 2007, Dr. Avellino completed the certificate program in medical management in the Department of Health Services at the UW School of Medicine, and in 2008, he received his masters of business administration degree from The George Washington University School of Business.

The Concept …The Creation……The Reality

Dr. Avellino has led the UW Neurosciences Institute to become a first class comprehensive health care entity that focuses on the evaluation, treatment and management of neurological disorders in patients. The UW Medicine Neurosciences Institute helps patients by making available the latest diagnostic studies and treatment modalities – many of which were pioneered right here at UW Medicine. We are improving neurosciences worldwide through our ongoing medical research and by educating the next generation of physicians, scientists and health-care professionals.
Patients travel from across the region, the country and even the world to the UW Medicine Neurosciences Institute for the care and expertise provided to patients with complex neurological conditions. Through our patient and family centered approach, we involve patients and their loved ones throughout treatment, every step of the way.

Because the brain and spinal cord are so complex, caring for them requires experts in a multitude of specialties. When one thing goes wrong with the brain or the spinal cord, it takes more than just one physician to treat the patient. For example, a neurologist may be able to determine the effects of a stroke, but a surgeon may need to remove a blood clot or decompress the brain. Then, a psychologist may need to address a patient’s resulting depression. And a rehabilitation specialist can help the patient regain the motor skills the stroke damaged so she can tie her shoes and walk unassisted once again.

*Because the brain and spinal cord impact the entire body, we treat the whole patient.*

By working together to provide patients with the best possible health outcomes. By carefully coordinating the care we provide to our patients, we can ensure more effective, efficient and safe quality care.

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**TO REFER A PATIENT TO HARBOURVIEW MEDICAL CENTER, UW MEDICAL CENTER OR ANY OF OUR CLINICS OR SERVICES**

**PLEASE CONTACT MEDCON AT 1.800.326.5300**

**NEUROLOGICAL SURGERY** ............................................................... 206.744.9300

**NEUROSCIENCES INSTITUTE** ............................................................. 206.744.9300

**SPORTS AND SPINE** ................................................................. 206.744.9340

**SPORTS CONCUSSION** ................................................................. 206.744.8000

**STROKE CENTER** ................................................................. 206.744.3992

**MAKE A REFERRAL** ................................................................. 206.744.9334

**TRANSFER CENTER** ................................................................. 888.744.4791

**MEDCON** ........................................................................ 800.326.5300

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**HARBOURVIEW MEDICAL CENTER** ........................................... 206.744.3000

**325 NINTH AVE.**

**SEATTLE, WA 98104-2499**

**GENERAL INFORMATION** ..................................................... 206.744.3000

**TTY** .................................................................................. 206.744.2800
TRAUMATIC BRAIN INJURY SUPPORT GROUP
The group is for people recovering from a brain injury.
First Thursdays, monthly, noon to 1 p.m.
Harborview, Maleng Building, main floor, room 112
Register by calling Chinua Lambie at 206.744.3188 or e-mailing clambie@u.washington.edu

BRAIN ANEURYSM SUPPORT GROUP
This group welcomes anyone who has been recently diagnosed with a brain aneurysm and is currently undergoing treatment, has a desire to support a friend or family member who has been diagnosed with a brain aneurysm or is recovering from a brain aneurysm.
Fourth Wednesday of the month, 6 to 8 p.m., Patricia Bracelin Steel Building, 401 Broadway, Suite 2097
To register and obtain more details, call Beth Dillard at 425.343.5638 or e-mailing beth102386@aol.com

BRAIN INJURY SUPPORT GROUP
This support group is for family members of those with a brain injury. For more information and locations, contact Lynn Krog at 206.744.4607.
Thursdays, 4 to 5 p.m.
Harborview, West Hospital wing, second floor, room 81

EPILEPSY EDUCATION AND DISCUSSION
For adults living with epilepsy and family members. Learn about epilepsy, depression and avoiding seizure triggers. The session is co-sponsored by the Epilepsy Foundation Northwest and the Regional Epilepsy Center at Harborview.
Meetings are held first Wednesdays bi-monthly (October 5, December 7), from 6:00 to 8:00 p.m. at the Norm Maleng Building, 420 9th Avenue, Room 112
For information, mail@epilepsynw.org or call 206.547.4551

MUSCULAR DYSTROPHY ASSOCIATION SUPPORT GROUP
The Muscular Dystrophy Association support group is for adults and is facilitated by Joe Stuckey, a UWMC social worker.
First Monday of the month, 4 to 5:30 p.m. UW Medical Center, Plaza Cafe.
For more information, contact Chelsea Page 206.293.2183.

