



# UCSF PATHOLOGY ALUMNI NEWSLETTER

ISSUE 3: JULY 2019

## Message From The Vice Chair: Dr. Grace E Kim, Professor of Pathology

Alumni and Friends,

What is the most attribute of our Department? My response has always been: the dedicated staff, residents, fellows and faculty who actively engage and drive change. I want to briefly update you about all the "moves" and "improvement" efforts in the Department.

With UCSF Health expansion to the Mission Bay campus, we are tremendously grateful for the persuasive arguments our previous Chair, Dr. Abul Abbas, and Vice Chair of Clinical Services, Dr. Linda Ferrell, presented that enabled us to have a wonderful space for the Department in the Ron Conway Family Gateway Building. The Gross Room at Mission Bay brought tears of joy to Dr. Ferrell's eyes knowing the hard-working team of Gross Room staff and trainees would have suitable space. Having staff and specimens across three sites is a challenge that Medical Director Dr. Soo-Jin Cho and Supervisor Bob Grefka have taken on. Our team composed of Dr. Elham Khanafshar, Director of Cytopathology, Jill Grochowski, Cytology Supervisor, and Susie Nguyen, Interim Director of Clinical Operations, have been attentively creating a cohesive area for our Cytopathologists, Fine Needle Aspiration (FNA) Biopsy Clinic and Cytology Lab in the Baker Precision Medicine Cancer Medicine Building. We are excited Cytopathology is an integral clinical team who will be serving our patients at this location on September 9, 2019. You can follow them on Twitter [@UCSFcytopath](#). Not to be left behind, already there has been a flurry of activity to determine our footprint in the New Parnassus campus hospital that will open 2030.

Numerous process improvement projects have occurred annually in the Department since our first LEAN event in 2012. The Histology Laboratory team led by Dr. Tara Saunders, Medical Director of Histology, along with Histology Supervisor, Yuri Murphy, and Technical Supervisor, Christopher Conlisk, are no stranger to utilizing technology. The Histology Lab staff have been digitally scanning all immunohistochemical quality control (QC) slides, thereby shortening the time these slides are available to the QC pathologists. In a future newsletter, Dr. Zoltan Laszik, Director of Digital Pathology, will share the massive efforts that have been made in the digital pathology front. We had a phenomenal showing of Departmental projects at the 4th Annual UCSF Health Improvement Symposium with three posters from our staff in the Cytology Lab (Improving Unsatisfactory Rate for ThinPrep Cervical Cytology), Gross Room/IT (Utilization of Mikrosan SL5 for Remote Interpretation of Frozen Sections), and Histology Lab (Use of Digital Imaging Improves Delivery Turn-Around-Time of Patient IHC Sides), along with five posters from our trainees. The latter included posters on evidence-based approaches to improving frozen section interpretation in Thoracic, Head & Neck, Neuro, and Breast & GYN Pathology, two presented by Dr. Nicole Croom, our budding forensic pathologist, and one each presented by Drs. Jeff Hoffman, neuropathologist/researcher and Cathryn Cadwell. Eliah Shamir, breast pathologist/researcher also presented a poster on "Reducing Failure Rates for ER/PR Immunohistochemistry". All the studies were done in conjunction with their respective supervisory faculty and Quality Improvement Champion Dr. Sanjay Kakar.

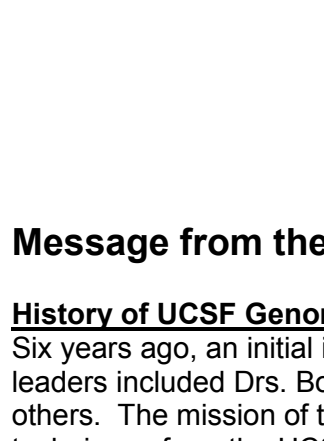
I am proud to serve in a department where change is embraced and individuals at all levels work together. We wish you all a delightful summer with family and friends. We also invite you to visit our updated [website](#) later this summer and hope to see you next year, if not sooner, at our gregarious UCSF reception at USCAP in Los Angeles or at our Annual Current Issues in Anatomic Pathology course in the city under the tutelage of our esteemed faculty.

