Chair’s Corner

Yes… We teach — a lot!

The close of an academic cycle lends itself to reflection on the challenges and accomplishments of the year past. Once again, the Department led the country (and Canada, as nearly as I can estimate) in the number of presentations at our national meeting, the USCAP 2018 Annual Meeting, held this year in Vancouver, BC, Canada. This continues an impressive trend begun several years ago; it is a testament to the caliber and academic productivity of our faculty. Coincident with the centennial last week celebrating the first admission of women to the Yale School of Medicine, I was proud and pleased to learn that of the first two women graduates, one (Helen Scoville) was immediately recruited onto the faculty in Pathology in 1920. Since that time, we have had many successful and prominent women join our faculty. Highlights from these events are reported elsewhere in this issue.

On other fronts, the Department’s clinical services have continued to grow, and major recruitments in neuropathology, breast pathology, hematopathology, renal/transplant pathology, and clinical pathology (at Bridgeport Hospital) have largely balanced the service loads of our faculty. On the scientific front, FY2018 has been one of continued achievement, with major new grant awards to most investigators, deepening collaborative ties to programs in the Cancer Center, Urology, Neurology, Dermatology, EPH, Medicine, and the newly instituted Center for Computational Biology. David Stern with Peter Glazer secured a new NIH grant to train recent departmental retreat again reminded me of the breadth and depth of investigative activity. However, our frequent focus on in the Department should not faculty to the “third leg” of our This is perhaps our most lasting for shaping tomorrow’s doctors, may come as a surprise to many involves our faculty. For starters, residency training program, with Natalia Buza and Harvey are trained over three to four years to be specialists in Anatomic and Clinical pathology, some combining this with focused research training in our physician-scientist residency track. Residency training is a task contributed to by nearly all of our faculty in weekly lectures, conferences, and one-on-one tutoring. Closely allied with the residency program are advanced clinical fellowship programs in Hematopathology, GI/Liver pathology; Renal & Urologic pathology, GYN pathology, Breast pathology, Head & Neck pathology, Molecular and Genetic pathology, and Cytopathology, along with several more offered by our partners in Laboratory. Our department is also the only enjoys membership in the Gradu- and that hosts its own Gradu- Experimental Pathology. This lar Medicine, Pharmacology, Yale’s BBS integrated graduate kides serves as our Director of Graduate Studies (DGS). Currently there are 17 graduate students training in pathology laboratories. Our graduate program also offers several courses in the Graduate School that are quite popular among students. These include David Stern and Qin Yan’s cancer course (PATH 650); Lab rotations in ExPath (Themis Kyriakides, PATH 620-622); Writing Scientific Proposals (Katie Politi, PATH 640); Molecular Medicine (Susuhiro Tomita, PATH 680); Advanced Topics in Cancer Biology (Ryan Jensen and Qin Yan, PATH 681); Cancer Clinical Translation (Sam Katz and Ranjit Bindra, PATH 682);...”

Faculty Focus

Dr. Marie Robert Named Chief Scientific Officer of Beyond Celiac

By Rachel Lyke

Celiac disease is an autoimmune disorder triggered by the ingestion of gluten, a protein found in wheat, barley, and rye in the genetically susceptible host, most of whom have either the HLA DQ2 or DQ8 allele, a part of the MHC class II antigen-presenting receptor system distinguishing self from non-self. It is the only autoimmune disorder where the trigger is known, providing unique opportunities for mechanistic discovery and therapeutic development. Approximately 1% of North American populations have celiac disease, amounting to 3 million Americans, with the incidence rising in recent decades. While celiac disease often presents in childhood with gastrointestinal symptoms, it is estimated that 83% of individuals suffering from celiac disease are undiagnosed adults experiencing extraintestinal symptoms. Lengthy delays in diagnosis, often lasting decades, are common in this disease, whose non-gastrointestinal manifestations include anemia, infertility, miscarriage, osteoporosis, dental enamel defects, severe fatigue and neurological symptoms. Untreated and refractory celiac disease is associated with an increased incidence of lymphoma and carcinoma.

Beyond Celiac is a non-profit foundation uniting with patients, academia, biotech, and pharmaceutical stakeholders devoted to improving diagnosis, advancing research, and accelerating discovery of new treatments and a cure for celiac disease. Founded in 2003, Beyond Celiac’s initial focus was raising awareness, bringing gluten free foods to market and teaching proper food preparation to restaurants purporting to serve gluten free foods. In 2013, Beyond Celiac pivoted to a research focus. Following a life-long gluten-free diet, currently the only method of managing celiac disease, is a lifestyle that is described by patients as a “cloud following you around 24/7,” severely impacting life styles. Recent studies from Harvard, Columbia, and the Mayo Clinic have documented that the burden of...
Chair’s Corner
(article continued from page 1)

Responsible Conduct of Research (Barbara Ehrlich, PATH 660); and Molecular Mechanisms of Disease (Narendra Wajapeey and Demetrios Braddock, PATH 690). Other graduate courses that draw on Pathology faculty include CBB 740, Clinical and Translational informatics (Michael Krauthammer); CBB 601, Fundamentals of Research, (Steve Kleinstein); MCDB 752, Biomedical Data Science: Mining and Modeling (Steve Kleinstein); and PHARM 528 Principles of Signal Transduction (Steve Kleinstein & David Stern).

