UW Medicine

A Publication of the Department of Neurological Surgery

The Montlake Cut

Summer 2015

A View From Puget Sound

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

One of the greatest joys for the faculty, and me in particular, is in the training of our residents, who are my second family. In return, they have always been one of the principle causes for the success of the department over the past more than 60 years. In July, we will welcome three more already very accomplished, enthusiastic, new R-1s as they begin their seven years of training on a journey to become neurological surgeons, and to join their now almost 100 predecessors.

Research Professor Sean Murphy provides a peek at some of the new, often as many as 100 papers per year authored in the department, along with his comments about them.

Assistant Professor Andrew Ko discusses his participation, along with others, in the recent Neuroscience Institute Essential Tremor Symposium. Andrew expanded on recent developments in DBS, and his hope for further progress.

We also offer another staff profile, this time featuring long-time, beloved Professor of Neurological Surgery and Biostatistics, Nancy Temkin, Ph.D. Nancy was wisely hired by Art Ward, and has been invaluable to all of us in separating the truth from statistical error. She is not only one of the most renowned faculty member in our department over her decades of selfless service, she is also the most modest and generous.

Our former resident, Professor Michael M. Haglund, MD, Ph.D. from Duke University has just received the 2015 American Association of Neurological Surgeons Humanitarian Award, a source of great departmental pride. We are also proud that the 4th Annual Goodkin Lecture occurred on May 13th. James Ausman, MD, PhD and Professor of Neurosurgery at UCLA gave us his spirited and entertaining view of our discipline.

We remind you all of the upcoming Western Neurosurgical Society Meeting in Hawaii, September 10-13, and the Editor suggests Rohan's Second Reading List, although Dr. Ramakrishna hasn't reported back from Cornell on whether or not he has finished the first one.

Last, with enormous gratitude, we thank the much admired, kindly and wise, Clinical Professor John Howe for his years of service in helping to build and direct the Harborview Medical Center Neurohospitalist Team, and we wish him happy sailing as he retires (again).

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

In This Issue

The New R-1s

Abdullah Feroze

Abdullah Feroze was born in Birmingham, England but grew up in Pakistan, Ghana, and Switzerland as well. He comes to us most recently from the "other" Capitol Hill in Washington, DC, where he served as White House intern.

He attended the University of New Mexico, where he graduated summa cum laude with dual degrees in economics and biology. During college he served as president pro tempore of the undergraduate student government body and as a congressional health policy intern in the United States Senate during the 2009 health care reform debates. At the same time, he continued research efforts both at his home institution and the MD Anderson Cancer Center's Brain Tumor Center, where he worked in the lab of W.K. Alfred Yung studying the role of the PI3K/Akt pathway in gliomagenesis. For his academic and extracurricular efforts, Abdullah was recognized as a national finalist for the Rhodes, Marshall, and Truman scholarships. Following graduation, he interned at the World Health Organization in Geneva, Switzerland while enrolled as a Global Health Fellow through the Duke University School of Public Policy's program on global governance and diplomacy.

Abdullah entered Stanford School of Medicine in 2010. In his time there, he continued as co-president of the Organization for Global Health and chapter delegate for the American Medical Association, where he was able to draft and pass legislation through the AMA's House of Delegates on the creation of a national registry for patients enrolled in phase I clinical trials. He also served as an anatomy instructor for the Stanford Medical Youth Sciences Program and coordinated the Arbor Free Clinic's cardiology services during his preclinical years.

As a first-year medical student he investigated a generic anti-inflammatory drug for prophylactic use in secondary lymphedema and lymphatic filariasis, won an NIH NRSA T32 training grant, and was recognized as a Stanford University SPARK Scholar for further clinical trials. Returning to neuro-oncology and neurosurgery, he joined Dr. Samuel Cheshier's lab investigating anti-CD47 immunotherapy in the management of medulloblastoma and other pediatric central nervous system neoplasms. These studies netted him recognition and funding by the American Brain Tumor Association, American Association of Neurological Surgeons, St. Baldrick's Foundation, and Alex's Lemonade Stand Foundation. Most recently, he was awarded the 2015 AANS Young Neurosurgeons Research Award for a pilot study exploring the use of dysfunctional neural placode tissue derived from myelomeningocele repair to serve as a novel source of oligodendrocyte progenitor cells.

