



# THE MONTLAKE CUT

A PUBLICATION OF THE DEPARTMENT OF NEUROLOGICAL SURGERY

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Since Larry Knopp graduated from our UW program in 1957, a total of 109 residents have trained in our department. All of them have been excellent, and the three who just began July 1st are spectacular. Of the approximately 300 applicants, Kate Carroll, Jessica Eaton and James Pan were the three who we were lucky enough to match. We welcome them to Seattle and UW as they begin learning how to be superb neurological surgeons over the coming seven years.

Associate Professor Christine Mac Donald has been awarded yet another federal/extramural grant. One of the leading international experts studying the long-term sequelae of traumatic brain injuries, she will now help to investigate an older population. As co-PI with Eric Larson, Vice President for Research at Kaiser, and Professor Paul Crane from the UW Department of Medicine, this newly-funded study will utilize

The Adult Changes of Thought cohort which is a community-based, longitudinal study of brain aging. The study is funded by the National Institute on Aging for three million dollars over five years.

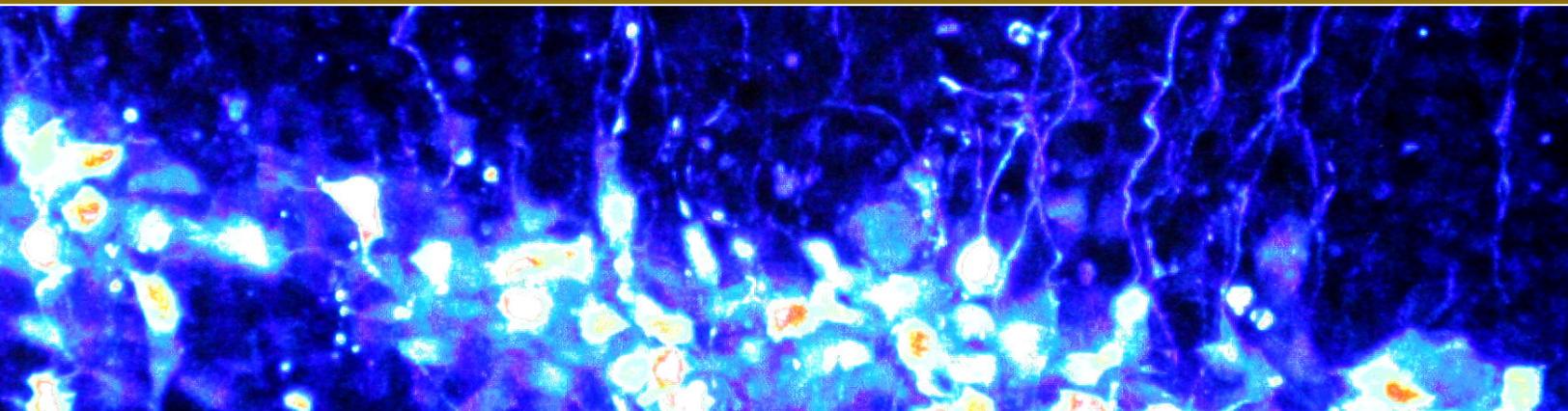
Congratulations to Fangyi Zhang and Raimondo D'Ambrosio on their well-deserved, hard-earned promotions to Professor. And Congratulations to Christoph Hofstetter, Amy Lee, Courtney Crane, and Franck Kalume who have been elevated to Associate Professors for their wonderful academic contributions.

The Fogarty Center at NIH recently published their Golden Anniversary Report which featured the work of Professors Randall Chesnut and Nancy Temkin who have pioneered studies in TBI in Latin America.

We welcome Keilys Corredor and Cheng Yu who have joined the administrative staff, and we rejoice with just graduated resident Kelly Collins and her husband Tristan who had their second child (both while Kelly was a resident), Marielle Rose Trutna.

UW Bothell Chancellor Bjong Wolf Yeigh recently awarded Professor Pierre Mourad the 2018 Distinguished Research, Scholarship, and Creative Activity Award. Pierre has been collecting recognition like this for a long time.

**Richard G. Ellenbogen, M.D., F.A.C.S.**  
Professor & Chairman  
Department of Neurological Surgery



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# WELCOME NEW RESIDENTS



**Kate Carroll** grew up in Menlo Park, CA. When she was 4 her mother's family moved west to Palo Alto when her grandfather took a job as a professor of British literature at Stanford. She went to high school at Sacred Heart Preparatory and was an undergraduate at Princeton studying cognitive neuroscience.

