



The Montlake Cut

A Publication of the Department of Neurological Surgery
UW Medicine Health Care

A View From Puget Sound



Richard G. Ellenbogen
M.D., F.A.C.S.

Welcome to the Spring 2014 issue of the *Montlake Cut*. In this issue we provide you an overview of our exciting and popular summer neuroscience program which allows high school and college-age students the opportunity to observe leading-edge neurosurgical procedures while being tutored by world-class scientists. We profile Dr. Sam Browd's novel UW Foster School of Business course on neuroscience-related innovation and commercialization, and we are absolutely delighted to introduce our three terrific and new UW Neurological Surgery Residents: Ariana Barkley, Sam Emerson and Jake Ruzevick. We introduce the work of four of our faculty who have partnered with our outstanding Seahawk team physicians at the request of the NFL for a new "on-field" safety program in concussion care. We also bring you news of our social media initiative as a way to share educational advances, research insights, events, and personal achievements of interest to our community. We want to introduce two new members of our team: Bronwyn Slobogean and Veronica Brauchli, as well as spotlight Patient Care Coordinator Lynnel Barquet. Hearty congratulations are due to Assistant Professor Dr. Amy Lee and her husband Dr. Eliot Fagley on the birth of their second child, Andrew Lee Fagley. Finally, Dr. Minku Chowdhary continues his roles as Puzzler-in-Chief, offering insight into the history of medicine while posing another riddle. Please enjoy this edition and remember, as always, we welcome your feedback and thank you for your support.

Sincerely,

Richard G. Ellenbogen, MD, FACS
Professor & Chairman, Department of Neurological Surgery

In This Issue

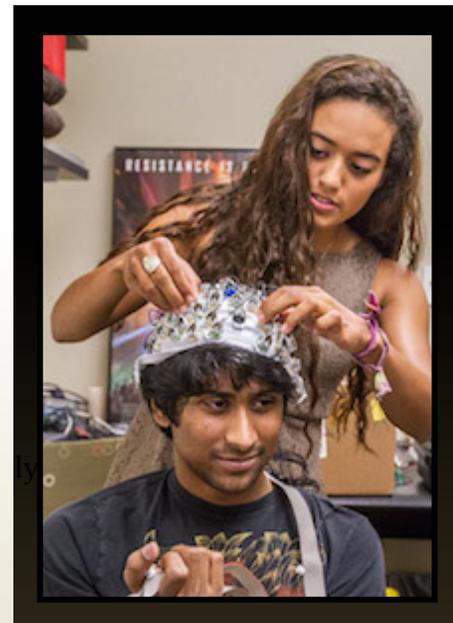
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Neurological Surgery Summer Neuroscience Program

Every summer, the Department of Neurological Surgery invites a group of college and high school students to observe leading-edge neurosurgical care while being mentored by world-class scientists. In doing so, we aim to inspire and educate students in ways that will ignite a passion for exploration and discovery. We hope students will feel so enthused about what they have learned that they will pursue an academic career in research, medicine or nursing - careers needed to support our nation's healthcare system.

The Student Experience

Founded and funded since 2008 by the Rich and Sandy Ellenbogen Family Foundation, and administered by Jim Pridgeon and Jana Pettit, The Neurological Surgery Summer Neuroscience Program is an eight-week excursion into research, lectures and surgical observations. At its conclusion, students describe their experiences in a presentation made to faculty, fellow students and family. It has been exceptionally well received and popular and now receives donations from around the state.



The unique program exposes young scholars to broad elements in neuroscience, including:

Participation in research. Students help conduct research in a laboratory matching their interest.

Attend educational events. Students accompany faculty and trainees at Neurological Surgery Grand Rounds, resident teaching conferences, and weekly lectures by Neurological Surgery faculty developed specifically for this group.

Shadow surgeons in the OR. Participants follow our neurosurgeons and neurosurgery residents into the operating room at Harborview Medical Center, Seattle Children's and UW Medical Center.

These activities not only immerse students in medicine and technology, but they also help them correlate research advances to improved patient care. We want our students to see that careers in science, medicine and nursing changes lives.

Our Students, Today

To date, 60 high school students and college undergraduates from more than 40 schools nationwide have taken advantage of the program. We admire the remarkable energy and enthusiasm shown by our "graduates" and of their subsequent success, based, in part, on their participation in our Program. Several students from our earliest classes have already been accepted into graduate school in science, medicine or nursing. Many of the high school students have pursued neuroscience or other science majors in college and hope for a scientific or medical career.

Our remarkable faculty is the key to this program's success. In total, students have been placed in 15 different labs and have shadowed 11 of our neurosurgeons in the OR, 17 different faculty have given weekly Friday Faculty talks to group, and students have attended over 80 different Grand Rounds.