Professionally, Abdullah maintains interest in pediatric neuro-oncology, health policy, medical education, biodesign, and global surgery. Abdullah loves all things related to stracciatello gelato, roofdecks, FC Barcelona, maple donuts, camping trips, and killer late-night solo dance parties (in that particular order). He continues to work on developing an ever-expanding travel list, his best Kevin Spacey/Frank Underwood impersonation, and the Sisyphean quest for his first under-par 18-hole round of golf (quests that all, assuredly, will last longer than the next seven years…).

The New R-1s Continued

John Williams

John Williams grew up in rural Maryland, the son of two public school teachers. He was always an excellent student, but dreamt of making it to the "big time" as a lacrosse player before somehow, magically becoming a scientist or physician. A last minute realization that his mind worked considerably faster than his legs allowed him the insight to choose intellectual development at Swarthmore College over lacrosse. There he studied film, media theory and German language/literature, played lacrosse and rugby, and held leadership positions in a number of extracurricular activities.

After graduating in 2006, John took a winding path to medicine, beginning with a year of writing about hip-hop and hiking in Missoula, MT. He won a Fulbright research grant to study the ways in which hip-hop allowed Turkish and working-class white Germans to find common cultural ground in Berlin. John then became a filmmaker and eventually earned an associate producer credit for his work on the academy-award nominated "Beasts of the Southern Wild." In 2010 he settled on medicine, enrolled in Bryn Mawr College's post-baccalaureate in pre-medical studies program, and gained early admission to the School of Medicine at Brown University where he has been active as a tutor, teaching assistant, and has even reconnected with lacrosse as a coach of the Rhode Island adaptive lacrosse league for developmentally delayed teens. Also at Brown, John rediscovered his love for neuroscience and neurosurgery, earning a Joseph Collins Foundation Scholarship in the clinical neurosciences and the Dr. Stanley M. Aronson Prize for excellence in the neurosciences.

John is most inspired by functional neurosurgery, especially seeking new techniques and targets for neuromodulation in refractory psychiatric disease. However, he appreciates the tactile satisfaction and geometry of complex spinal surgery, as well as the complexities and nuance of pain. He also hopes to leverage his background in media and communications to write material and generate digital media that help demystify neurological surgery for patients allowing them more realistic expectations for surgical outcomes. Based on previous experience, these ambitions are subject to change.

Chris Young

Chris Young joins the Department from the University of Cape Town where he was a Clinical Fellow in Neurosurgery. A native of Taiwan, Chris and his family moved to South Africa months following Nelson Mandela's release from prison, and experienced first-hand the miracle of the rainbow nation in the post-apartheid South Africa.

The son of a shipping captain and textile merchandiser, Chris stumbled into medicine accidentally. His first foray into research was a project on cervical cancer screening in the Transkei, a rural part of South Africa. Fortunately, an aversion to amniotic fluid and a chance reading of "The Phantom Limb" by VS Ramachandran led him to us.

At the University of Oxford as a Rhodes Scholar, Chris became interested in neuroscience and regenerative medicine. He earned a master's degree in neuroscience by examining the pathological effect of hemorrahge on traumatic spinal cord injuries. For his doctoral thesis, he worked in Francis Szele's lab investigating the relationships between endogenous neural stem cells in the subventricular zone to post-stroke angiogenesis.

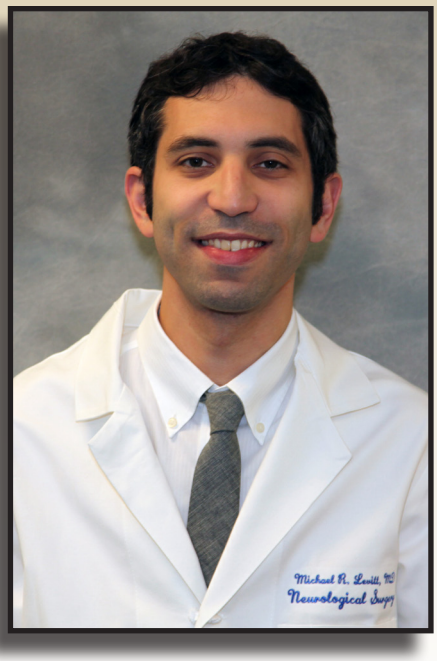
Chris envisages a career in academic neurosurgery that combines clinical medicine and basic science in a fashion that has global relevance. He is drawn to UW Neurosurgery not only by the tradition of excellence in training, patient care and research, but also by our ongoing efforts to engage the international community in a socially responsive manner.