We also teach in Yale College. In 1986, Pathology introduced a course (MCDB-315) for Yale undergraduates that focused on human disease biology. Offered annually, it has sustained its standing as one of the more popular undergraduate MCDB courses. Directed by David Hudnall, lectures this year were delivered by five selected faculty (Hudnall, Morrow, Moeckel, Gibson, and Sklar). Pathology also contributes to a second Yale College course in biomedical engineering (BENG435), entitled Biomaterial-Tissue Interactions, instructed by Themis Kyriakides.

Of course, perhaps our major teaching commitment is to the 100 medical students who pass through YSM each year. Rob Homer is our Director of Medical Studies (DMS) and plays a major role in guiding Pathology’s contribution to the preclinical medical curriculum. Comprised predominantly of eight “master courses,” these include Scientific Foundations (cell biology), Genes and Development (genetics and heme/onc); Attacks and Defenses (ID/microbiology, immunology, musculoskeletal, dermatology, and inflammatory pathology); Homeostasis (lung, heart, kidney); Metabolism (GI, endocrine); Connections to the World (neuroscience, behavioral science); Across the Lifespan (pediatrics, ob/gyn, geriatrics); and a non-technical module Introduction to the Profession. Each of these has significant input from Pathology, guided by Rob Homer, Bob Camp, Mina Xu, Sam Katz, Gilbert Moeckel, Debo Adeniran, Veerle Bossuyt, and Natalia Buza. Many more of our faculty at all levels contribute to the small team-based learning sessions and laboratories that accompany these courses. Beyond the formal YSM curriculum, Debo Adeniran organizes a clinical elective in pathology for medical students that has become very popular, with 20-30 students participating each year. They rotate for either 2 or 4 weeks. Students from outside are mostly those interested in pathology, allowing us to showcase Yale Pathology. Yale students are more diverse and include those interested in other specialties, including surgery and OB/Gyn.

Additional teaching forums in which Pathology plays a significant role include the Physician Assistant program, headed by Earl Glusac, in which our faculty deliver about 20 lectures each year. We also host Pathology Assistant trainees (from Quinnipiac University, typically one each month) and two forensic interns each semester from the University of New Haven, both programs managed by Art Belanger. Jim Gill delivers lectures on forensic pathology to students in both YSM and in EPH. Cindy DeRiso participates in the training of certified histotechnologists, a field in great demand.

In aggregate, there is no doubt… Pathology is deeply embedded in the fabric of Yale’s educational mission. We should all be proud of these important contributions by so many of our faculty (and some staff). As things slow for the summer season, I ask each of you not only to find some time to relax and enjoy the beautiful weather, but to also recognize the educational contributions of your colleagues and, whenever you can, congratulate them on a job well done.

Jon S. Morrow
Spring/Summer 2018

Very Important Pathologist: Dr. Xuchen Zhang

By Rachel Lyke

Xuchen Zhang, MD, PhD, Associate Professor of Pathology, grew up in a doctor’s family in China. He received his medical training at the Beijing University of Chinese Medicine, where he conducted research on the pathogenesis of gastric precancerous lesions (chronic atrophic gastritis, intestinal metaplasia and dysplasia). Subsequently, he attained his PhD at the Chinese Academy of Medical Sciences/Peking Union Medical College. In his PhD program he studied the role of apoptosis in animal models of chronic obstructive pulmonary disease (COPD) and pulmonary emphysema. After his PhD, he joined Dr. Patty Lee’s laboratory here at Yale as a postdoctoral associate, and subsequently was appointed Associate Research Scientist at the Yale School of Medicine.

Working with Dr. Lee, Dr. Zhang investigated a family of signaling molecules called mitogen-activated protein kinases (MAPKs) that modulate cell protection through the action of hemeoxygenase-1 (HO-1) and carbon monoxide. He also examined the role of the cytokine IL-13 in mediating lung inflammation and remodeling, and identified a role for toll-like receptor 4 (TLR4) in protecting the lung against aging and oxidant-induced injury. These studies represented important paradigm shifts in our understanding of TLR and lung biology, and now form the basis of translational studies examining therapy for those with acute lung injury and/or age-related chronic lung diseases, such as COPD.

In 2012 he joined the Department as an Assistant Professor. In 2017 he was promoted to Associate Professor. Working primarily with the Department’s GI/liver pathology service, Dr. Zhang returned to his interest in gastrointestinal pathology but focused more intently on liver cancers. As a member of the Liver Cancer Program that was formalized in 2017 at the Smilow Cancer Hospital, Dr. Zhang emerged as an expert responsible for the diagnostic analysis of biopsies and surgical resections in patients with liver cancer. In this work, he not only provides an accurate diagnosis, but also characterizes the biological and pathologic features of these tumors, contributing as part of the cancer team to an enhanced understanding of the biology of such tumors, their impact on the patient, and the therapeutic effectiveness of evolving treatments.

Dr. Zhang’s studies of hepatocellular cancer (HCC) have revealed heretofore-unappreciated phenotypic heterogeneity and differentiation within such tumors, echoing observations emerging from genomic studies. He has also identified cancers arising in typically “non-neoplastic” backgrounds, and observed that such tumors, e.g. those arising in non-cirrhotic/non-fibrotic livers, tend to be larger, of higher histologic grade, and more aggressive. Such patients are more likely to suffer earlier vascular invasion, metastatic spread, and shorter survival, all features that may profoundly affect a patient’s choice of therapy and course. In other work, along with his colleagues, he has identified that another type of cancer, steatohepatic-HCC, can occur in patients without metabolic syndrome and in a background liver devoid of significant steatosis. Reflecting his interest and contributions, he is currently a collaborator on two RO1 grants studying HCC; the first entitled “HIV and Aging Mechanisms for Hepatocellular Cancer”; the second “A Novel Druggable Epigenetic Vulnerability Pathway in HCC”.