Feel free to refer interested students to our program. Jim Pridgeon (Pridgeon@uw.edu) and Christina Buckman (cbuckman@uw.edu) are our program contacts. Students should 'Like' us on Facebook at www.facebook.com/neurosurgery to keep up with program announcements and related news.

<http://neurosurgery.washington.edu/education/summerprogram/>



The Business of Innovation: The Emerging Neuro-Economy

How do you take an idea and make it reality? That question is the driving force behind a new course offering at the Foster School of Business called “**Neuro Ventures**” **ENTRE 579**. Our own Dr. Samuel Browd was asked to direct the course on innovation and commercialization. NorthWest Neuroneighborhood (www.nwnn.org) founding member Lance Steward, Ph.D., MBA, - senior director of alliances at the Allen Brain Institute and Connie Bourassa-Shaw, director of the Buerk Center for Entrepreneurialism at the Foster School of Business - conceived this idea almost two years ago. The Pacific Northwest has become a fast growing hub for neuroscience-related innovation, commercialization and industry. The UW Department of Neurological Surgery has been a leading voice within the university, and our faculty members have been actively spinning out companies to improve patient care including ThermaNeuroscience, Aqueduct Neuroscience, Aqueduct Critical Care, Navisonics, eLoupes and Spark Medical. Dr. In his role as co-founder and chief medical officer for five of these companies, Dr. Browd seemed a natural choice to direct the course, initiated this winter-term when we enrolled more than 25 students with backgrounds ranging from undergrad computer science majors to MBAs.

The course offered yearly takes students through what Dr. Browd called the “pipeline”. “Ideas are just that... ideas. The hard part is not having a great idea, it is bringing it to reality.”

Sam shows students the path from idea to product. Many steps lie between a great idea and useful treatment. Topics address the fundamental steps and concepts to commercialize a biomedical device. Regional and national experts lecture on various subjects including: Intellectual property/patents, market opportunities, competition, regulatory and FDA guidelines/submission, company formation/equity/corporate boards, funding (grants, Angel Investors and Venture Capital), pitching and the all important exit strategy. The course ends with student teams pitching a novel product idea. The panel of commercialization experts listens, interrogates, and provides feedback to the team. This year participants expect to promote their ideas by entering into the 2014 Business Plan Competition at the Foster School of Business, and several intend to form their own companies.

NeuroVentures ENTRE 579 will be offered each UW Winter term. It is open to UW students, faculty, as well as interested people outside of the university. The course is held at Paccar Hall on the main UW campus, Wednesday evenings from 6-9:30 pm. For more information contact, Dr. Samuel Browd at sbrowd@uw.edu or Samantha Ogle, Buerk Center for Entrepreneurship, at samogle@uw.edu, or 206-616-8687 for more information.

UW Neurological Surgery

New Residents to start July 2014!

We are delighted to announce three new Neurological Surgery Residents, Ariana Barkley, Sam Emerson and Jake Ruzevick who will join our program in July 2014. Welcome!



Ariana Barkley

Ariana completed her undergraduate degree in Psychology and Cell and Molecular Biology at Johns Hopkins University and will soon graduate from the Perelman School of Medicine at the University of Pennsylvania where she has been involved in neuro-regenerative research with former graduate Tim Lucas and others. Ariana is originally from Trinidad and enjoys running, playing basketball, volleyball, and sky-diving! Ariana performed in an exemplary fashion as a sub-I at the UW and was recruited heavily around the country, but is now one of our program's rising stars.



Jake Ruzevick

Jake graduated with a BS in Brain and Cognitive Sciences from MIT. He will graduate from Johns Hopkins University in May. Jake has published several papers on glioblastoma therapy, and was a Doris Duke Research Fellow. He is an avid long-distance runner, and was honored as an MVP member of MIT's cross-country team. Jake distinguished himself at Hopkins where he was described by several of the Professors as one of the best students they had seen in years.



Sam Emerson

Sam has been part of the UW Neurological Surgery family for many years - he completed his PhD in Neurobiology and Behavior in 2012 at the University of Washington with extensive work in Dr. Philip Horner's lab. He will complete his MD at the UW in May. Sam has a BS in Biomedical Engineering from the University of Southern California, and his research has been focused on stem-cell therapies in SCI. Sam has been a favorite of both residents and faculty since he started mysteriously showing up for Neurological Surgery Grand Rounds 7 years ago.