Outside work, Chris enjoys scuba diving and hiking and has an interest in expedition medicine. He has accompanied marine expeditions to the Wakatobi Reserve in Indonesia and hopes to one day join a team to the Himalayn Annapurna (although maybe after the earthquakes settle down).

Michelle Chowdhary, MD and Michael Levitt, MD Join the Department of Neurological Surgery

Dr. Michelle C. Chowdhary has just completed her Residency in our Department, and has been appointed as a University of Washington Assistant Professor of Neurological Surgery on the Clinician Educator track effective July 1, 2015. She will partner with our team on caring for the enormous general neurosurgey practice and patient population.

In addition to her 7 years of training in our program, Dr. Chowdhary graduated from the University of Illinois-Urbana Champaign with a BS in Biology in 2004, and attended Rush Medical College in Chicago, IL where she received her M.D. in 2008. At her Residency graduation ceremony, Chairman Rich Ellenbogen spoke not only of her considerable clinical skills but also of the high regard in which she is held by patients, families, and her colleagues both in our Department and at all UW clinical sites. Dr. Chowdhary distinguished herself early on in our program by her skill, diligence, dedication, sense of organization, and exceptional ability to solve problems in the midst of difficult circumstances. At her graduation, Dr. Ellenbogen also characterized her as one who exemplifies "Quiet Leadership" – those, as described in the recent book "Quiet" by author Susan Cain, " who innovate and create but dislikes self-promotion…" Dr Chowdhary reflects these virtues through her clinical excellence, surgical prowess, strong work ethic, and social skills that always place the patient and family first. - Congratulations and welcome aboard to Dr. Chowdhary!



Michael Levitt, M.D. has been appointed to the faculty as Assistant Professor of Neurological Surgery and Radiology. Mike was a resident here from 2007 to 2014. Last year he completed a neurovascular fellowship at the Barrow Institute in Phoenix, and now joins Drs. Sekhar and Kim on the neurovascular team at Harborview. Already widely published in high quality journals, Mike's research interest is in applying the flow wire Doppler technology developed in cardiology for gaining a better understanding of blood flow in cerebral aneurysm production and rupture.

Dr. Levitt was born and raised in Fargo, North Dakota. He graduated with honors in psychology from Northwestern University in 2002, then AOA and summa cum laude from Loyola Medical School in 2007. Mike and his wife Julia were married after his R-1 year so that they could spend the next six years apart, and then were also able spend his fellowship year separated. Now that he has returned to Seattle, her job is taking her to Europe for nine months. One of these days, they'll get together.

Mike has already received five grants, including an R0-1, and published forty-two peer reviewed papers. He is the author of ten book chapters and has presented thirty-six papers, abstracts or posters. The editor was surprised several years ago while attending a concert at a downtown theater given by the Seattle Rock Orchestra in which one of his son's bands was featured to see Mike in the lobby. When asked why, Dr. Levitt explained it was because he had arranged the score. So we really don't think there is much he can't do very well. We welcome Dr. and Mrs. Levitt back to Seattle, pretty soon at the same time.

Recent Notable Publications from Members of the Department -with commentary-

MacDonald C.L., Adam O.R., Johnson A.M., Nelson E.C., Werner N.J., Rivet D.J., Brody D.L. Acute post-traumatic stress symptoms and age predict outcome in military blast concussion. Brain 138: 1314-1326.

High rates of adverse outcomes follow blast-related concussive traumatic brain injury in US military personnel, and those who return to duty still fare poorly 6–12 months later. This appears to correlate with psychological health measures, age, and traumatic brain injury status.

Wang D.B., Kinoshita Y., Kinoshita C., Uo T., Sopher B.L., Cudaback E., Keene C.D., Bilousova T., Gylys K., Case A., Jayadev S., Wang H-G., Garden G.A., **Morrison R.S.** Loss of endophilin-B1 exacerbates Alzheimer's disease pathology. Brain In press.