(article continued on page 12)
New Haven AAPC Hosts Dr. Janina A. Longtine

By Aileen Baldwin

Janina Longtine, MD, Vice Chair of Pathology and Laboratory Medicine, Professor of Pathology and Laboratory Medicine, presented “The Science and Technology of Molecular Diagnostics” to the New Haven Chapter of American Academy of Professional Coders (AAPC) on April 19th in the TAC Auditorium. Dr. Longtine spoke with great passion on topics such as the history of molecular diagnostics and the current expanded and comprehensive testing and analysis of new technologies. She provided an overview of the financial challenges related to coding and reimbursement in this much needed field of medicine. The audience of billing professionals, leaders, lab technicians, physicians and administrators were delighted to learn how Yale Pathology and Smilow Cancer Center are translating new discoveries and novel technologies into powerful diagnostic findings and treatments related to cancer, genetic disorders and many other diseases. AAPC is a national organization with local chapters throughout the U.S. and several countries that consists of certified medical billers, coders, auditors, compliance officers, practice managers and documentation specialists.

“Triple the Pink” Event Educates Community on Triple Negative Breast Cancer

By Rachael Leftridge

“Triple the Pink,” a mandated program of the National Association of Negro Business and Professional Women’s Club, Inc., was held on Saturday, March 3, 2018, which was National Triple Negative Breast Cancer Day. The program objective was to educate minority communities about this disease in hope of minimizing its negative impact among those populations.

Triple negative breast cancer occurs when the three most common types of receptors known to fuel most breast cancer growth—estrogen, progesterone, and the HER-2/neu gene—are not present in the cancer tumor. When these receptors are not present, the breast cancer cells have tested negative for hormone epidermal growth factor receptor 2 (HER-2), estrogen receptors (ER), and progesterone receptors (PR). Since the tumor cells lack the necessary receptors, common treatments like hormone therapy and drugs that target estrogen, progesterone, and HER-2 are ineffective (www.nationalbreastcancer.org). Triple negative breast cancer is more likely to affect younger people in African American and Hispanic populations.

The National Association of Negro Business and Professional Women’s Club, Inc., founded in 1935, emerged as a national non-profit organization in light of the need to promote and protect the interests of women business owners and professionals. The mission of the organization is to promote and protect the interests of African American business and professional women; to serve as a bridge for young people seeking to enter business and the professions; to improve the quality of life in the local and global communities; and to foster good fellowship.

It was an honor as a member of the NANBPWC, Inc., as well as a triple negative breast cancer survivor, to serve as the chair for this program. I would like to give a special thank you to Dr. Veerle Bossuyt and Dr. Andrea Silber for assisting us in raising awareness and supporting our national initiative, “Triple the Pink.” The presentations offered a wealth of information and kept the attendees engaged.
Retirement Celebration for José Costa, Professor of Pathology

On March 28th in BML 137, a lively and heartfelt reception was held to honor the work and legacy of Dr. José Costa upon his retirement from the Department of Pathology. Colleagues, friends, and students came together to share stories and fond memories of Dr. Costa. This included a slide show by Dr. Pei Hui, which provided a glimpse into the travels that he and Dr. Costa have taken over the years.

Dr. Costa came to Yale in 1993, serving as Vice Chair of Pathology. From 1995 until 2007, he served as the Deputy Director of the Yale Comprehensive Cancer Center. Dr. Costa has also led the Pathology Autopsy Service as its Director and was Director of Bone & Soft Tissue Pathology. Dr. Costa will now hold the title of Professor Emeritus. We wish him all the best!
Recent Grant Funding

Grants funded from January 2018 to date. Information provided by Shilpa Shukla.

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Mohammed Kahn, PhD Candidate, Molecular, Cellular, and Developmental Biology (Krauthammer Lab), defended his thesis, “Computational Tools for the Analysis of Neoepitopes and Aberrant Transcription in Cancer,” on May 9th. Mohammed will be completing his research in the Krauthammer Lab over the summer. He plans to pursue a career working in the software industry.

Xiaoni Liu, PhD Candidate, Experimental Pathology (Bosenberg Lab), successfully defended her thesis, “Epigenetic Regulation of Intratumor Heterogeneity in Melanoma: Effects on Drug Resistance and Anti-Tumor Immunities” on April 16th. After graduation, Xiaoni will be joining the Boston Consulting Group as a Consultant.

Announcements are sent Department-wide for these important events, which are open to anyone who would like to attend.
**Women in Pathology**

By Rachel Lyke

Coinciding with the introduction of women to the Yale School of Medicine, the history of female faculty in the Department of Pathology spans almost 100 years. This extraordinary group of women, who came from diverse backgrounds, broke gender barriers, learned, taught, pioneered groundbreaking research, and in innumerable ways advanced the field of pathology, have all become integral pieces of the rich historical fabric of not only the Department, but Yale University as a whole. Beginning with Helen May Scoville and Isabel Mary Wason in the early 20th century and continuing with our current faculty, women in the department have made and are still making important and lasting contributions to research and patient care.