SPINAL CORD INJURY:
NW REGIONAL SPINAL CORD INJURY SUPPORT AND INFORMATION GROUP
The Northwest Regional Spinal Cord Injury System presents a monthly support and information group for people with spinal cord injuries. Share stories and experiences, ask questions or just listen to fellow members of the spinal cord injury community. The content of the discussions is driven by the interests of those attending. This is not a therapy group.
Third Thursday of the month, 12:30 to 1:30 p.m. Participants should bring lunch.
Harborview, West Hospital wing, fourth floor, patient and family multipurpose room across from the nurses’ station. For information, call 206.616.8568 or e-mail nwrscis@uw.edu
NW REGIONAL SPINAL CORD INJURY SYSTEM FORUM
The Northwest Regional Spinal Cord Injury System presents a monthly evening educational program which covers topics of interest to people with spinal cord injury, family members and friends, physicians and allied health professionals.
Second Tuesday of the month, October through June, 7 to 8:30 p.m.
UW Medical Center
For more information about dates, times and upcoming speakers and topics, visit the Spinal Cord Injury Forum web site at http://sci.washington.edu/info/forums/index.asp or contact Cynthia Salzman at 206.685.3999.

Research News

Dr. Jeffrey G. Ojemann Named Research Director

Dr. Jeffrey G. Ojemann has been named Research Director for the Department of Neurological Surgery, by the Chair, Richard G. Ellenbogen, a position previously held by his father, Dr. George Ojemann, Professor Emeritus of Neurological Surgery. Dr. Jeffrey Ojemann carries forward our Departmental tradition of Physician Scientists who are productively engaged in Patient Care, Research and Teaching. As Research Director, he is responsible for leading and facilitating the Department’s research activities. These cover a wide range of interdisciplinary clinical and basic teams generating approximately $10M per year of research funding. UW Neurological Surgery research funding ranks in the top 10 departments nationally and our research faculty have established substantial collaborative networks with other UW neuroscience departments.

Dr. Ojemann's own research uses electrocorticography (ECoG) to answer basic neuroscience questions as well as to develop tools for clinical and rehabilitative applications. ECoG is used for long-term clinical monitoring of epilepsy patients and provides a unique opportunity to collect intracranial cortical data from individuals while awake. In this procedure subdural electrode grids are used to record electrical activity from the surface of the patient’s brain. These signals are then studied to map areas of brain activity. Although this procedure is used primarily for diagnostic purposes, Dr. Ojemann and others discovered that patients can quickly learn to train their thought patterns to control external devices through a computer interface. The potential of this for future patient care is substantial and a major effort is underway to develop Brain Computer Interfaces to control robotic neuro-prosthetic devices. Dr. Ojemann’s group represents researchers from a wide range of backgrounds including neurosurgery, neurology, rehabilitative medicine, engineering, neuroscience, and physics. In addition to neuro-prosthetics, his team’s major focus is on learning mechanisms, tactile feedback and fundamental questions about cortical representation of simple and complex hand movements, the dynamics of cognition, language, and higher-order nonlinear interactions between brain areas. His work is supported by
Faculty Spotlight

Robert Goodkin, M.D.

Endowed Lectureship in Neurological Surgery

On November 9, 2011 the Department of Neurological Surgery recognized the long and distinguished career of Dr. Robert Goodkin through the Robert Goodkin, M.D. Endowed Lectureship in Neurological Surgery. The Goodkin Lectureship was established through a $150,000 endowment including multiple gifts from individuals and organizations in funding the lectureship, and in addition we received a generous, anonymous gift of $100,000 toward our $150,000 goal.

Dr. Goodkin has served as a role model and mentor to young physicians during their formative years of training, which include the practice of meticulous surgical technique and the development of clinical judgment.