Warm regards,

Grace E. Kim

## Updates

### Genomics



Dr. Aleksandar Rajkovic is a Professor of Pathology and Obstetrics/ Gynecology and Reproductive Sciences. He is a Stuart Lindsay Distinguished Professor in Experimental Pathology I. He serves as the UCSF Chief Genomics Officer and is the Medical Director and Chief of the Center for Genetic and Genomic Medicine (CGGM) that organizes, coordinates and oversees Clinical Genetics and Genomics Services across the entire UCSF Health System. He also serves as the Director of the Genomic Medicine Initiative, a translational arm of the Institute of Human Genetics. He earned his medical degree from Case Western University, followed by internal medical internship and residency training in obstetrics and gynecology at the Cleveland Metropolitan General hospital in Cleveland, Ohio, and subsequent Medical Genetics fellowship training at Baylor College of Medicine in Houston, TX. Prior to arriving to UCSF, he was the Chief of Medical and Laboratory Genetics at the University of Pittsburgh Medical Center where he oversaw Pittsburgh cytogenomic, molecular genomic and pregnancy screening laboratories as well as adult/ cancer and prenatal genetic clinical services. He also served as the director for genomic training programs that spanned clinical genetics and genomics, clinical biochemical genetics, and laboratory genetics and genomics. He has served as a member and director on numerous NIH study sections and workshops, March of Dimes advisory committee on prematurity, Basil O'Connor Starter Scholar Research Award Advisory Committee, and ACOG Committee on Genetics among others. He has been the principal investigator on NIH grants that studied various aspects of reproductive genomics, women's health, and leiomyoma tumors. He published more than 120 original peer reviewed articles in leading medical journals including NEJM, JAMA, Nature Genetics, Science, and JCI. He was elected into the American Society of Clinical Investigator and American Association of Physicians.

## Message from the UCSF Chief Genomics Officer

### History of UCSF Genomic Medicine Initiative (GMI)

Six years ago, an initial investment was made to create UCSF Genomic Medicine Initiative, whose leaders included Drs. Bob Nussbaum, Abul Abbas, Neil Risch, Pui-Yan Kwok, Boris Bastian and others. The mission of the UCSF Genomic Medicine Initiative was to seamlessly transition the latest techniques from the UCSF research community into patient care, giving patients access to international experts in genomic medicine. The Genomic Medicine Initiative was a UCSF-wide effort established by the Chancellor and Dean, an interdepartmental, interdisciplinary effort harnessing knowledge and experience across a large number of departments and research groups, which blends the providers and services of these departments into an efficient, knowledgeable team. UCSF Genomic Medicine Initiative produced two laboratories. The Genomic Medicine Lab (GML) focuses on germline testing, such as exomes, genomes and panels, as well as Clinical Cancer Genomics Lab (CCGL) that focuses on somatic tumor testing (UCSF500 gene panel). The creation of these clinical genetic labs and bioinformatics support enabled development and clinical implementation of exome, genome and panel sequencing (UCSF500 tumor sequencing) at UCSF. These labs support larger grants such as the NHGRI U01 Program in Prenatal and Pediatric Genomic Sequencing (P3EGS) and multiple clinical trials and pilot projects. Dr. Rajkovic is the current overall director of GMI (<https://gmi.ucsf.edu/leadership/>) as well UCSF Center for Clinical Genetics and Genomics (<https://genomics.ucsf.edu/>). Current laboratory and operational leadership for CCGL and GML include James Grenert (Medical Director), Patrick Devine (Medical co-Director) and Jessica Van Ziffle as the technical director. Our bioinformatics is led by Dr. Mark Kvale and Courtney Onodera. Susan Knowles is the new Director of Genomics Operations that covers China Basin genetic laboratories.

### The future vision for genomic testing at UCSF

Genomic testing is essential part of the clinical genomics services at UCSF. GMI will continue as part of the newly established UCSF Center for Clinical Genetics and Genomics and will be a preeminent hub for innovative genetic diagnosis, counseling and testing, and will span pre-conception, pre-implantation, prenatal, neonatal, cancer, pediatric and adult conditions. The goal of the Center is to be a leader in innovative clinical, diagnostic, and educational services for local, state, national and international patients. It will create systems to integrate genomics into everyday practice, develop processes for high value genomic evaluation, build the knowledge base for predictive genomics in diverse populations, assure that genomic information is available for all, and build genomic information management systems, superb bioinformatics, and CLIA-CAP certified genomic services to benefit all UCSF departments and accelerate discovery. The overarching goal of our Center will be to support all departments and clinical services in the provision of precision medical care through preventive/predictive/curative genomics that will span the preconception period through senescence. This cutting-edge service will in the future integrate OMICS medicine with clinical data, innovative phenotyping and longitudinal tracking for improved wellness, health and new discoveries.