The Seattle Seahawks, the NFL & UW Neurological Surgery



Dr. Manny Ferreira

The NFL was again asked to address the medical, media and public frenzy on the concussion issue in 2013. NFL Commissioner Roger Goodell championed a novel idea in 2013 and rolled out a new player safety program last year called the Unaffiliated Neuro-Trauma Consultant or UNC. At the request of the players, an extra set of eyes and ears in the form of a neuro-trauma physician expert appearing on each sideline during every NFL game. These neurosurgeons, neurologists, emergency medicine physicians, sports medicine physicians or physiatrists are experts on TBI/concussion and are now in partnership with the NFL team physicians. The UNC is chosen based on their affiliation with the local major trauma center to which these professionals would refer an injured player or fan. In August of 2013, the NFL rolled out its UNC pilot program for all 32 teams. Drs.

Ellenbogen and Batjer, Co-Chairs of the NFL's Head Neck and Spine Medical Committee were responsible for operationalizing this national program.

This program wisely does not replace the team physicians upon whom the players depend for daily medical, surgical and follow-up care. Because team physicians have a baseline exam and longitudinal medical history for all players, they still make all final decisions on return to play issues. However, the UNC serves as an unaffiliated consultant for the NFL during a game and can, in real time render a return to play second opinion, for a team physician or player. This year the UNC consulted with team physicians when requested in order to provide another opinion on whether or not it was safe to return a player to the field in the face of possible concussion. There were many such positive collaborations on the field during the past NFL season.

This year, four UW Medicine neurosurgeons affiliated with the only Level I trauma center in the Northwest, Harborview Medical Center, served as the UNC's for the Seahawks. **Manny Ferreira, Sam Browd, Fangyi Zhang and Rich Ellenbogen** worked closely with, and were mentored by their experienced and beloved sports medicine colleagues from UW who are team physicians for the Seattle Seahawks: **Drs. Stan Herring, Ash Rao and Jon Drezner**. This innovative NFL safety program championed by the Commissioner and players, is invisible to the public and definitely not intended for amateur sports, but demonstrates again how pro-active the NFL is as a leader in concussion diagnosis and care.

Neurological Surgery in Social Media

Social media stands at the forefront of all business communication today. For universities, it's a way to stay connected beyond borders while keeping the audience abreast of educational advances, research insights, events and personal achievements. While this is interesting, the most important aspect of social media is to create accessibility beyond the narrow scope of a given business.

With that, the goal of the **UW Department of Neurological Surgery** is to make ourselves accessible outside the reach of academia and medicine. Our Department is not an abstract entity but something to relate to, and impacts lives on a personal level. Through social media we add a narrative to the important and interesting things we do here.

These ideas may be new to Neurological Surgery, but not to the UW School of Medicine in general. Each department maintains some sort of social presence, through a Facebook, Twitter or YouTube page; and sometimes all three! There are 350 million global users, with 100 million viewers per day – and that's just for Facebook, with the average daily user spending 55-minutes per day logged on.

Our Department has made encouraging strides with a social media presence in the past six months. Although still in its adolescence, we've had increasing growth on our Facebook page. In a six-month period, our visitor average has jumped from 4 per day in September of 2013 to an average of 43 visitors per day as of February 2014. In comparison to other UW Medicine department efforts, we still have a ways to go, but we are certainly catching up.

This increase in visibility directly correlates to posts reaching a broader and more diffuse audience. We continue this presence with small media campaigns such as the inception of a "Resident Spotlight." So far, four of our amazing residents have been in the 'spotlight' garnering the most views of any posts to date. Why, you ask? The more personable and accessible the message, the more we are able to reach our target audience and encourage participation.

With that, we hope *you* will share your stories with us, and "like" our page to get regular updates and information. It's about the human experience. You can keep stories as general or detailed as you want; but a shared experience goes a long way and has a positive impact on the audience and ultimately with us all!

The work being done isn't limited to our Facebook page. Thanks to the toils of our Computer Specialist Kris Lewis, the launch of a Neurological Surgery Twitter and a YouTube page has expanded our social presence. Why the additional efforts? While Facebook can go into detail of our activities, Twitter is a more immediate micro-blogging platform to answer the basic question of, "What are we doing?" We also added YouTube, a video-sharing platform, to showcase interviews and surgical techniques.

With all three media avenues, Christina Buckman, our Social Media Specialist, will continue to bring you updated information on the faculty, residents, programs and events happening in our department. We have a lot going on, so check us out!



www.facebook.com/uwneurosurgery



<http://www.youtube.com/UWNeurosurgery>



<https://twitter.com/UWNeurosurgery>

A New Member of the Neurohospitalist Team

Bronwyn Slobogean, PA-C has joined the Neurohospitalist Team on dayshift. Bronwyn comes to us from Johns Hopkins Neurosurgery where, according to her attending in Baltimore, she essentially “held things together”. She also has extensive experience as first assistant in spine surgery.