On June 1, 2018, the Committee on the Status of Women in Medicine (SWIM) hosted an all-day symposium commemorating the 100-year anniversary of women at the Yale School of Medicine. In honor of this landmark, we offer the following brief departmental history in the form of vignettes of some of its notable women faculty over the past century. This is by no means a comprehensive account, which would require considerably more space than is available here, but we hope that it provides at least a starting point for recognizing and celebrating the contributions of the women of our department to the field of pathology. The brief history presented here takes us to the year 2000. We can all be proud of the fact that since that time, the ranks of women faculty have continued to increase, especially on the clinical service, with impactful recruitments among the basic and translational science faculty as well.

**Maria Luisa Carcangiu**

Maria Luisa Carcangiu, a native of Sardinia educated in mainland Italy, joined the Yale Department of Pathology in 1988 as a member of the Surgical Pathology team. She started her academic career at the University of Florence, where she completed her undergraduate and graduate work, eventually becoming a junior member of the staff of the Pathology Department.

After her arrival to New Haven she took on the subspecialty of gynecologic pathology with her characteristic zest and expertise. Her competence was based on a thorough knowledge of the technical literature and a prodigious visual memory for histopathological images. Her devotion to the clinical team was unfailing and her expertise and capacity to work made her an essential contributor to the section led by Dr. Peter Schwartz. In 1996 she was promoted to the rank of Professor of Pathology. Her original contributions in the fields of thyroid pathology and gynecologic tumors made during her Yale years have remained reference points for pathologists and clinical oncologists; her findings are widely cited and have withstood the test of time. Her early interest was in thyroid carcinoma, where she wrote a series of definitive papers on the diagnostic features of these tumors, including the first contemporary descriptions of insular carcinoma, anaplastic carcinoma of the thyroid, and diffuse sclerosing variant of papillary thyroid carcinoma. Later in her career, her interest grew to include breast and gynecological pathology. She was among the first to describe atypical lesions in fallopian tubes of patients with BRCA mutations (now serous tubal intraepithelial carcinomas, which is the precursor to high grade serous ovarian carcinoma). Dr. Carcangiu was one of the editors of the 4th Edition of the WHO series on Classification of Tumors of Female Reproductive Organs, published in 2014. As the only woman on the clinical faculty in Anatomic Pathology for many years, she took a special interest in supporting and mentoring women residents.

**Louise Eisenhardt**

Louise Eisenhardt’s legacy as a leader in the field of neuropathology spans the designations of scholar, investigator, editor, and teacher. She began her career as an editorial assistant to Dr. Harvey Cushing at Harvard at the Peter Bent Brigham Hospital. Recognizing Eisenhardt for her talents and intelligence, Dr. Cushing left her in charge of the materials that would be used for Tumors of the Nervus Acusticus, when he was called to active duty in May of 1917. Eisenhardt later pursued her education at Tufts Medical School, graduating in 1925 with the highest record that had ever been attained by a graduate. She completed an internship at the Boston Hospital for Women and Children before arriving at Yale to work with Dr. Cushing in 1933.

The first woman to specialize in neuropathology, she served as the first female president of the American Association of Neurological Surgeons. She was the first editor of the Journal of Neurosurgery, a position she held for 21 years. In 1928 with Dr. Cushing and Dr. Percival Bailey she co-authored the paper “Angioblastic Meningiomas.” In 1938 she collaborated with Dr. Cushing on Meningiomas. Their Classification, Regional Behavior, Life History, and Surgical End Results. She had long been in charge of the collection of brains and had maintained the record of his neurosurgical cases in what came to be known as her “little black book.” Continuing the work she had begun with Dr. Cushing, Dr. Eisenhardt eventually became the Curator of the Yale Brain Tumor Registry. Between 1939 and 1967, Dr. Eisenhardt curated the collection, which drew scholars to New Haven in hopes of being able to utilize it while they studied for their certification boards. She served as the Secretary-Treasurer of the Harvey Cushing Society from 1934-1938 and 1939-1952, the President from 1938-1939, and the Historian from 1952-1965.

**Lucia R. Languino**

Lucia R. Languino joined Yale Pathology in 1994 as an Assistant Professor and focused her studies on integrin-mediated mechanisms of cancer progression, obtaining an R29 NCI award, a DOD award and the first of many NCI RO1 awards. She was promoted to Associate Professor in 2000. In 2002, Dr. Languino moved to the Dept of Cancer Biology, University of Massachusetts Medical School as a Professor with tenure. Her expertise in signaling mediated by adhesion receptors as well as in prostate cancer progression were unique and offered a novel dimension to transduction and integration of regulatory signals. Dr. Languino has actively pursued translational aspects of prostate cancer research, focused on the identification of integrin antagonists as potential molecular therapeutics in prostate cancer.

At Sidney Kimmel Medical College, where she moved in 2010, Dr. Languino integrated her expertise with other scientists in the comprehensive Prostate Cancer Program. She collaborates with Dr. Adam Dicker in studies on radio-therapy, and with Dr. Kevin Kelly at Jefferson Medical College, studying bone metastasis. Dr. Languino has been a member and discussion leader of NCI panels and is a chartered member of the NIH Tumor Progression and Metastasis Study Section (2014-2018). Her scientific contributions have been internationally recognized in over 100 papers. Her efforts have been recognized by awards from the NCI, Prostate Cancer Foundation, and by the Dean Transformational Award. Her most recent experiments on exosome-mediated cancer progression are recognized as high-impact studies investigating novel aspects of cancer biology. She is currently the Director of the Genetics, Genomics and Cancer Biology PhD program at Sidney Kimmel Medical College.
Laura K. Manuelidis

Laura K. Manuelidis developed a passion for neurosciences early in her career. While a medical student at Yale, she did research in the laboratory of the neurophysiologist, Jack Flynn. Upon graduating from YSM in 1967, she was recruited to Yale Pathology by the chairman, Harry S. N. Greene, for internship and residency. Dr. Manuelidis has described the Pathology department of that time as having been “full of outspoken renegades who loved to poke the established order,” and she remembers fondly an atmosphere of intellectual excitement and inclusiveness toward women. Following residency, Dr. Manuelidis received NIH fellowship support for postdoctoral training in neuropathology. She was then appointed to the Pathology faculty in 1970 and actively pursued both clinical service and basic research here for nearly a decade before moving to the department of Surgery.

