

Calendar

February 27, 2011, 5:30 pm – 7:30 pm
United States and Canadian Academy of Pathology
Fellowship Fair, Room 007B
Henry B. Gonzalez Convention Center
San Antonio, Texas

February 28, 2011, 5:30 pm – 7:30 pm
United States and Canadian Academy of Pathology
Johns Hopkins Pathology Alumni Reception
San Antonio Marriott Riverwalk, Salon A
San Antonio, Texas

April 6, 2011, Noon – 4:00 pm
Pathology Young Investigators' Day
Turner Concourse
The Johns Hopkins University School of Medicine
Baltimore, Maryland

May 13, 2011
Pathology Awards Dinner
The Belvedere
Baltimore, Maryland

June 10, 2011, 9:00 – 10:00 am
Hopkins Biennial Reunion
Pathology Grand Rounds
Baltimore, Maryland

October 29 - 30, 2011
Johns Hopkins Pathology
GI/Liver CME Course
Owens Auditorium
Baltimore, Maryland

Congratulations to the 12th Annual Pathology Young Investigators' Day Awardees April 8, 2010

The Department of Pathology again enjoyed an excellent turnout for this year's Young Investigators' Day.

For Excellence in Basic Research

Cheng Ran Lisa Huang, B.S.
AeRyon Kim, Ph.D.
Cheryl Koh, B.S.
Kristen Rennoll-Bankert, B.S.
Brian W. Simons, D.V.M.
Yuan Tian, Ph.D.
Kai Lee Yap, B.Sc.
Tong T. Zhang, B.S.

For Excellence in Clinical Research

Justin Bishop, M.D.
Toby Cornish, M.D., Ph.D.
Safia Salaria, M.D.
Andrea Subhawong, M.D.
Rui Zheng, M.D., Ph.D.

For Excellence in Translational Research

Laura Asnaghi, Ph.D.
Vivian W. Chow, Ph.D.
Karisa Schreck, B.S.
Karen Sfanos, Ph.D.
Yi Zhong, M.D., Ph.D.

Support our trainees by attending their presentations
at the USCAP meeting

<http://pathology.jhu.edu/departments/uscap11.cfm>

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<http://pathology.jhu.edu>

Path



Ways

The Johns Hopkins Medical Institutions

Department of Pathology

Volume 11, Winter 2011

Director's Corner

J. Brooks Jackson, M.D., M.B.A.

This past academic/fiscal year witnessed another year of growth for Pathology in a number of areas. NIH grant awards of \$52.8 million for Pathology reached an all time high as did the number of enrolled graduate students (45) in the Pathobiology program.



Dr. J. Brooks Jackson

Test volumes in both AP and CP held steady or increased, and despite the economic downturn, Pathology received gifts and pledges of \$6.9 million. Pathology budgets on both the hospital and medical school sides were met due to the careful management and increased funding efforts of our faculty and staff.

The year was also notable for the passage of health care reform legislation, expansion of the Hopkins Health Care System, and a signed major affiliation agreement to develop a new private medical school and hospital in Kuala Lumpur, Malaysia. Given that the regulations for health care reform implementation are still being written, it is difficult to know the exact impact on Pathology, but it is very likely that reimbursement rates for Part A and Part B pathology services are

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Spotlight: Division of Hematopathology

Introduction

Blood circulates throughout the body, and cells of the hemolymphoid system are found in all tissues, so it is not surprising that the scope of hematopathology is far reaching. The discipline of hematopathology encompasses everything from routine blood cell counting to genetic analysis of neoplasia, and although we are a small division with only 6 core faculty members, we play a significant consultative role in the diagnosis and management of patients with hematologic disease; in the investigation into the etiology, pathogenesis and management of these diseases; and in the training of individuals from a wide range of disciplines. Within pathology, we interact closely with many other divisions including molecular pathology, surgical pathology, immunopathology, autopsy pathology,

cytopathology, and many of the surgical pathology subspecialty divisions. Outside the department we serve the pediatric and adult medicine divisions of hematology, and the hematologic malignancies division in oncology, and have research collaborations with individuals both within and outside of Hopkins in areas ranging from basic genetics, to cancer biology, to cardiology. Hematopathology is also a discipline in which anatomic pathology and laboratory medicine are tightly intertwined, and one in which the advances of molecular biology and genetics over the last two decades have been most quickly adopted into routine diagnosis and patient care; many other disciplines have followed the model of hematopathology, whereby basic investigation into pathogenesis of diseases has resulted in revisions to classification systems, and a commensurate increase in

things pathologists need to know. Moreover, because many of the diseases that hematopathologists deal with are amenable to appropriate therapy, accurate diagnosis and classification of these disorders has become not only critically important, but also highly rewarding. At the same time, the more we learn about mechanisms of these diseases, the more questions arise that will hopefully form the basis for future improvements in the management of patients with these diseases.