Bronwyn graduated from Gonzaga University with a degree in French Language and Literature, which is an odd but probably very valuable road to medicine, and then from the University of Washington MEDEX PA program. She lives in Vancouver, BC with her husband who is an Orthopaedic Surgeon. We are lucky to have her with us, if for no other reason than to give us an accurate translation of Proust.



Patient Care Coordinator Spotlight - Lynnel Barquet

Lynnel Barquet is the Patient Care Coordinator for Dr. Randall Chesnut and the Resident Clinic in the Neurosurgery Department at Harborview Medical Center. She was born and raised in the Seattle’s Central District, has been a valued employee at Harborview since 1999, and the resident’s best friend since 2008. In 2012, she took on the entire responsibility for coordinating all care for Resident Clinic patients, where the vast majority of the service’s trauma patients are followed. She manages the hospital discharge appointments for the dozens of patients each month that have suffered spinal and head injuries.

As the Patient Care Coordinator, Lynnel is responsible for coordinating all of their follow-up care. Since our patients arrive from the five-state WWAMI REGION, this is not a small logistical problem. It is important that she communicate not only with the patients/families, but also their PCP’s, skilled nursing facilities and insurance companies. Simply to coordinate all of their appointments on the same day can be daunting. Obtaining pre-authorization from the insurance company prior to any imaging or procedures, then scheduling it, contacting outside facilities where the images may have been done, figuring out exactly what studies to obtain, helping patients with paperwork, processing referrals, then obtaining the outside imaging and records can take hours and sometimes significant aggravation.

And there is the occasional disorder in the clinic itself when junior residents are elsewhere, or are unsure of the procedures, the clinic is full, some images have not been properly scheduled, or three patients show up an hour and a half late.

When the young doctors are uncertain about what to do, Lynnel bails them out (as well as sometimes the attendings). She wryly notes that, since the Residents Clinic is staffed by multiple providers, it is important to be organized and alert.

Neurological Surgery Welcomes Veronica Brauchli

Veronica Brauchli was born and raised in Scottsdale, Arizona: the only Arizona native in her family as her parents and brother had originally moved to the southwest from New Jersey. After receiving her BS degree, Veronica began a long administrative career in higher education, working over the years for Deans, Directors and the Provost of Arizona State University. She also worked in the Ira A. Fulton Schools of Engineering where she took an interest in the Science, Technology, Engineering and Mathematics (STEM) initiative that encourages K-12 students to succeed in the “hard sciences.” It was at this point that she began volunteering for the Big Brothers Big Sisters of Central Arizona, and as a tutor for the Tempe School District and found both experiences to be extremely rewarding.



But instead of growing fonder of the blazing Phoenix heat, Veronica began to tolerate it less. In August 2013, she took a leap of faith and relocated to Seattle, a city she had always loved to visit. She feels very fortunate for the opportunity to work within the Department of Neurological Surgery as an Administrative Specialist for Dr. Anthony Avellino, where she has already proven her worth. When she isn't working, Veronica enjoys exploring the various Seattle neighborhoods, writing, drawing, cooking and maintaining her deeply conflicted relationship with running.

Department of New Arrivals



Assistant Professor **Dr. Amy Lee** and her husband **Dr. Eliot Fagley**, announce the birth of their second child - a son: **Andrew Lee Fagley** born on February 14th at 7:46 am in at 7 lbs, 11 oz. Mother, father and so far, his sister, are all doing well.

Puzzler



Dr. Minku Chowdhary
Chief, Neurosurgery
Overlake Hospital



Puzzler: What was the original occupation of the handyman who indirectly inspired Dr. Ivan Pavlov to famously state that classical conditioning could make a dog salivate on cue?

Answer to January's Puzzler

January's Puzzler: Jay Cutler and Barry Bonds are two famous athletes who owe success to the discoveries of this man, who is so unique, that there are only 3 other people in the world like him.

Answer: Frederick Sanger - Won two Nobel Prizes, one in 1958 and one in 1980, both in the field of chemistry. The first one was for the sequencing of insulin (Jay Cutler is a diabetic) and the second for DNA sequencing which led to the creation of HGH (Which is one of the substances Barry Bonds is alleged to have used). Other scientists who have received two Nobels are John Bardeen for physics (1956-1972), Marie Curie for physics (1903) and chemistry (1911), and Linus Pauling for chemistry (1954) and peace (1962).

<http://www.nytimes.com/2013/11/21/us/frederick-sanger-two-time-nobel-winning-scientist-dies-at-95.html?hp&r=0>

We remain eager to publish stories and photos about all aspects and activities of the Department. Please share your memories, ideas and suggestions for stories and news items that expand our common ground. Please contact us at these email addresses:

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Share a story, tell us about your experience.
We'd love to hear from you!



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Follow us. You'll be glad you did.

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