Dr. Manuelidis has made innovative contributions to the understanding of chromosome organization and structure, as well as in the field of Creutzfeldt-Jakob Disease pathogenesis and “slow virus” transmission in animal models. She is currently Professor and Head of Neurology and Neurosciences at the Yale School of Medicine.

Isabel Mary Wason

Isabel Mary Wason obtained her MD at Johns Hopkins medical school in 1917. She was recruited to Yale by Milton Winternitz, the first chair of Yale Pathology (at that time, called The Brady Laboratory of Pathology and Bacteriology), soon after his arrival. Dr. Wason was appointed Assistant Professor and Instructor of Pathology in 1918, at a time when less than 10% of practicing physicians in the US were women. In 1925, she was appointed a Clinical Pathologist at St. Luke’s Hospital in New Bedford, Massachusetts, where she stayed until 1949. After leaving St. Luke’s, Isabel went to the National Research Council in Washington, DC. She retired in 1958.

Dr. Wason was one of three authors of the famous monograph, The Pathology of Influenza, published in 1920 by Yale University Press. That same year she published “Report of a case of congenital stenosis of both ureteral orifices” in the Journal of Urology as one of the first three women to publish in that journal. She published two case reports in JAMA in 1921 and 1926, and a paper in the 1922 Transactions of the Annual Meeting of the National Tuberculosis Association entitled “A Statistical Review of Tuberculous Lesions in Six Hundred Autopsies.” In a letter written in 1924, Milton Winternitz described Isabel Wason as a “splendid pathologist” with “considerable experience in clinical pathology, surgical pathology and chemical analyses.”
New Residents 2018-2019

Muhammad Ahmed, MD — AP/CP
Medical School: St. George’s University School of Medicine, May, 2018
Undergraduate: University of Illinois
Hobbies/interests: reading, jogging, and PC gaming

Sean Gu, MD, PhD — CP only
Medical School: University of Iowa, May, 2017
Undergraduate: University of Iowa, May, 2008
Hobbies/interests: badminton, chess, piano, scuba diving, and cooking

Wael Suhaill Ibrahim, MBChB — AP/CP
Medical School: Sulaimani College of Medicine, August, 2011
Undergraduate: Cornell University, May, 2006
Hobbies/interests: playing golf, playing violin, cross-country and downhill skiing

Christopher Kerantzias, M.D., PhD — CP only
Medical School: Albert Einstein College of Medicine, May, 2018
Undergraduate: UConn, May, 2008
Hobbies/interests: weightlifting, lighting, fishing, travel, and medical history

New Fellows 2018-2019

Yazeed Alwelaie, MBBS
Endocrine Head & Neck Pathology Fellow (AP)
Yazeed is currently completing AP residency at University of British Columbia (Vancouver, Canada). He received his medical degree from King Saud bin Abdulaziz University for Health Sciences, Riyadh, Saudi Arabia. His clinical interests include Head and Neck/Endocrine pathology, and general surgical pathology.
Hobbies/interests: jogging, traveling, photography and reading.

Ian Baine, MD, PhD
Transfusion Medicine Fellow (CP)
Ian recently completed a Molecular Genetic Pathology Fellowship here at Yale. He received both MD and PhD from Albert Einstein College of Medicine in Bronx, NY, focusing on epigenetic regulation of cytokine gene transcription in regulatory T cells. His clinical/academic interests are in molecular analysis of blood group antigens to improve transfusion safety, the immunologic mechanisms underlying red cell alloimmunization, and diagnosis and treatment of hematopoietic neoplasms.
Hobbies/interests: playing bass guitar, technology, listening to music and spending time with his family.

Nalin Leelatian, MD, PhD — AP only
Medical School: Siriraj Hospital, March, 2009
Graduate: Vanderbilt University, PhD, April, 2018
Hobbies/interests: cooking, reading, crafting, baseball, and musicals

Deyland Weyrauch, MD — AP/CP
Medical School: University of North Dakota, May, 2018
Undergraduate: University of Mary, April, 2013
Hobbies/Interests: Writing/performing stand-up comedy, basketball, and reading

Philippa (Pippa) Li, MD — AP/CP
Medical School: State University of New York, May, 2018
Undergraduate: Cornell University, May, 2013
Hobbies/interests: watercolor painting, viola, linguistics, and foreign languages

Nana Priscilla Matsumoto, DO — AP/CP
Medical School: Touro University Nevada, May, 2018
Undergraduate: University of Nevada, May, 2012
Hobbies/interests: aquascaping and marine biology

Bruce Rottmann, MD — AP/CP
Medical School: Wayne State University, June, 2018
Undergraduate: Oakland University, May, 2011
Hobbies/interests: learning to cook, amateur astronomy, and studying foreign languages

Deyland Weyrauch, MD — AP/CP
Medical School: University of North Dakota, May, 2018
Undergraduate: University of Mary, April, 2013
Hobbies/Interests: Writing/performing stand-up comedy, basketball, and reading

Raisa Balbuena-Merle, MD
Transfusion Medicine Fellow (CP)
Raisa received her medical degree and completed Pathology Residency Training at University of Puerto Rico School of Medicine. She came to Yale in 2016 and completed a Hematopathology Fellowship. Since then she has been working as part of the Post-Doctoral Research Training Program towards a Master’s Degree in Clinical Research focused on “alloimmunization and transfusion in sickle cell disease patients” in Dr. Jeanne Hendrickson’s Lab.
Hobbies/interests: cooking, movies, hiking, and reading.