Diagnostic service

Diagnosis in hematopathology starts with the core laboratory, under the direction of Dr. Kickler, with Danna Anderson serving as supervisor. The laboratory has the latest in blood counting technology; current software algo-

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Director's Corner

likely to fall over the next few years. Given the federal deficit, NIH funding is likely to remain flat or even decrease so that cost cutting and increased diversified sources of revenue will be imperative to maintain our tri-partite mission at its current level.

The addition of Sibley Hospital in Washington, DC and All Children's Hospital in Tampa, Florida to the four existing Hopkins Hospitals (JHH, Bayview, Suburban, and Howard County General) will present management challenges as well as patient care and academic opportunities. These types of expansions will help position Hopkins to deliver the health care needed for populations as envisaged under health care reform. The details of the role of Hopkins academic departments in the new Malaysian medical school need to be worked out, but in principle, Pathology will play a role in developing the Pathology curriculum for the medical students in conjunction with other departments. A hospital facility will also be built adjacent to the new medical school and Pathology will assist with building, developing and implementing Pathology services through our Amcare Laboratories affiliation.

The coming year will present challenges in terms of patient care reimbursement and grant funding as in past years. However, given the strength of Johns Hopkins Medicine and the Department of Pathology, I am confident that our faculty, trainees, and staff will deal effectively with these challenges as well.

Dr. Fred Askin – Best in Show

“Best of Breed,” is easy enough to understand but what about “Best of Opposite,” “Winner's Dog” and “Reserve” and how does the Dog Show judge decide which of the seven very different dogs he or she has in competition is worthy of the “Best in Show” award? Not a problem faced by most pathologists, but very real questions for Dr. Fred Askin, Chief of Pathology at the Johns Hopkins Bayview Medical Center.

Dr. Askin became involved in the sport of showing purebred dogs through a circuitous path. His family always had a resident dog and when he and his wife Duffy moved to St. Louis, Missouri, they obtained the first of a succession of Old English Sheepdogs (think Nana in Peter Pan or the Shaggy DA). After they moved to Baltimore in 1991, the Askins wanted a smaller breed and adopted their first West Highland White Terrier, Miss Tess through local Westie Rescue. Through Miss Tess, Dr. Askin met other Westie breeders and became involved in dogs shows as a ring “steward,” helping to supervise the operation of the shows. His many years of Surgical Pathology training and interaction which surgeons made it easy to deal with irrational, irritated or impatient exhibitors! After the ring experience, Dr. Askin had the opportunity to obtain his first Champion Westie, Connor, who went on to win two Best in

Show Awards and was the top Westie in Conformation (the award is based on appearance, attitude and presentation of the dog) in 2001.

Dog shows involve a lot of time! When Connor was the #1 Westie, the Askins attended over 60 shows in 2001, some as far away as upstate New York or Vermont. This year their current contender, Grand Champion Glennhaven's Danny Boy O'Donnybrook (“Danny”) has been to Alaska, Washington State and several times to California, where he won Best of Breed in the AKC/Eukanuba Invitational Show (on TV on January 23, 2011). If you saw the National Dog Show in Philadelphia

(November), he was the Breed winner there also.

So how does the judging work? The Best of Breed is chosen by the judge and the Best of the Winners (male vs. female) is picked along with the Best of Opposite (if the Best of Breed winner was male, the Best of Opposite will be the best female dog in the ring, in the judge's opinion). Then we move on to Group Competition. The Terrier Group consists of 27 different terriers, ranging from the small Norfolk and Norwich Terriers to the relatively large Airedale, the Kerry Blue Terrier and the American Staffordshire Terrier, (NOT a pit-bull). The idea is to find

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...On The Web

As the Pathology Web presence continues to grow, we've branched out into several social media channels to make it easier to follow the department and the latest news. Look for us on:



Our Web office has begun to rapidly produce high definition educational video for patients and staff, which are hosted by YouTube.



The new Pancreatic Cyst Clinic features interviews with members from the multidisciplinary team, including Surgery, Pathology and the clinic's coordinator. A new Podcast service is in the works through the Johns Hopkins iTunes U channel.

In addition to our latest blog posts, you can follow us on Twitter, Facebook and YouTube. The latest links can be found at <http://pathology.jhu.edu/department/socialmedia.cfm>. Please follow us!