Endophilin-B1, an endogenous neuroprotective protein, may be important in the development of Alzheimer's disease pathogenesis because amyloid reduces its expression which, in turn, enhances amyloid accumulation and the vulnerability of neruons to stress.

Suarez M.W., Dever D.D., Gu X., Ray Illian P., McClintic A.M., Mehic E., **Mourad P.D.** Transcranial vibro-acoustography can detect traumatic brain injury. Ultrasonics 61:151-156.

Vibro-acoustography, which uses two or more beams of confocal ultrasound, will detect acute and focal brain injury in animals and may, one-day, serve as a technique for detecting traumatic brain injury in humans.

Lee R.J., Kim J.K., Chao D., Kuo L., Mally A., McClean M.E., Pemberton H.E., Wilmington A.R., Wong J., **Murphy S.P.** Progesterone and allopregnanolone improve stroke outcome in male mice via distinct mechanisms but neither promotes neurogenesis. J. Neurochem. 132:32-37.

Progesterone holds promise as a new therapy for stroke as the drug is effective in experimental animal models. The mechanism of drug action appears to be via preservation of existing cells rather than through the generation of new neurons.

Koch H., Caughie C., Elsen F.P., Doi A., Garcia A.J. 3rd, Zanella S., **Ramirez J.M.** Prostaglandin E2 differentially modulates the central control of eupnoea, sighs and gasping in mice. J. Physiol. 593:305-319.

Prostaglandin E2 can increase the frequency of normal breathing, and of augmented breaths, when the drug is injected into a discrete medullary area of the brain known to be critical for breathing.

Eastman C.L., Fender J.S., **Temkin N.R., D'Ambrosio R.** Optimized methods for epilepsy therapy development using an etiologically realistic model of focal epilepsy in the rat. Exp. Neurol. 264:150-162.

Current drugs fail to control seizures in one-third of patients, and no treatment prevents epilepsy. Screening new drugs in animals using more appropriate measures based on clinical criteria will maximize the power to detect treatment effects.

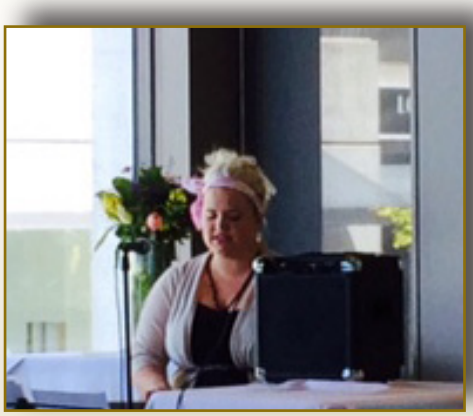
Kievit F.M., Stephen Z.R., Wang K., Dayringer C.J., Sham J.G., **Ellenbogen R.G., Silber J.R., Zhang M.** Nanoparticle mediated silencing of DNA repair sensitizes pediatric brain tumor cells to γ-irradiation. Mol. Oncol. 9:1071-1080

Radiotherapy is integral in treatment of pediatric brain tumors but can damage healthy tissue. One enzyme implicated in radiation resistance can be targeted by nanoparticle-mediated delivery of an RNA silencing agent, a promising strategy for circumventing tumor resistance.

Neurosciences Institute Essential Tremor Event

Andrew Ko, MD

Kate Longfellow, MD



Emily Ann Peterson

On May 2, 2015, the UW Medicine Neurosciences Institute held an Essential Tremor Presentation

On May 2nd UW Medicine Neurosciences Institute sponsored an Essential Tremor Event featuring Dr. Kate Longfellow, Dr. Andrew Ko and Ms. Emily Ann Peterson. Dr. Longfellow is a Fellow in the UW Department of Neurology who spoke on "Diagnosis and Medical Management of Essential Tremor." Dr. Ko, an Assistant Professor in the UW Department of Neurological Surgery, reviewed Surgical Treatment of Essential Tremor and Deep Brain Stimulation." Ms. Peterson who was diagnosed with tremor at age 27, which has limited her performance career (but not her music publishing), gave a talk entitled "My Tremor and My Music" as well as a performance, both extremely well received. Here we focus on Dr. Ko's talk.