Nalin Leelatian, MD, PhD — AP only
Medical School: Siriraj Hospital, March, 2009
Graduate: Vanderbilt University, PhD, April, 2018
Hobbies/interests: cooking, reading, crafting, baseball, and musicals

Dustirn Bunch, PhD
Clinical Chemistry Fellow (2nd year) (CP)
Dustirn recently completed his first year of Clinical Chemistry Fellowship at Yale. He received a PhD in Clinical-Bioanalytical Chemistry from Cleveland State University. He has spent over 9 years as a development scientist in the Department of Clinical Pathology at Cleveland Clinic. His clinical/academic interests focus on general clinical chemistry, endocrinology, biomarker development and analytical techniques.
Hobbies/interests: martial arts and spending time with family.
Sarah Rutter, MD  
Transfusion Medicine Fellow (CP)  
Sara recently completed AP/CP Residency training at Yale New Haven where she was also Chief Resident. She received her MD degree from University of Tennessee Health Science Center College of Medicine in Memphis, TN.  
Hobbies/interests: Sara enjoys working with CAP, baking, and traveling.

Jane Date Hon, MD  
GYN Pathology Fellow (AP)  
Jane graduated from New York Medical College. Her AP/CP Residency was done at Rutgers Robert Wood Johnson in New Jersey.  
Hobbies/interests: Jane enjoys opera and musicals, cooking, sci-fi/fantasy novels and shows, and traveling to other countries.

Esther Yoon, MD  
Cytopathology Fellow (AP)  
Esther was born in Korea and grew up in Vancouver. She received an MD from St. George Medical School. She received her AP/CP Residency training at NYU Langone Medical Center, where is she recently completed a Pathology Fellowship in Women’s Health.  
Hobbies/interests: movies, music, walking in parks, and baking.

Kim Rabe, MD  
Breast Pathology Fellow (AP)  
Kim completed residency training in Anatomic and Clinical Pathology at the University of Minnesota. She has 22 years of postgraduate experience as a pathologist, medical director, and co-owner of North Central Pathology, P.A., an independent laboratory in St. Cloud, Minnesota. In addition to breast pathology, she has experience and interest in cytopathology, including fine needle aspiration, dermatopathology, quality assurance, and standardization of terminology and reporting.  
Hobbies/interests: spending time with her three young adult children, cooking, traveling, hiking, and reading.

Chen (Charlie) Yang, MD  
Renal GU Pathology Fellow (AP)  
Chen attended Peking University Medical School in China.  
He did his Pathology Residency Training (AP/CP) at Washington University School of Medicine in St. Louis, MO.  
Hobbies/interests: European football, hockey, and curling, but prefers quiet, indoor activities such as reading, music, and culinary pursuits.

Danielle Maracaia, MD, MMedsC  
Hematopathology Fellow (CP)  
Danielle completed her AP/CP residency at University of Texas Health Science Center in San Antonio. Prior to that she completed a Master of Medical Sciences in Anatomic Pathology (Federal University of Rio de Janeiro), as well as Clinical Pathology and Internal Medicine residencies (Federal University of Sao Paulo).  
Hobbies/interests: spending time with her husband and 2 children, handcrafting, traveling, and cooking with friends.
USCAP 2018 Meeting — Poster Presentations

Poster Session I (Morning)

Paulson N, Colunga M, Zhang X, Costa J, Celli R.
Back to the Future: Network Analysis on Autopsy Generated Data Identifies Changes in Disease Patterns over 18 Years (Abstract 30; Poster 4)

Kumar D, Toki M, Rimm D, Xu M.
Benign Lymph Node Microenvironment is Associated with Response to Immunotherapy (Abstract 19; Poster 5)

Lo Y-C, Zuo T, Mirza H, Manrai P, Buza N, Pinto M, Harigopal M.
Utility of GATA3, PAX8 and WT1 Immunohistochemistry in Distinguishing Metastatic Ovarian Serous Carcinoma from Breast Primary Using Tissue Microarrays (Abstract 244; Poster 34)

Chandler J, Colunga M, Callender G, Prasad M, Chhieng D, Adeniran A.
Could “Follicular Neoplasm with Atypia” Provide an Alternate Bethesda Subcategory for Cytopathologists Considering a Diagnosis of Non-Invasive Follicular Thyroid Neoplasm with Papillary-like Nuclear Features (NIFTP)? (Abstract 378; Poster 46)

Cytology-Histology Correlation and High-Risk HPV Genotyping of 568 Cases with Diagnosis of Atypical Glandular Cells on Pap Testing (Abstract 523; Poster 50)

Mirza H, Chooate K.
NA-FISH/IF multiplex assay for evaluation of message stability and post-translational processing in Epidermolytic Ichthyosis (Abstract 557; Poster 62)