### Fellowship and Educational Programs in Genomics at UCSF

The training and education of the future genetic workforce is of utmost importance to the department. The Department is currently supporting the training of molecular genetic pathologists (MGP) and laboratory genetics and genomics (LGG) fellows. The current director of MGP is Dr. Jeffrey Simko, and LGG training is co-directed by Drs. Van Ziffle and Yu. The department members are also involved in educating medical students, pathology and medical genetic residents as well as other healthcare providers interested in genomics. The laboratories also support NIH and other funded research projects.

### Our Initiatives

We have a number of initiatives centered around centralizing and insourcing genomic testing at UCSF, as well as improving our services to all departments and affiliates across UCSF Health, which include easier access:

- GML and CCGL will be consolidated at Mt Zion. The consolidation will involve moving all the equipment and bioinformatics support from Parnassus to Mt. Zion, upgrading our bioinformatics support and clusters, and providing additional office space to GML and CCGL faculty.
- We have spent a year improving our turnaround time for the UCSF500 tumor test as well as whole exome sequencing. Genomic testing has significantly impacted oncology, neonatology, neurology and prenatal space, with more demand for rapid results that can change management and therapeutics. Our turnaround time improvement effort involved close interactions between CCGL and surgical pathology leadership to understand current processes and improve on them. We have decreased our turnaround time by a whole week, and hope to improve it by another week in the next 12 months.
- UC500 version 3 will be soon implemented and will include improved coverage of genomic landscape for different tumor types.
- The CCGL became successful in achieving CAP accreditation with zero deficiencies.
- GML successfully launched clinical exome in pediatric, adult and prenatal space. Our diagnostic hit rate is above 30%, and exome sign out sessions have become popular for teaching and education.
- We plan to introduce organ and disease specific gene panels that will allow healthcare providers to order more focused genetic analysis.
- We are working on offering PDL-1 testing together with UCSF500, to help meet the demand from oncologists. Moreover, we are initiating efforts to allow pathologists to order reflex testing on UCSF500, in order to improve and refine tumor diagnostics with molecular markers.
- We plan to initiate a one-day course on genomic medicine and testing for all faculty, residents and other learners. This course will hopefully bring all clinicians interested in learning the newest in tumor and germline testing, and how these technologies are changing management and therapies.

### Our Future:

The future of pathology involves integrating multiple data sets to arrive at a consultative report. Molecular diagnostics, such as genomics and other OMICS, including metabolomics, proteomics, transcriptomics and epigenomics are becoming an integral part of pathology practice to arrive at proper diagnosis and to recommend appropriate therapy. The OMICS medicine is seeing unprecedented innovation that will continue to disrupt diagnostics in every area of pathology and add value to traditional pathology. Involvement of physicians, PhD scientists, laboratory geneticists, bioinformaticians and genome analysts is now essential to work with large data sets, data storage, data interrogation, data re-interrogation and how to best communicate this data to other healthcare providers in a meaningful and clinically actionable ways. Our future offers significant opportunity for growth with associated benefits in research, education and clinical excellence. The GML and CCGL clinical laboratories, as well as China Basin laboratories (cytogenetics and molecular diagnostics laboratories) provide excellent foundation to build upon. We will work together to become a preeminent hub for innovative genetic diagnosis, counseling and testing, that will span clinical conditions from conception thru senescence. First and foremost we want to provide excellent and seamless customer service to all UCSF departments and affiliates. This will require building robust billing and authorization for our services, as well as integration of genetic counselors to help with result interpretation and customer service. It will also require building superb bioinformatics, data science services and automation to streamline how we analyze large data sets. We will continue to harness intellectual prowess and ingenuity of UCSF faculty to translate discoveries into clinical care. We plan to offer multiple disease specific gene panels that will allow clinicians to easily focus on their disease of interest. These include tumor specific (e.g., lung tumor panel) as well as germline disease specific (e.g., cardiomyopathy) gene panels. In the future, we also plan to improve upon tumor testing via UCSF500 panel and integrate other molecular markers such as epigenomic profiling, transcriptomics, metabolomics and proteomics to refine tumor diagnoses. In the constitutional genomics, we want to introduce whole genome sequencing for rare diseases, rapid genomes in the care of critically ill babies and pregnancies with undiagnosed disease, as well as carrier screening and non-invasively circulating DNA testing in pregnancies and cancer patients. We are also interested in developing a novel laboratory of functional characterization, adjacent to diagnostic labs, where we develop custom models for disease, either through cell-based functional assays (e.g. patient specific iPSCs or organoids) or model organisms. For example, the development of tissue/tumor organoid models as well as disease/patient specific functional characterization of gene variants would be of great interest, and may also serve as a platform for high throughput drug screening. It will also enlighten individuals about penetrance of their disease predisposition, and help discover mechanisms of resistance to disease.