BE SURE TO BOOKMARK THE JOHNS HOPKINS PATHOLOGY BLOG!

<http://apps.pathology.jhu.edu/blogs/pathology/>

...In The Photography and Graphics Area

Ever since the announcement of the Daguerreotype process to the world on August 19, 1839, our view of the world has changed. Photography has been a scientific tool since its invention nearly 175 years ago. Men of science from the disciplines of archeology to zoology began applying this new tool to document their observations. Before the invention of this “art-science,” scientists worked with illustrators to visualize their work. Sometimes drawings could be inaccurate because of the bias of the artist's eye. It is hard to imagine with our 21st century visual sophistication what it must have been like to view the first photograph. The idea that nature could be exactly reproduced on a chemically treated plate without the aid of the artist's pencil was unheard of.



Fast forward to 2011 and the upcoming USCAP meeting in San Antonio, Texas, and look at all the ways Pathology Photography and Computer Graphics can help with your scientific visualization. With poster printing, top quality graphic design, and custom photomicrography, our team of designers and photographers will make your posters and presentations stand out from the rest. Excellence is our goal, as well as speed, efficiency, and competitive pricing.

On your way to Path Photo (Pathology Building, Room 111) take a moment to enjoy the current selection of photography on display in the hallway leading to our front desk. The show changes every few months. Each one comes from members of the Hopkins community. Our current show, “Maryland the Beautiful,” is from Chris Zink D.V.M., Ph.D., Director of the Department of Molecular and Comparative Pathobiology.

Awards/Recognition

Becton Dickinson and Company Award in Clinical Microbiology

Karen Carroll, M.D., Director of the Division of Medical Microbiology, will receive the Becton Dickinson and Company Award in Clinical Microbiology at the American Society of Microbiology General Meeting to be held in New Orleans, Louisiana in May 2011. The award is presented to an individual who has outstanding research accomplishments, clinical or nonclinical, leading to or forming the foundation for important applications in clinical microbiology. Dr. Carroll will also deliver the annual Clinical Microbiology Division Lecture at the ASM General Meeting.



2010 AMLI Distinguished Service Award

Barbara Detrick, Ph.D., Professor of Pathology with a joint appointment in Molecular Microbiology and Immunology, Bloomberg School of Public Health, was honored with the 2010 Association of Medical Laboratory Immunologists (AMLI) Distinguished Service Award at their annual meeting held in Orlando, Florida in August 2010. Dr. Detrick was acknowledged for her significant contributions, dedication and leadership to the AMLI society and for her outstanding accomplishments to the field of clinical and laboratory immunology.



Mastership Award of the American Society for Clinical Pathology

Dr. Yener Erozan, Professor of Pathology in the Division of Cytopathology, was recently honored with the "Mastership Award" of the American Society for Clinical Pathology. This prestigious award is given to the members of the ASCP for recognition of their significant contributions to the Society and to the field of Pathology. The award was given on October 28, 2010, during the ASCP Annual Meeting in San Francisco, California. The photograph shows Dr. Erozan receiving the award from Dr. Mark Stoler, President of the ASCP.



President's Award at the 2010 Annual Meeting of the AABB

Paul M. Ness, M.D., received the President's Award at the 2010 Annual Meeting of the American Association of Blood Banking in Baltimore, Maryland this past October. The award recognizes extraordinary public service by an individual in the health care arena. Dr. Ness was recognized along with Dr. Jeffrey McCullough of University of Minnesota and Dr. Thomas Zuck of the University of Cincinnati for their service as editors-in-chief of *Transfusion*, the leading journal in transfusion medicine, which is celebrating its 50th anniversary of publication this year. Dr. Ness is the current editor and has held the position since 2003.



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Spotlight: Division of Hematopathology

rithms have all but eliminated the need for morphologic blood film review on routine cases, allowing our skilled morphologic technologists to devote their time and energy to the most challenging patient samples. We also have technology for assembling images captured from blood smears that can be shared efficiently with clinicians throughout the hospital. Core lab hematology services also include routine and specialty coagulation testing and hemoglobin analysis. The special coagulation testing service works closely with the clinical team and consults on patients with difficult-to-diagnose bleeding or clotting disorders. The Weinberg laboratory, under the supervision of Jennifer Hurley, is a high-intensity laboratory dedicated to serving the oncology patient population, and also houses the bone marrow laboratory and flow cytometry.