Bell P, Nalbantoglu I, Cates J, Gonzalez R.
Significance of Clinicopathologic Parameters, Including Margin Distance and Tumor Budding, on Local Disease Recurrence Following Esophageal Endoscopic Mucosal Resection (Abstract 675; Poster 74)

Perineal Carcinoma Cuniculatum: Histology Review of 38 Cases (Abstract 891; Poster 85)

Pathologic Characteristics of Magnetic Resonance Imaging/Ultrasound Fusion Targeted Biopsy Associated with Adverse Pathology at Radical Prostatectomy (Abstract 1042; Poster 110)

Wilson P, Schultz W, Guo X, Bilguvar K, Humphrey P.
Whole Genome Sequencing of Matched Prostate Cancer and High-Grade Prostatic Intraepithelial Neoplasia Demonstrates Both Shared and Private Mutations (Abstract 1117; Poster 118)

Snir O, DeJoseph M, Wu X, Rottmann D, Wong S, Buza N, Pinto M.
Lack of Genomic Homozygosity in Pediatric Teratomas: Divergent Genetic Pathogenesis from that of Ovarian Teratomas in Adults (Abstract 1281; Poster 134)

PD-L1 and DNA Mismatch Repair Protein Expression in Clear Cell Carcinoma of the Ovary: Clinicopathologic Analysis and A Comparison of Two International Cohorts (Abstract 1191; Poster 136)

Ordulu Z, Chai H, McDonald A, Garcia-Fernandez E, De Nicotis M, Hardisson D, Prat J, Li Peining, Ollivio E, Hui P, Buza N.
Molecular and Immunohistochemical Characterization of Intrahepatic Cholangiocarcinoma: A Study of 28 Cases (Abstract 1250; Poster 146)
Poster Session II (Afternoon)

Hoskoppl D, Reisenbichler E.
Can Tumor-Associated Macrophages in Ductal Carcinoma in Situ on Core Biopsy Predict Invasive Carcinoma on Excision? (Abstract 201; Poster 3)

Lo Y-C, Pinto M, Harigopal M.
Frequency of DNA Mismatch Repair Deficiency in Breast Cancers Using a Large Tissue Microarray Cohort of Breast Cancer Cases Including Triple Negative Breast Cancers (Abstract 243; Poster 16)

Kumar D, Abi-Raad R, Ross J, Prasad M, Chhieng D, Adeniran A.
Hurthle Cell Neoplasms: A Retrospective Cyto-Histologic Correlation of 295 Cases (Abstract 426; Poster 32)

The Prognostic Significance of Positive Peritoneal Cytology in Endometrial Cancer Revisited: An Assessment in FIGO stage I, ESMO-ESGO-ESTRO Low Risk Patients (Abstract 362; Poster 50)

Michael J Hwang, Peter A Humphrey, Marie E Robert.
Syntaphilin is a Biphasic Biomarker of Aggressive Behavior in Prostate Cancer: Decreased Central Tumor Expression is Associated with Metastasis (Abstract 977; Poster 115)

Fadare O, Gwin K, Quick C, Zheng W, Hanley K, Lin D, Jarboe E, Parkash V.
The Boundaries of the Lower Uterine Segment and its Assessment by Pathologists (Abstract 1172; Poster 167)

Chen P, Cai G.
Expression of GATA3 in Primary Lung Carcinomas: Correlation with Histopathologic Features and TTF-1/p40 Expression (Abstract 2021, Poster 246)

Smith S, Prasad M, Barbieri A.
Impact of Transoral Endoscopic Vestibular Approach Thyroidectomy Procedure on Pathology Examination (Abstract 2215; Poster 278)

Smith S, Barbieri A, Parkash V.
Communication of Errors in Surgical Pathology: Amend, Addend or Phone a Friend? (Abstract 2216; Poster 311)

Poster Session III (Morning)

Clinical Outcome of Perineal Carcinoma Curriculatum in a Cohort of 38 Cases (Abstract 887; Poster 117)

Joseph N, Brunt E, Marginean EC, Nalbantoglu I, Thung S, Yeh M, Umetsu S, Ferrell L, Gill R, Snover D.
Recurrence GNAQ and GNA14 Mutations in Hepatic Small Vessel Neoplasms (Abstract 1763; Poster 138)

Hepatic Angiomyolipoma: Clinicopathologic Analysis of 39 Cases Including Malignant Variants (Abstract 1733; Poster 148)

Celli R, Gurung A, Assis D, Jain D.
Network Analysis Identifies Phenotypic Subgroups of Autoimmune Hepatitis (Abstract 1733; Poster 148)

Graham R, Jain D, Torbenson M.
A Comprehensive Survey of Primary Hepatic Neoplasms for the Altered Lengthening of Telomeres Phenotype (Abstract 1757; Poster 158)

Steatoheptatic Hepatocellular Carcinoma: Background Liver Disease and Histology (Abstract 1729; Poster 170)

Snir OL, Buza N, Hui P.
JAZF1 Fusion Detection by FISH: Valuable Marker for Diagnosis of Endometrial Stromal Tumor in Curettage Specimens (Abstract #; 1280; Poster Board 248)

Poster Session IV (Afternoon)

Melanomas with NF1 Mutations: Histopathologic, Clinical and Molecular Correlation (Abstract 564; Poster 94)

Panse G, Subtil A.
Mantle Cell Lymphoma in the Skin: Clinicopathologic Analysis in a Series of Nine Cases (Abstract 563; Poster 95)