## Current Issues Summary

On behalf of the course co-chairs and our Department, we wanted to personally thank everyone who attended this year's **UCSF Annual Current Issues in Anatomic Pathology** conference. This year marked our **35<sup>th</sup>** anniversary and was a resounding success with more than 145 participants representing 26 states and 6 foreign countries including Australia, Canada, Grenada, Netherlands, South Korea, and the United Kingdom. If you were there, we hope you found it as engaging, educational, and enjoyable as we did. If you were not able to join us this year, we hope you plan to attend next year's meeting.

We had an action packed four days, filled with interactive microscopy sessions, lectures, interactive lunch tutorials, and poster sessions. The Cytology Seminar was held on Wednesday at the SFVAHCS, located on the beautiful bluff overlooking the San Francisco Bay and Pacific Ocean. It was my pleasure to personally welcome attendees to the interactive glass slide sessions, where participants had the opportunity to closely interact with our expert faculty, including **Drs. Balassanian, Calkins, Khanafshar, and Walavalkar**, who discussed nuances of breast, salivary gland, fluids, and EUS/EBUS FNA cytology, respectively.

To kick off the main course at the beautiful SF Intercontinental Hotel, our new Department Chair, **Dr. Jay Debnath**, began Thursday morning with introductory remarks and welcomed attendees. **Dr. Andrew Horvai** and guest faculty, **Drs. John Goldblum and Jason Hornick**, inspired the day with pearls on Bone and Soft Tissue pathology, and, **Dr. Timothy McCalmont** concluded the day with a discerning discussion on Near-Neural Lesions and Their Differential Diagnoses. In the evening, the interactive microscopy sessions at Mission Bay (envisioned and implemented by **Dr. Joe Rabbani**), provided ample opportunity to learn from the expertise of **Drs. Melike Pekmezci** and **Rebecca Wolsky** in Neuro and GYN Pathology (respectively) and to tour the new Mission Bay facilities. Throughout the course, participants also enjoyed interactive lunch tutorial sessions with our expert faculty in Hematopathology (**Dr. Karthik Ganapathy**), GI pathology (**Dr. Grace Kim**), and Pulmonary pathology (**Dr. Anatoly Drisman**).

**Dr. Linda Ferrell** kicked off Friday morning with an entertaining historical "then and now" perspective on the Mission Bay neighborhood, home of the new PCMB building. Our engaging Friday faculty presenters included **Drs. Yunn-Yi Chen, Gregor Krings, Poonam Vohra, and JP Grenert**, who, together with esteemed guest faculty **Dr. Stuart Schnitt**, provided insightful presentations in various challenging aspects of Breast pathology. **Dr. Philip LeBoit** then segued with an informative presentation on the Interface between Breast and Skin Pathology. At the conclusion of the day, attendees packed the house for the special **Henry Moon Lecture** presented this year by **Dr. Schnitt**, addressing The Continuing Dilemma of Ductal Carcinoma in Situ. The Evening Wine and Cheese Reception followed with time to catch up with great friends and provided excellent opportunity to network, socialize, and exchange ideas.