As part of a UW Medicine series focusing on specific diseases and their contemporary management, he presented an overview of surgical approaches to treating essential tremor. He began with the brief history of surgically treating essential tremors and movement disorders starting in the late 1800's when Sir Victor Horsley performed the first operation attempting to cure tremor. Unfortunately, that surgery and others done through the 1940's traded tremor for weakness. In the 1950's surgeons learned that the occlusion of perforating arteries supplying the globus pallidus (essentially inducing a focal stroke) reduced tremor. Refinement of this approach led to the treatments still in use today, techniques that create a small lesion in the thalamus or globus pallidus, using either radio frequency ablation, high frequency ultrasound, or Gamma Knife radiation.

Dr. Ko also discussed how image guided neurological surgery has further refined these approaches by allowing immediate feedback to surgeons. Contemporary operations employ MRI imaging, Tractography (a method for identifying anatomical connections in the living human brain), use of computer surgical navigation systems to guide procedures, and intraoperative CT scanning. Surgeons can see operative targets nearly in real time. He finished with an overview of how DBS works, described the surgical procedure itself. Implantation involves two operations, the first to place electrodes in the brain and the second to implant the generator. Programming the stimulator is then done in the clinic. He also discussed University of Washington research into stimulators that respond to individual patient needs rather than being on continuously.

<u>Comparing Deep Brain Stimulation with Thalamotomy</u>

Permanent implants (requires maintenance)	**No hardware**
Both sides can be treated	Can treat one side only
Adjustable treatment	Not adjustable: What you see is what you get
90% with good reduction in tremor	90% with good reduction in tremor
Side effects reversible	Side effects generally not reversible

Faculty Feature

Nancy Temkin, PhD

Dr. Temkin is a biostatistician and clinical trialist who has focused her career for the past 35 years on understanding outcome from TBI and evaluating interventions to improve that outcome. At the beginning of her career she was hired by first Chairman of Neurological Surgery, Dr. Arthur A Ward, Jr., to head up the new NIH funded Regional Epilepsy Center Biostatistics Unit. Dr. Temkin not only helped design studies undertaken by the Center she pioneered the Epilepsy Center database which contributed substantially to the development and success of the Center. She led the seminal studies of the value of prophylactic anticonvulsants in TBI management. She has a PhD is Statistics and has a joint appointment in Neurological Surgery and Biostatistics at the University of Washington, teaching statistical consulting each year in one of the top-rated Biostatistics programs in the country.

She has been the biostatistician and PI for the data center for 4 federally-funded multicenter clinical trials (Effects of Scheduled Telephone Intervention on Outcomes after Traumatic Brain Injury [2004-2009], Traumatic Brain Injury in Latin America: Lifespan Analysis [BEST-TRIP, 2007-2012], Controlled Trial of Venlafaxine XR for Major Depression Following Spinal Cord Injury: A Multi-Site Study[2007-2014], Phase II, randomized controlled trial of brain tissue oxygen monitoring [BOOST-II, 2009-2014] as well as numerous observational studies and single-site trials. She has published extensively in the area of TBI (h-index-of 44), is a Fellow of the American Statistical Association, and has served on the editorial boards of scientific journals, study sections, Institute of Medicine committees, and data and safety monitoring committees. She is frequently called in as an international consultant on clinical trials and travels extensively as a result.

Dr. Temkin is also PI for the biostatistics component of a multi-national NIH award to develop Consensus Based Guidelines for treating severe TBI in the absence of intracranial pressure monitoring devices. This study is sited in Latin America with participation from 20 centers in 5 countries (Argentina, Bolivia, Columbia, Ecuador and Venezuela). Since 80% of TBI patients globally are not monitored, and rigorously tested guidelines do not exist at present, the results from this study will substantially impact care of those with severe head injury around the world.

She is also actively involved in the large multicenter collaborations aimed at rewriting the book on TBI characterization and outcome. She leads the Biostatistics core for TRACK-TBI (Transforming Research and Clinical Knowledge in Traumatic Brain Injury) and is on the executive committee for TED (TBI Endpoints Development).

Dr. Temkin and her husband Peter enjoy hiking, camping, and kayaking in the Northwest and live on a farm outside of Seattle.