Dr. Goodkin has received much recognition for his achievements and contributions. In 1989, he received a commendation from Madigan Army Medical Center, where he served as chief of neurosurgery from 1987 to 1989. Dr. Goodkin was nominated by colleagues to serve as the president of the Neurosurgical Society of America in 1997. In 2008, Dr. Goodkin received the Distinguished Alumnus of the Year Award from the Chicago Medical School of the Rosalind Franklin University of Medicine and Science. More recently, Dr. Goodkin was appointed as an associate editor-in-chief of a new, open-access neurosurgical journal, Surgical Neurology International, in 2010.

Our guest lecturer was Howard P. Goodkin, M.D., Ph.D., Associate Professor, University of Virginia, Department of Neurology, and son of Dr. Robert Goodkin. As our first invited lecturer, we received an overview of his father’s dedication to patient care and teaching as well as to his lecture entitled ‘Etat de mal’.

Dr. Howard P. Goodkin is a distinguished and noted specialist in the field of epilepsy and pediatric neurology. He is a highly respected clinician, educator, and research scientist. Dr. Goodkin’s research interests focus on Status Epilepticus.

Dr. Howard P. Goodkin is the Shure Professor of Neurology and Pediatrics at the University of Virginia, Charlottesville, VA. He is a graduate of the MST Program at Washington University in St. Louis. He completed pediatric training at St. Louis Children's Hospital followed by Child Neurology residency and Clinical Neurophysiology fellowship at Children's Hospital Boston. He joined the faculty of UVA in 2002. Dr. Goodkin is a member of the editorial board of Neurology and Surgical Neurology International. He is an associate editor of Wyllie’s The Treatment of Epilepsy. Dr. Goodkin is an active member of the American Epilepsy Society and is currently the chair of that organization's CME Review Committee. He is a member of the scientific advisory boards for CURE (Citizens United for Research in Epilepsy) and the Tuberous Sclerosis Alliance. He has been consistently named to Best Doctors in America since 2008. Dr. Goodkin's research focuses on the trafficking of GABA(A) receptors and the modifications that occur in the presynaptic release of GABA during the prolonged seizures of status epilepticus.

This lectureship will serve to attract experts in neurological surgery to speak and teach at UW Medicine. The intent of the Robert Goodkin, M.D. Endowed Lectureship is to continue to expose students, trainees and faculty to the best practices in the field, as well as to challenging and inspiring ideas — much as Dr. Goodkin has done over the course of his career.

The key emphasis of the Goodkin Lectureship includes:

**IMPROVING CLINICAL CARE.** The creation of the Goodkin Lectureship will allow UW Medicine to recruit guest speakers and experts who specialize in neurological surgery and the neurosciences. In their presentations to and interactions with the department, the lecturers will add to the department’s expertise in patient care, with the goal of improving treatment and patient outcomes.

**FOSTERING CAREERS AND KNOWLEDGE.** Establishment of the Goodkin Lectureship will help the Department of Neurological Surgery enrich its teaching and learning environment and continue to develop academic careers in neurological surgery — essential to future advances in the field.

Robert Goodkin, M.D., Endowed Lectureship in Neurological Surgery will forever honor Dr. Goodkin’s professionalism and dedication to healing and teaching.
Upcoming Grand Round Lectures

…Mark Your Calendars
All lectures held on the UW Medicine-Harborview Campus in the Research & Training Building Auditorium
(300 Ninth Avenue, Seattle, WA)

GRAND ROUNDS 2012

JANUARY 4, 2012:
7:00AM  Residents’ Case Presentations
8:00AM  Journal Club

JANUARY 11, 2012:
7:00AM – 9:00AM  Annual Compliance Training
Closed Session – Open to UW Only

JANUARY 18, 2012:
7:00AM  Spine Lecture: Eugene Carragee, MD
8:00AM  Neuropathology Lecture (TBA)

Dr. Carragee specializes in adult spine care. His areas of expertise focus are:
- spinal reconstructive surgery
- cervical and lumbar disc and fusion surgery
- spinal tumor and infections
- spinal deformities