When not at school, Kate was dancing: ballet for 10 years, including two summers studying at American Ballet Theater programs. She continued to dance in college and hopes to find a studio in Seattle.

In March 2009, Kate's uncle died of metastatic melanoma. Though Kate had never considered a career in healthcare, this event pulled her to medicine, and after graduation she went to work for Integra LifeSciences, a medical devices manufacturer. Her first job at Integra was a long rotational position spent in different departments.

Then she was hired as Project Manager to the Chief Scientific Officer, and started a scientific affairs department under his leadership. While on the Clinical Affairs rotation, she visited a neurosurgical operating room for the first time. Standing in the OR, she realized that her role in healthcare was going to be much closer to the patient. She wanted to be the surgeon. And now she will be.

Kate has 13 publications, 5 as first author. She has been an NIH Scholar and the recipient of an NIH TL1 Research Training Grant Recipient. She was one of 10 medical students selected for Master's Degree tuition support through an NIH Training Grant administered by the Clinical and Translational Research Institute at UCSD NIH M-STREAM, and was elected to Sigma Xi (the Scientific Research Honor Society) at Princeton.

**Jessica Eaton** has lived in Kentucky since early childhood, and has spent most of that time in Louisville. She was both an undergrad and medical student at the University of Louisville. As an undergraduate, she embraced the novel double major of Physics and English.

Jessica was a member of the first class of James Graham Brown Fellows, an experience that inspired her interest in global health by allowing travel abroad each summer to study or conduct research. During medical school, she won a Fulbright-Fogarty Fellowship in Global Health and spent a year in Malawi constructing a neuro-trauma database.



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# WELCOME NEW RESIDENTS

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Jessica met her husband Michael during her freshman year in college, where he was an All-American cross country runner and the school's 10K record holder on the track. He continues to run professionally and has since qualified for the Olympic Marathon Trials twice. It's a good thing Hanak has graduated, or even Jake wouldn't be able to keep up.

Jessica has 7 peer reviewed published papers, plus one now in consideration, and 8 poster presentations. In addition to the Fulbright and the James Graham Brown fellowship, she was elected to the Gold Humanism Honor Society, won the Lily Banerjee endowed scholarship, the Engage Lead Serve Board Award for Outstanding Leadership, as well as the Hershberg Academic Scholarship. And she did manage to graduate cum laude in physics and English, so she should be able to tell us where the lost particibles are hidden.



**James Pan** grew up in New York City, and completed his undergraduate studies at Carnegie Mellon University. He first got involved in research studying the mechanisms of transcriptional control in bacteria as a high school student, and he continued to do research during college. After his time in Pittsburgh, he was a research fellow at the National Institutes of Health studying the genetics and cell biology of rare disease. He attended medical school at Stanford University. It was there that he discovered neurosurgery and worked on elucidating genetic and molecular mechanisms in the pathogenesis of neuro-oncologic disease.

James is also interested in designing technologies that help both physicians and patients interact with healthcare systems. Prior to Stanford, he was the founding designer at CareMessage, a non-profit aimed at helping underserved clinics better connect with their patients through text messaging. His next venture was Glimpse, a consumer facing startup designed to help patients navigate their medical records. This company was acquired by Apple Inc. in 2017. His ultimate goal is to use his neurosurgical training combined with research expertise, entrepreneurship, and design-thinking to help patients recover from neurological disease both in and out of the operating room. In his spare time, he enjoys weightlifting and photography.

James is the author or co-author of 13 peer reviewed papers and 6 book chapters. He is also already the recipient of 5 grants for a total of \$170,000.

# MAJOR FEDERAL GRANT SHARED BY UW AND KAISER

Two University of Washington scientists and another from Kaiser Permanente Washington Health Research Institute are multiple principal investigators of a project funded for five years to retrieve clinical MRI brain scan data from the Adult Changes in Thought (ACT) study. ACT is an ongoing prospective cohort study of older adults enrolled from Kaiser. The National Institute on Aging has committed \$3 million over the next five years to this project.

Christine Mac Donald, PhD, Associate Professor in the Department of Neurological Surgery, will serve as contact principal investigator for this project. “This is a tremendous opportunity to gather existing MRI scan data for this well characterized cohort of older adults,” says Mac Donald. “As clinical scan quality has improved over the last few decades, clinical care of older adults includes brain scans in more and more people. Usually these scans exist in the clinical realm, and do not make their way into research studies. We decided to change that – to recapture those clinical scans and integrate them with the amazing data from the ACT study to improve our understandings of older adults.”