The 4th Annual Robert Goodkin, M.D. Endowed Lectureship

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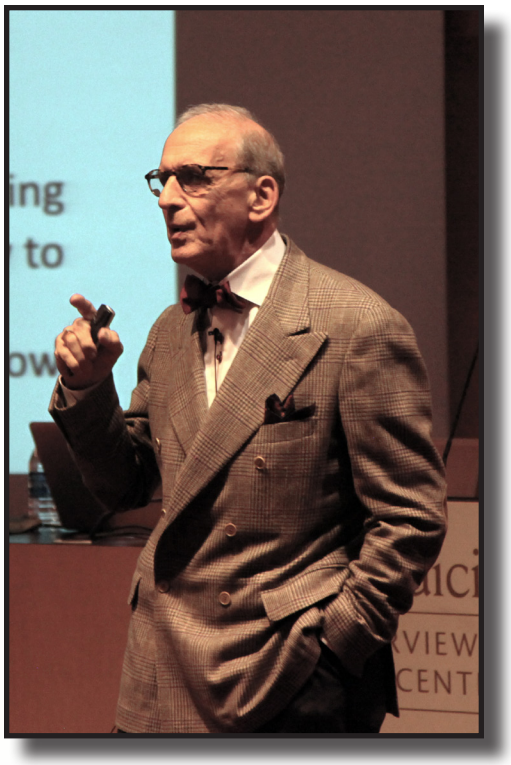
James I. Ausman, MD, PhD

Dr. Richard Ellenbogen & Dr. James Ausman



Dr. James Ausman

Guest Lecturer James I. Ausman, M.D., Ph.D delivered the 2015 Robert Goodkin Endowed Lecture on May 13th at Harborview Medical Center. Dr. Ausman is Professor of Neurosurgery at UCLA. In addition to his scientific and clinical expertise, he is known globally for his work as Editor-in-Chief of Surgical Neurology International, an open access, internet-only journal with global distribution. Dr. Robert Goodkin, whom this lecture series honors, was also a founding editor of the journal and committed to its mission of providing the most current clinical and research information to the widest possible audience of neurosurgeons and neuroscientists. In his provocative talk, Dr. Ausman repeatedly stressed the essential need to put patients first as the highest priority in clinical decision making, as well as assessing quality-of-life when judging outcomes.

On behalf of the Department and the Goodkin family Dr. Ellenbogen presented our speaker with a set of Dr. Goodkin's surgical tools mounted in a shadow box as a memento of his visit. Dr. Ellenbogen also presented Mrs. Goodkin with a bouquet of flowers in thanks to her family for their ongoing support.

Dr. James Ausman, Mrs. Goodkin, Dr. Richard Ellenbogen

American Association of Neurological Surgeons

HARVEY CUSHING

Michael M. Haglund, MD, PhD, FAANS

2015 AANS Humanitarian Award Recipient

We are extremely proud of our former resident, Dr. Michael M. Haglund who has just received the 2015 American Association of Neurological Surgeons Humanitarian Award.

Dr. Haglund is Distinguished Professor of Neurosurgery, Neurobiology, and Global Health at Duke University Medical Center. He is Program Director for the Duke Neurosurgery Training Program and Surgical Director of the Duke Epilepsy Center. Further, he is Co-Director of a Neurosurgery Training Program serving Uganda. He is a graduate of Pacific Lutheran University in Tacoma, Washington, and the UW School of Medicine where he also did PhD work in our Department with Professor Philip Schwartzkroin. Mike was a Neurological Surgery resident here and completed an Epilepsy Surgery Fellowship with Dr. George Ojemann. He was an outstanding Resident and Fellow and is now a gifted surgeon who has helped thousands of patients.

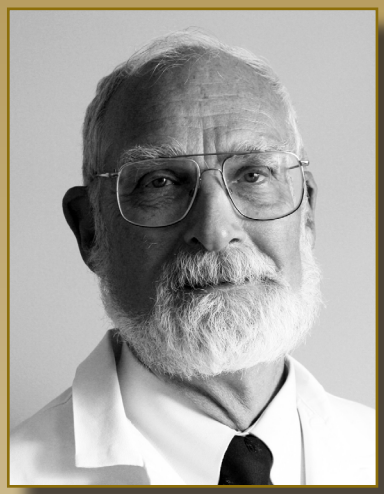
As a result of his global health insights, 20 years ago Mike decided to enlarge his practice to serve patients in Latin America and then Africa. He focused first on Uganda, a country with only five neurological surgeons to serve 30 million people, and has taken 15 trips there since 2007. In addition to a lack of facilities, equipment, and supplies, there were no neurological surgeon training programs in the country. Mike was able to lead a team of 33 medical professionals in refurbishing five operating rooms, and establishing a new recovery room and an ICU. He worked with Duke to found a surplus medical equipment re-use program and in the first year alone was able to collect 9 tons of equipment worth over $1,275M. This he supplemented with additional funds for shipment to Uganda.