EUGENE CARRAGEE, MD
Professor
Department of Orthopaedic Surgery
Director
Spine Center
Stanford Medical Center
Stanford, California

JANUARY 25, 2012:
7:00 – 9:00AM  M&M

FEBRUARY 1, 2012:
7:00 – 9:00AM  Neurological Surgery Lecture

FEBRUARY 8, 2012:
7:00 – 8:00AM  Neurological Surgery Journal Club
8:00 – 9:00AM  Colin Studholme, PhD

FEBRUARY 15, 2012:
7:00 – 8:00AM  Noojan Kazemi, MD
8:00 – 9:00AM  Neurological Surgery Lecture

FEBRUARY 22, 2012:
7:00 – 9:00AM  M&M

FEBRUARY 29, 2012:
7:00 – 9:00AM  Neurological Surgery Lecture
**Upcoming Grand Round Lectures—2012**

*Mark Your Calendars*

All lectures held on the UW Medicine-Harborview Campus in the Research & Training Building Auditorium
(300 Ninth Avenue, Seattle, WA)

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<tr>
<td>March 7, 2012</td>
<td>7:00 – 8:00 AM</td>
<td>Neurological Surgery Journal Club</td>
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<td>8:00 – 9:00 AM</td>
<td>Sean Murphy, PhD</td>
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<td>March 14, 2012</td>
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<td>Neurological Surgery Lecture</td>
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<td>March 21, 2012</td>
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**Staff Spotlight...**

**Stephanie Schubert**

As we continue to spotlight our outstanding departmental staff, we are pleased to highlight Stephanie Schubert. Stephanie grew up in Wisconsin 20 miles from St. Paul, Minnesota in a household of artists. She holds a degree in civil engineering but her love of building led her to a career in construction management. Before she joined our department in May of 2010 she had spent 20 years in Seattle working as a project manager for a general contractor. Projects that she is especially proud to have in her resume are: A sound & television studio for Microsoft; The International Glass Museum; The corporate headquarters for Paul Allen’s Vulcan Northwest; The renovation of the Seattle Opera House, aka Marion Oliver McCaw Hall; and The Bravern, a multi-tower, high-rise in Bellevue. Initially, Stephanie joined the department to support me and the emeritus faculty, work on special projects, and provide general administrative support to the department. Quickly noticing that she was overqualified for these duties, we began giving her more responsibility. With her recent promotion, Stephanie now coordinates the appointments and promotions for the department, as well as the visitor process. Stephanie has joined two groups (one for HR and the other for A&P) within the School of Medicine that bring together all of the departments to discuss and share best practices in these important areas. Her interests include architecture, music, food, and travel. She spends time with her new husband attending concerts, riding her motobike off-road, skiing, and planning for the extensive remodel of their home.


New Knowledge (Continued)


**Current comprehensive management of cranial base chordomas: 10-year meta-analysis of observational studies.** Di Maio S, Temkin N, Ramanathan D, Sekhar LN. J Neurosurg. 2011 Aug 5. PMID: 1819197


How to Find Us:

Whether you are coming to see us for our Grand Round Lectures, as a visitor, or as a patient, you will find us at:

**DRIVING DIRECTIONS TO HARBORVIEW**

**FROM INTERSTATE 5 NORTHBOUND**
Exit at James Street, Exit 164A. Turn right (east) and travel to Ninth Avenue.
Turn right (south) on Ninth Avenue and go one block to Jefferson Street.

**FROM INTERSTATE 5 SOUTHBOUND**
Exit at James Street, Exit 165A. Turn left (east) on James and travel to Ninth Avenue. Turn right (south) on Ninth Avenue and go one block to Jefferson Street.

**HARBORVIEW PARKING**

**VIEW PARK GARAGE**
The View Park Garage is located at the west side of Harborview between Alder and Jefferson streets. People with disabilities may park on Levels A, B and 1. Oversize vehicles may park on Level A at kiosk.

**NINTH & JEFFERSON BUILDING PARKING**
Underground parking also is available in the Ninth & Jefferson Building. The parking garage entrance is on the east side of the building, off of Terry Avenue, between Jefferson and James Streets. Parking is avail-