Delgado S, Gibson J, Barbieri A.
HSV Encephalitis: Something Old, Something New (Abstract 712; Poster 101)

Knowledge Gaps in the Lower Gastrointestinal Tract (GIT): A Multi-institutional Study from Six Academic Centers (Abstract 670; Poster 138)

Poster Session V (Morning)

Parkash V, Smith S, Adeniran A, Fadare O.
ASCR-H Taging with HPV Co-Testing Provides Discriminatory Value in Post-Menopausal Women (Abstract 459; Poster 44)

Kumar D, Abi-Raad R, Ross J, Chhieng D, Adeniran A.
Are There Cytoplasmic Predictors of Malignancy in Fine-Needle Aspiration of Hurthle Cell Neoplasms? (Abstract 427; Poster 61)

Parkash V, Smith S, Fadare O, Adeniran A.
HPV-Negative High Grade Squamous Intraepithelial Lesion has Different Implications in Different Age Groups (Abstract 460, Poster 76)

Siddon A, Huntington S, Jain D.
Heliocobacter Pylori Negative Mucosa-Associated Lymphoid Tissues (MALT lymphoma) of the Stomach: A Clinicopathologic Analysis (Abstract 849; Poster 86)

Post-Sustained Viral Response Histologic Changes and Occult Hepatitis C (Abstract 1734; Poster 136)

Gonzalez I, Hartley C, Nalbantoglu I.
Recurrent Autoimmune Hepatitis and De-Novo Autoimmune Hepatitis in Post-Transplant Liver Transplant, Clinical and Histologic Characterization (Abstract 1755; Poster 137)

Gonzalez I, Chrisinger J, Nalbantoglu I.
Does Antibody-Mediated Rejection Play a Role in De-novo Autoimmune Hepatitis in Post-Transplant Liver?: An immunohistochemical characterization with C4d antibody (Abstract 1766; Poster 158)

Kang LI, Ritter J, Carpenter D, Goyal B, Cao D, Nalbantoglu I.
Interobserver Agreement in Assessment of Dysplasia in Barrett’s Esophagus Using Digital Pathology: Applications for Intradepartmental Consensus Diagnoses (Abstract 2171; Poster 327)

Poster Session VI (Afternoon)

INI1 Expression in Neurofibromas and Malignant Peripheral Nerve Sheath Tumors Reveals “Mosaic” Pattern in a Subset of Cases (Abstract 100; Poster 18)

Zuo T, Cai G, Adeniran A, Kowalski D, Hui P.
KRAS Mutation Testing in Pancreatobiliary Cytology Specimens: Analysis of 619 Cases from an Academic Institution (Abstract 522; Poster 77)

Abi-Raad R, Harigopal M, Schofield K, Adeniran A.
Histologic Follow-up of Women with a Cervical Pap Diagnosis of ASC-H Triaging with HPV Co-Testing Provides Discriminatory Value in Post-Menopausal Women (Abstract 459; Poster 44)

Yildiz-Aktas I, Adeniran A.
Incidence, Malignancy Rates of Diagnoses and Cytohistological Correlations in the Ne Milan Reporting System for Salivary Gland Cytology: An Institutional Experience (Abstract 515; Poster 87)

Chandler J, Xu M, Hui P, Cai G.
Diagnosis of Lymphoproliferative Disorders on CSF specimens – The Utility of Gene Rearrangement Studies in Conjunction with Cytologic Evaluation (Abstract 377, Poster 101)

Naini B, Arnold C, Jain D, Kakar S, Lam-Himlin M, Torbenson M, Wu TT, Yeh M, Graham R.
Analysis of Voluntary Extramural Second Opinions in Pancreatobiliary Pathology: A Multicenter Study (Abstract 1907; Poster 185)

PANEL Mutations in Clear Cell Endometrial Carcinoma (Abstract 1135; Poster 284)
Spotlight on Staff

Department Welcomes New Staff

Monica Croce has joined SurgPath Histology as a Clinical Technologist. She is responsible for the preparation of routine histology slides for diagnostic interpretation. She also works on microtome sectioning, routine and special staining, and embedding. Prior to joining Yale, Monica was a histology technician at Dermatopathology Laboratory of New England. She is originally from Wallingford, CT.

Juliana Norman has come to the Pathology Business Office as a Financial Assistant. Previously a Fulfillment Manager at Gems Group, Juliana now supports the Pathology clinical staff with their day to day financial tasks. She is originally from Colombia and has lived in Guilford, CT, for the past seven years.

Zivile Olewicz is a Histotechnologist in the Department of Pathology. In her role, Zivile prepares diagnostic slides for review. Additionally, she is responsible for embedding tissue in blocks of paraffin wax, using a microtome to cut thin slices of tissue to create slides. She comes to Yale from Bridgeport Hospital where she was a Histotechnician. Zivile is lives in East Haven and is originally from Lithuania.

Natalia Treloar comes to the Pathology Business Office from the Yale Department of Pediatrics where she was an accountant. In her current role as a Financial Analyst, she manages the Clinical Portfolio accounts and assists with and serves as the primary point of contact for clinical faculty and their admins. Although Natalia’s office is at 100 Church Street South, she would very much like to meet many members of the department, especially those with whom she regularly works. Natalia is originally from Columbia and lives in New Haven.

Dr. Marie Robert Named CSO

Dr. Marie Robert Named CSO (continued)

Dr. Marie Robert Named CSO

VIP: Dr. Xuchen Zhang

VIP: Dr. Xuchen Zhang (continued)