Eric B. Larson, MD MPH, Vice President for Research and Health Care Improvement at Kaiser, will serve as PI of the subcontract, and serves together with Dr. Mac Donald and Paul K. Crane, MD, MPH, a Professor in the Department of Medicine at UW Medicine, as multiple PIs on this project. Dr. Larson founded the ACT precursor Alzheimer’s Disease Patient Registry in 1986, and launched the prospective ACT study in 1994-1996. He and Dr. Crane now serve as multiple PIs for ACT. “The initial vision for this line of research was that there was tremendous value in situating a cohort study in a healthcare delivery system,” said Dr. Larson. “Over the years, the ACT study has capitalized on pharmacy data, clinical laboratory data, billing codes, addresses, and medical records from what was then Group Health and is now Kaiser Permanente Washington. This extension to MRI imaging data is an extension of that overarching research strategy.”

Dr. Crane echoes that enthusiasm. “ACT has really solidified itself as a leading resource of high quality data to address some of our most important questions about aging and dementia,” Crane said. “We are excited about our ability to answer important questions with the imaging data from this study. We are also excited about our plans to share these data with the research community.”

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The project includes a new partnership with Arthur Toga, PhD, a Professor at the University of Southern California and Director of the USC Institute for Neuroimaging and Informatics. Dr. Toga directs the Laboratory On Neuro Imaging. “Our plan is to work closely with Dr. Toga to ensure that our scan data are made available to researchers around the world who have good questions about aging brains,” says Dr. Larson. “We will be very careful to ensure participant confidentiality and remove any identifiers from the imaging data. We have made important advances ourselves with ACT study data, and we have a terrific track record of ensuring that other experts outside of ACT are able to use our data as well. This new initiative with Dr. Toga and LONI continues this rich tradition of sharing our data broadly to ensure maximal scientific impact.”

“It’s an exciting time for dementia research,” said Dr. Crane. “In particular, because of hard work over many decades, and especially because of the incredible generosity of our participants and their families, we have a terrific infrastructure in place to examine brain tissues of ACT participants who die and come to autopsy. It will be very exciting to figure out how to best combine MRI data taken during life with the extensive data from brain tissues from autopsy for that group. There is a tremendous amount we still do not understand about aging and dementia, and the combination of MRI data during life and brain tissues from autopsy promises to be a rich resource to further our understanding.”

“This is an important milestone,” said Dr. Mac Donald. “I am so excited to have the opportunity to partner with the ACT study team on this terrific project. We are grateful to the NIA for this opportunity, and will be excited to share what we learn with the research community and with the public at large.”

## FACULTY PROMOTIONS

As of July 1st, the Department of Neurological Surgery is pleased to announce the following promotions:

**Fangyi Zhang** to Professor  
**Raimondo D’Ambrosio** to Professor  
**Christoph Hofstetter** to Associate Professor  
**Amy Lee** to Associate Professor  
**Courtney Crane** to Associate Professor  
**Franck Kalume** to Associate Professor

# *FOGARTY AT 50* RECOGNIZES UW NEUROLOGICAL SURGERY GLOBAL HEALTH RESEARCH

UW Neurological Surgery Traumatic Brain Injury (TBI) research is featured in the NIH Fogarty International Center's Golden Anniversary report: *Fogarty at 50 – Advancing science for global health since 1968*. Neurological Surgery Professors Randall Chesnut and Nancy Temkin are PIs on several projects involving the Fogarty, most recently an RO-1 entitled *Managing Severe TBI without ICP Monitoring, Guidelines Development and Testing*. This is a collaboration with a group of Latin American neuro-intensivists and centers to develop and test Consensus Based Guidelines for treating severe TBI in clinical settings lacking intracranial pressure monitoring (ICP) devices commonly used to direct treatment in high resource areas. This trial will conclude in 2019. The Fogarty report also mentions their prior research to assess the efficacy of treatment based on ICP monitoring as compared to treatment based on CT imaging and clinical examination. The main results paper of this work by Chesnut, Temkin, et al., *A Trial of Intracranial-Pressure Monitoring in Traumatic Brain Injury* was published in the New England Journal of Medicine, December 27, 2012 and has already been cited in the literature some 650 times.