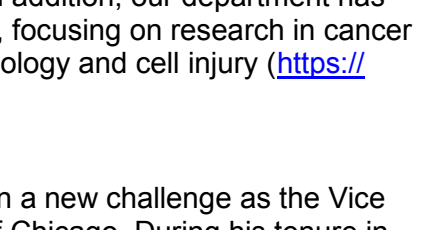
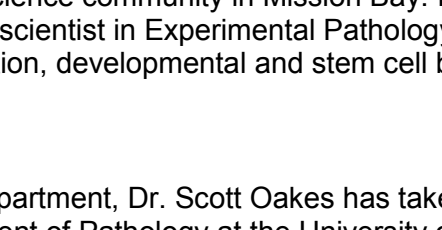
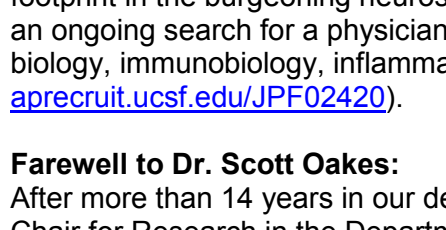
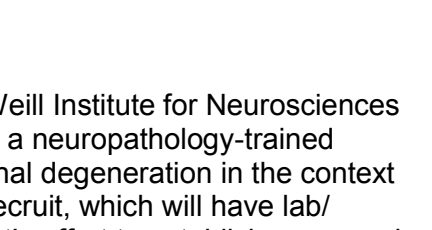
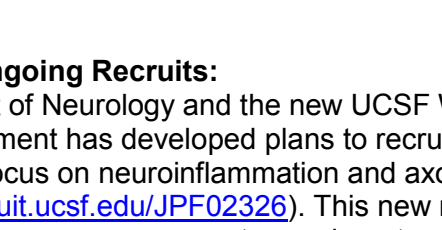
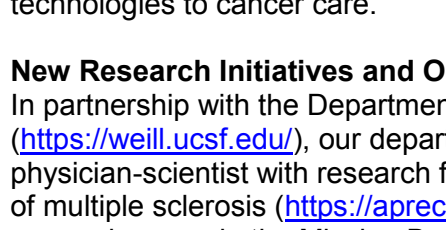
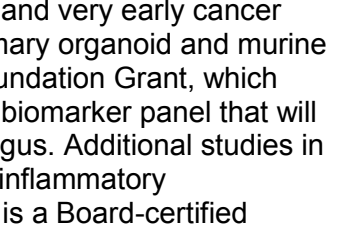
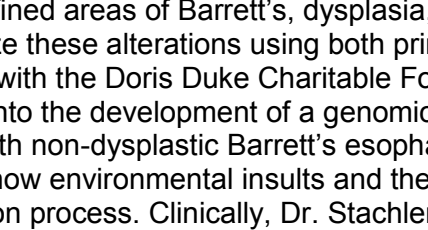
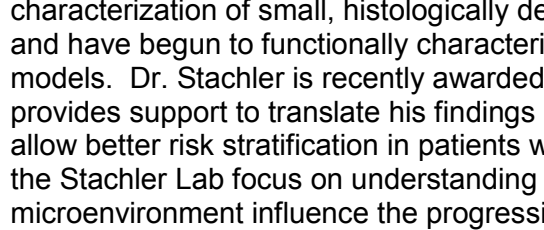
On Saturday morning, **Drs. Jeff Simko, Brad Stohr**, and guest faculty **Dr. Victor Reuter** took the helm to provide insightful and entertaining lectures in GU pathology tackling the myriad challenges in bladder, prostate and kidney pathology. Following lunch, a satisfying GI-filled session including dynamic and informative presentations with digestible pearls of wisdom from **Drs. Cho, Gill, Umetsu, and Kakar** concluded the course.

The strength of the dedication at each annual Meeting are a tribute to our Department's educational mission and presentations of our faculty. Thanks to each of our expert faculty speakers for the excellent sessions and for those who participated in this year's course. For those who attended, please be sure to provide feedback through our course survey, on which we rely to bring you the best possible educational and enjoyable experience. Your continued participation allows all of us occasion to exchange ideas, learn from each other's experiences, meet new friends, and keep old friendships alive.

Finally, we would be remiss if we didn't thank **Ms. Ana Narvaez, Christine Hall, and Jane Brooks** for all of their help and hard work in coordinating the innumerable course logistical details and our exhibitors (Elsevier, Wolters-Kluwer, Deep Bio, Inc., APS Medical Billing, Philips, and Merck) for their continued support.

We thought to share some photographs from this and prior year courses with you below. It is our honor and pleasure to serve as a part of this annual course, and we look forward to seeing you all again soon!!

Update submitted by: **Professor Laura Tabatabai, Course Chair**



## Research Highlights

### Highlights on Academic and Research Faculty

As a leader in academic pathology, our department has a long tradition of excellence in basic science research that focuses on cancer biology, inflammation and immunology, genomic medicine, neuro-oncology and neurodegenerative diseases. Our thriving research program was established by our previous Chair, Dr. Abul Abbas, and continued by the current Chair, Dr. Jay Debnath. This Newsletter highlights the research programs by several faculty members and the new directions for our department to grow and expand the research enterprise in our department.