Five years ago, Mike started the first Uganda Neurosurgery Training Program, which is now graduating its inaugural residents. Despite the substantial time difference, he holds weekly conferences with them. Mike has recruited teams to travel with him, (up to 50+ professionals), brought 45+ tons of medical equipment and supplies to Uganda, and every year raises over $200,000 to support his volunteer program. He has even paid for hospital OR expansions that have doubled service availability. Mike's work has also donated over $1M in equipment to Rwanda and trips with his clinical team to Kenya.

We are proud to celebrate Mike's outstanding accomplishments as a UW Neurological Surgery Residency program graduate. He represents the best we can be in service to others.

Clinical Professor John Howe Retires - Again

by Richard Rapport, MD



When John Howe retires this summer, it will mark the end of an era for Seattle neurosurgery, UW Medicine and Harborview. For me, it will also be the end of a personal journey with my friend that dates from 1963.

John was born in Sault Ste. Marie, Michigan, the son of a general surgeon father and Humanities/Chemistry Professor mother. As a young man, he spent time as a high school exchange student in Malaysia and some summers worked aboard merchant ships on the Great Lakes before attending Lawrence University in Appleton, Wisconsin. Maybe it was the fine mind, or perhaps the fact that he was a member of the university cross-country team and devoted to the outdoors, that first attracted the attention of his classmate, Cynthia Russell. While still an undergrad, John began his research career with Dr. H. David Potter, a neurophysiologist, the same professor who supervised my own honors work two years earlier. John graduated from Lawrence in 1967, a member of MACE, the men's honor society, summa cum laude and Phi Beta Kappa. In 1971, he graduated from Case Western Reserve School of Medicine, where he was the Vice President of his class.

John came to Seattle as a surgery intern in July of that year, and began his training in neurological surgery under Arthur Ward the following summer. John and Cynthia married in 1974. When I showed up to start in 1973, and was sitting in the conference room at UWMC with the faculty and staff for the first time, a bearded fellow sitting next to me leaned over and sotto voce said, "Say, didn't you go to Lawrence, and play football?"

John was already an accomplished neurophysiologist when he arrived at UW, and his research on the "Neurophysiological basis for the radicular pain of nerve root compression" won the American Academy of Neurological Surgeons Research Award in 1976. After he finished training, the Berry Plan extracted its pound of flesh, and sent him to the US Army hospital at Landstuhl, Germany where he was one of the staff neurosurgeons from 1977-'79. He returned to the UW Faculty to become the Chief of Service at the Seattle VA and USPHS Hospital until Ken Peirce and I recruited him to join us, and Larry Knopp, at Group Health in 1982. He was the Chief of the Neuroscience Section at GHC 1992-99, and then the Neurosurgery Service Line Chief for Group Health Permanente 1999-'03. During those years he also developed his abiding interest in medical ethics, serving as a member of the Ethics Council of Group Health Cooperative, the GHC Board of Directors Committee 1986-'92, the Ethics Committee of Central Region Hospital 1988-'97, and the Committee on Group Health Values in 2001. These humanistic pursuits were matched by his important contributions to a broader understanding of the many-faceted problem of back pain.

When we retired from Group Health and the operating room in 2008, John and I both joined the faculty to attend at Harborview, helping to manage the nascent neuro-hospitalist team. In addition to his significant clinical contributions, he also sat on the Patient and Family Centered Care Committee, the Harborview Medical Center Ethics Committee, the Acute Care council, and was co-site Director for the fourth year medical student elective neurosurgery rotation. This year, the senior UW medical students elected John to AOA as their outstanding teacher. Along the path of this career, he published 31 high value papers, including two with Rick Deyo, et al. about the vexing and still unsolved problem of low back pain.