In addition to clinical studies, Fogarty awards share a common mission to increase research capacity globally. Text from the *Fogarty at 50* includes the following description of this activity:

*In another example of two-way benefit, a study in Latin America compared treatment of traumatic brain injury using the expensive high-tech equipment common in the U.S. with its own practice of clinician monitoring, and found no difference in patient outcome. "It has caused us to rethink our care and ask what really, truly is important," said Dr. Randall Chesnut of the University of Washington. "By corroborating across borders, we can come to a better understanding of what we do." The grants also expand research capacity. Chesnut's project, for example, involves 13 intensive care units in Latin America where many former trainees are conducting their own research and training programs. With Fogarty brain program awards, "you're making researchers as you're doing research," he said. "It's a bit like building the bridge as you're driving across it. We need to integrate the idea that research is not what you read in a journal, it's what you do in the educational process and in the machinery of medicine."*

The book *Fogarty at 50* can be found online [here](#). Congratulations to Professors Chesnut, Temkin, and the entire Neurological Surgery team involved in this important global health research!

# DEPARTMENT OF NEW BABIES



Chief Resident Kelly Collins and her husband Tristan welcomed Marielle Rose Trutna into the world on May 24th. Marielle arrived weighing 7lbs, 8oz. Kelly reports that she is recovering well having had a speedy delivery, and that Marielle is settling into the family nicely.

## WELCOME NEW STAFF



Keilys Corredor started with the department on April 3rd. She received her Master's from the Evans School of Public Policy and Governance at UW in 2015. Keilys worked with us half-time through April as part of the transition arrangement with CRBB where she was the Clinical Research Budget Manager.

She has worked for Grants and Contract Accounting and has financial experience at HMC and as an Assistant Controller in New York. Keilys will be responsible for all of the clinical budgets (practice plans and hospital) as well as the incentive programs and partnering with the neuroscience clinic and program managers on initiatives and projects.

Cheng Yu joined our department as a Business Analyst at the end of February and has already made great progress learning the UW Medicine systems and databases. Cheng's background includes roles at Milliman, Group Health and most recently Providence, where he worked on the telehealth and Innovations teams as



a Senior Healthcare Financial Analyst. He is EPIC certified in both Professional and Hospital billing and has begun reviewing our data around clinical practices. He has also been busy examining reports for the multiple clinical budgets that are due at this time of the year. Cheng will be focusing initially on establishing standard reports by program and physician as well as responding to ad hoc department requests.

## **PIERRE D. MOURAD RECEIVES UW BOTHELL 2018 DISTINGUISHED RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY AWARD**

University of Washington Bothell Chancellor Bjong Wolf Yeigh recently announced that Neurological Surgery Professor Pierre D. Mourad has received the 2018 Distinguished Research, Scholarship, and Creative Activity Award (DRSCA). First awarded in 2014, the award is presented annually to a faculty member in recognition of scholarly or creative achievement that exemplifies the standards of excellence that are required by the research-intensive education environment of UW Bothell.

Dr. Mourad is a joint Professor of Engineering and Mathematics at UW Bothell and Neurological Surgery at UW Seattle. He was judged by the selection committee as the nominee who most represents the values for which the UW Bothell award was originally established. The committee also noted he has made significant contributions to his field through publications, patents, conference presentations, and multiple external grants for biomedical research involving ultrasound's interaction with the brain.

Chancellor Yeigh also noted Dr. Mourad has made a demonstrable impact off campus, working with industry and students to generate research partnerships that seek to solve real-world problems with high social impact. In 2017-18, he was recognized as a UW Community-Based Learning and Research Fellow for leading interdisciplinary research with students and external partner 21 Acres, A Woodinville center for sustainable farming, to create a vertical garden.

On the UW Bothell campus, Dr. Mourad has contributed to the culture of undergraduate research in mechanical engineering by designing and overseeing its capstone sequence and, more broadly, by helping to facilitate interdisciplinary research projects with other units on campus. His research lab — the Alliance for Device Innovation (A4DI) — serves as a focal point for the more readily translatable of those collaborative projects.

Regarding his research, Professor Mourad commented: "Not only is the technology interesting, but also I find great value in the pedagogy associated with these projects. I have the good fortune to have students from several degrees involved: nursing and health studies, biology, electrical engineering, computing and software systems, and mechanical engineering. It's an example of a project that highlights the exciting cross-disciplinary work we can do at UW Bothell and one of the attractions I find here."



# PUZZLER



**Dr. Minku Chowdhary**  
Director, Neurosurgery  
Overlake Hospital

## SPRING EDITION ANSWER

Qiu Jin, known as the Chinese Joan of Arc, wrote, “Autumn wind, autumn rain, fill one’s heart with melancholy.” Qiu means Autumn in Chinese.

## SUMMER EDITION QUESTION

Sometimes we WISH to be more beautiful. The radio station mentioned above, beauty, and Chinese phenomena are the three clues that help you find the answer to the question: What is linguistic wonder that relates to all three?

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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