**Research Highlights: ImmunoX Initiative and the Grand Challenge Grant for Cancer Research**  
**The UCSF Bakar ImmunoX Initiative** is an innovative research program that promotes collaborative research and data sharing to catalyze discoveries about the central role of the immune system in human health and harness it to treat a wide range of diseases, including cancers, chronic viral infections, and neurodegeneration (<https://immuno.ucsf.edu/>). Based in the Department of Pathology, ImmunoX is spearheaded by Dr. Matthew (Max) Krummel, who is Professor of Pathology and the Robert E. Smith Endowed Chair in Experimental Pathology. Dr. Krummel joined our department in 2001 as an Assistant Professor and since led a large team effort to study the mechanisms that regulate T cell response and immune function using cutting-edge real-time imaging technologies. Throughout his career, Dr. Krummel has made many important contributions to immunology. As a graduate student, he developed monoclonal antibodies that target costimulatory and inhibitory molecules on T cells, including antibodies to CTLA-4, which identified an inhibitory pathway of T cell regulation. This approach led to the development of human antibodies of the same type, a therapy now named "ipilimumab" and more generally "Checkpoint Blockade", approved by FDA for treatment of melanoma and other cancers.

Dr. Thea D. Tlsty, Professor of Pathology and a UCSF leader in cell cycling and signaling in tumorogenesis. Dr. Tlsty joined our department in 1995 and since then, has risen to Full Professor and led a multidisciplinary team to investigate epithelial and stromal contributions to wound healing and malignancy. The model systems developed by the Tlsty Lab have uncovered important molecular mechanisms of stromal-epithelial stress responses and the interactions that facilitate tumor progression in breast, prostate and other cancers. Dr. Tlsty's work also has critical translational insights and potential implications for clinical utility. As a testament to her success, Dr. Tlsty has been awarded a \$26 million **Grand Challenge Grant from Cancer Research UK (CRUK)** to lead an international team exploring how chronic inflammation causes cancer.

**Featured Junior Faculty in Research: Physician-Scientists Embarking on Exciting Paths to Uncover Disease Mechanisms**  
**Dr. David Solomon – Molecular Genetics of Brain Tumors.** Dr. Solomon is a physician-scientist who splits his time between surgical neuropathology and molecular neuro-oncology. The Solomon Lab investigates both basic science and translational research projects focusing on the genetic mechanisms that drive cancer development. During his graduate training, Dr. Solomon discovered frequent inactivating mutations of the cohesin complex gene STAG2 in glioblastoma, urothelial bladder cancer, and Ewing sarcoma, which define molecular subgroups of these tumors with distinct clinical outcomes. Using a newly generated conditional STAG2 knockout mouse and isogenic sets of STAG2 proficient and deficient cancer cell lines, the Solomon Lab is currently working to determine the function of STAG2 in development and tumorigenesis and to identify therapeutic vulnerabilities in the many cancers harboring cohesin gene alterations. Other ongoing studies in the Solomon Lab include genomic characterization of the many different brain tumor types such as choroid plexus tumors, pineal parenchymal tumors, bithalamic gliomas, and choroid gliomas. As a trainee, Dr. Solomon received many national awards, including the Harold Weintraub Graduate Student Award, AACR Future Leaders in Basic Cancer Research Award, USCAP Stowell-Orison Award, and AANP Lucien Rubinstein Neuro-Oncology Award. After becoming an independent investigator, Dr. Solomon's research has been supported by the NIH Director's Early Independence Award, UCSF Physician-Scientist Scholar Program, UCSF Glioblastoma Precision Medicine Program, and UCSF Wolfe Meningioma Program.