John and Cindy Howe have three children, all of whom have advanced degrees, and three grandchildren who probably will too. An experienced sailor, John now sails the same vessel that he first learned to crew on the Great Lakes as a boy, up and down the Inland waters of Washington State. I know that this summer will find the Howe family happily somewhere on the Salish Sea headed to Desolation Sound, or perhaps to travel 1,200 miles again and circumnavigate Vancouver Island (not a small nautical feat) as John, Cynthia and their son Nathaniel did one recent July.

John Howe is one of the finest people I have ever known: revered by patients, respected by his colleagues, and venerated by students and staff. I will miss my friend and colleague of more than 52 years, and the institution will miss his shy wisdom, absolute dedication, total understanding of neurosurgery and, perhaps most of all, his kindness.

Rohan's Second List

When Rohan Ramakrishna, now Assistant Professor of Neurological Surgery at Cornell, was finishing his residency in 2013, he envisioned having time to read things he'd missed. He asked, as had some other residents, for a list of recommendations. I provided about twenty titles, beginning with *DEATH COMES FOR THE ARCHBISHOP* and ending with *WAR AND PEACE*. That was two years ago, and while he probably hasn't finished them all yet, here is his next assignment. The editor believes (as did William Osler) that reading great literature makes one a better doctor. The titles are again arranged in an order that I found progressively more demanding.

THE MEMORY OF OLD JACK, Wendell Berry
TEAM OF RIVALS, Doris Kearnes Goodwin
COLLECTED STORIES OF FRANK O'CONNOR, Frank O'Connor
DREADNOUGHT, Robert Massie
A WORLD LIT ONLY BY FIRE, William Manchester
MANKIND AND MOTHER EARTH, Arnold Toynbee
THE DISCOVERERS, Daniel Boorstin
THE METAPHYSICAL CLUB, Louis Menand
GOING AFTER CACCIATO, Tim O'Brien
THE YEAR OF DECISION, Bernard DeVoto
TREE OF SMOKE, Denis Johnson
WILLIAM JAMES, Robert Richardson
ONE HUNDERED YEARS OF SOLITUDE, Gabriel Garcia Marquez
THE AGE OF ENTANGLEMENT, Louisa Gilder
BLINDNESS, Jose Saramago
THE IDIOT, Fyodor Dostoevsky
THE MAGIC MOUNTAIN, Tomas Mann
WITTGENSTEIN'S VIENNA, Javik and Toulmin
THE MAN WITHOUT QUALITIES, Robert Musil

Announcement:

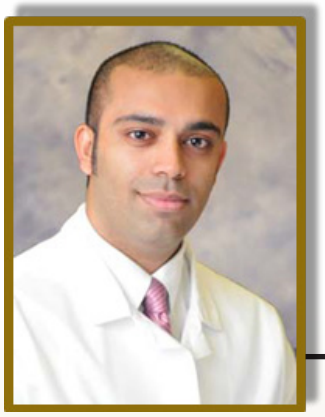
Western Neurosurgical Society Annual Meeting

Grand Hyatt Resort and Spa • Kaua'i, Hawaii • September 10 - 13, 2015

For the 61st annual meeting, the Western returns to the Grand Hyatt Resort and Spa on the Hawaiian Island of Kaua'i. Direct flights to the Lihue airport on Kauai (17 miles from the resort) are available from many major airports.

More details about the meeting and the meal venues and afternoon activities will be forthcoming. The online room reservation link is ***https://resweb.passkey.com/go/wns2015***

Puzzler



Dr. Minku Chowdhary
Director, Neurosurgery
Overlake Hospital

New Puzzler:

New Puzzler: While you can get parasitic diseases from a sand-fly bite from a trip to Brazil, these two things have another cancer connection that is related to a man from Canton who was born in the year of the dragon. Who is he and what is the connection?

Previous Puzzler: How do you connect leprosy, a "fair pitcher," and neurosurgery?

Answer:

India has the largest gathering of humans in the world in a festival called Kumbh Mela, which means Fair Pitcher. The first neurosurgeon in India was **Dr. Jacob Chandy**. He was invited by Robert Cochrane, a famous leprologist, to join the Christian Medical College, Vellore and started neurosurgery training in India 8 years after his arrival.

http://en.wikipedia.org/wiki/Jacob_Chandy

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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