**Dr. Aras Mattis – Disease Mechanism for Non-Alcoholic Fatty Liver Disease.** Dr. Aras Mattis is Assistant Professor with expertise in GI Pathology and research in disease modeling using patient-specific induced pluripotent stem cells (iPSC). Using his laboratory is focused on understanding mechanisms in NAFLD pathogenesis primarily using induced pluripotent stem cell-derived cells (iPSC) from patients. They use iPSCs from patients with a genetic predisposition to NASH and differentiate these cells into hepatocytes. These iPSC-hepatocytes or iHeps function similar to immature fetal human hepatocytes and fully reproduce genetic defects present in these patients. This iHep model shows increased intracellular steatosis, ER stress, and de novo lipogenesis, features similar to NASH (awarded Program for Breakthrough Biomedical Research grant). In one of the disease families, Dr. Mattis and his team identified TM6SF2 E167K as one of several genetic risk factors for increased steatosis in these patients and they are trying to further characterize the contribution of this SNP for NAFLD. Finally, the Mattis Lab has developed expertise in editing iPSCs using CRISPR-Cas9 technology. In a collaborative effort with Michael McManus's lab, they are developing a whole genome screen to identify targets to reverse steatosis and ER stress in these patient-derived iHeps. Their approaches will directly uncover druggable targets with the goal of reversing the NASH disease process (awarded UCSF Liver Center Pilot grant).

**Dr. Matthew Stachler – Genetic Basis for Barrett's Esophagus and Neoplasia.** Dr. Stachler received his Anatomic Pathology and Molecular Pathology training at the Brigham and Women's Hospital, Harvard Medical School, and joined our department in April 2019. The general focus of Dr. Stachler's research is to understand what drives the progression of preneoplastic disease into invasive cancer by applying the many systems developed for studying cancer to premalignant conditions such as Barrett's esophagus. His overall goal is to better define the pathobiology of Barrett's and delineate the process by which it progresses to esophageal adenocarcinoma with the long-term goal to develop better clinical biomarkers for risk stratification and therapy. Through work funded by his NIDDK Career Development (K08) award, Dr. Stachler performed advanced genomic characterization of small, histologically defined areas of Barrett's, dysplasia, and very early cancer and have begun to functionally characterize these alterations using both primary organoid and murine models. Dr. Stachler is recently awarded with the Doris Duke Charitable Foundation Grant, which provides support to translate his findings into the development of a genomic biomarker panel that will allow better risk stratification in patients with non-dysplastic Barrett's esophagus. Additional studies in the Stachler Lab focus on understanding how environmental insults and the inflammatory microenvironment influence the progression process. Clinically, Dr. Stachler is a Board-certified Molecular Pathologist with a special focus on applying next-generation sequencing based technologies to cancer care.

**New Research Initiatives and Ongoing Recruits:**

In partnership with the Department of Neurology and the new UCSF Weill Institute for Neurosciences (<https://weill.ucsf.edu/>), our department has developed plans to recruit a neuropathology-trained physician-scientist with research focus on neuroinflammation and axonal degeneration in the context of multiple sclerosis (<https://aprecruit.ucsf.edu/JPF02326>). This new recruit, which will have lab/ research space in the Mission Bay campus, represents our department's effort to establish a research footprint in the burgeoning neuroscience community in Mission Bay. In addition, our department has an ongoing search for a physician-scientist in Experimental Pathology, focusing on research in cancer biology, immunobiology, inflammation, developmental and stem cell biology and cell injury (<https://aprecruit.ucsf.edu/JPF02420>).

**Farwell to Dr. Scott Oakes:**

After more than 14 years in our department, Dr. Scott Oakes has taken a new challenge as the Vice Chair for Research in the Department of Pathology at the University of Chicago. During his tenure in our department, Dr. Oakes has been a beloved faculty on the Autopsy Service. He has also established a world-class research program that investigates the disease mechanisms caused by the misfolding, aggregation and accumulation of protein in specific cells leading to their dysfunction. Dr. Oakes' research has wide-ranging implications in human diseases, such as diabetes, retinitis pigmentosa, Alzheimer's disease, Parkinson's disease and certain cancers. We wish Dr. Oakes the very best in his new endeavor.

Updated Submitted by: **Dr. Eric Huang, MD, PhD**

## UPCOMING EVENTS

### USCAP 2020: Hotel Reservation Available NOW!

[Reservation Link](#)

**USCAP 2020 Location: Los Angeles Convention Center, Los Angeles, CA**

**Date: February 29—March 5, 2020**

### Save the Dates:

**Current Issues in Anatomic Pathology:**

**May 22-23, 2020 (Cytology Seminar: May 21, 2020)**

Parc 55 Hotel, San Francisco

**Current Issues in Anatomic Pathology:**

**May 27-29, 2021 (Cytology Seminar: May 26, 2021)**

Parc 55 Hotel, San Francisco

[UCSF Pathology Department](#)