Most of our faculty, however spend the majority of their service time with morphologic hematopathology, looking at bone marrow aspirates and biopsies, and consulting on suspicious lymphoid lesions in any tissues in which they

arise. Residents, fellows and attendings from all other services know that every afternoon they can find a "lymphomaniac" seated at the heme scope in the Weinberg signout room ready to help with the workup of some challenging case. Overall, we sign out about 2500 cases annually of material obtained from patients here at Johns Hopkins, and an additional 1500-2000 cases of consultation material, many of which are challenging cases sent here for second opinions.

Workup of our cases requires close interaction with many laboratories including immunohistochemistry and the molecular diagnostics laboratory. We are fortunate that one of our faculty, Dr. Chris Gocke, has a joint presence in the molecular pathology division, facilitating interactions between our laboratories. In addition, and unique to our division is the intimate association of flow cytometry with morphologic diagnosis; to this end, and in contrast to the situation at many other institutions, the flow cytometry laboratory is fully integrated into the workings of diagnostic hematopathology.

The flow cytometry laboratory processes more than 4000 specimens annually for diagnosis, staging and monitoring of patients with leukemia and lymphoma. Its dedicated staff, headed by Kathy Cowan, Pattie Chiurazzi and Shirley Fuller work closely with the hematopathology fellows and faculty, and with clinical faculty in oncology and hematology, to provide exemplary service. In addition to leukemia and lymphoma testing, the laboratory performs additional specialized assays including CD4 counting for monitoring patients with HIV, CD34 counting to monitor patients undergoing peripheral blood stem cell harvest for transplantation, and detection of clones of cells in patients with paroxysmal nocturnal hemoglobinuria. Technology in this area is exploding rapidly; we now have instrumentation capable of performing 8-color analysis, and as of this writing are evaluating a 10-color instrument. While this level of sophistication has long been useful for research applications, a challenge for the laboratory going forward is to produce efficient and reproducible ways of using this tech-

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Front row: left to right: Generosa Alinsod, Linda Williams, Irene Chan, Tiffany Gabbin, Jennifer Hurley, Esther Lee, Hailan Zhou, Shirley Fuller, Karen Garber, Kathy Cowan

Back row: left to right: Connie Curry, Marius Mukete, Bette Ford, Patricia Williams, Katie Gallagher, Nancy Edwards, Judy Hutchison

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Spotlight: Division of Hematopathology

nology that are suitable for routine clinical application. Stay tuned.

Research

The faculty in the division of hematopathology have diverse research interests, ranging from the very basic, to clinical and translational. A few of the activities of each faculty member are highlighted below.

Dr. Michael Borowitz has had a long interest in flow cytometry, and in developing new diagnostic uses of this technology, particularly in leukemia and lymphoma. His laboratory is especially interested in assessing minimal residual disease, and for the past several years has been testing samples in support of clinical trials in childhood acute lymphoid leukemia, in which patients are assigned to specific therapy based on these results. In collaboration with investigators at other institutions he is also interested in identifying new methods for improving risk stratification for children with leukemia.

Dr. Gocke is involved in the molecular diagnosis of hematologic cancers, and his lab develops new approaches to genetic analysis. Current projects include a universal method for translocation detection and a long-range haplotyping assay. Dr. Gocke is also exploring high-throughput identification of alternative splicing of mRNA.

Dr. Kathleen Burns' research focuses on mobile DNAs, which are a major component of all our genomes contributing substantially to each individual's genetic uniqueness. Her lab is pioneering strategies to identify these sequences, and is among the very first groups to systematically approach how these DNAs contribute to human disease predispositions and cancer progression in the post genomic era.

Dr. Thomas Kickler's research involves the study of platelet activation in different clinical situations. Current research includes: 1) the role of

cocaine in activating platelets and the promotion of atherosclerosis in HIV patients, 2) pharmacogenomics of anti-platelet and anti coagulant agents in arterial disease, 3) the role of platelet activation in anti-phospholipid syndrome.

Dr. Milena Vuica is interested in identifying genetic factors that govern cancer progression via accumulated structural alterations in chromosomes. Her research has focused on systematically screening for genes involved in chromosomal stability; on characterizing these novel chromosome integrity determinants; and on describing their relevance to cancer biology.

Dr. Amy Duffield is working in the laboratory of Donald Small in Pediatric Oncology, which focuses on the FMS-like tyrosine kinase (FLT-3). Up to one-third of acute myeloid leukemias harbor mutations in FLT-3 that result in constitutive activation of this kinase, and these activating mutations are an independent predictor of poor clinical outcome. The laboratory is currently identifying novel interaction partners for FLT-3, and ascertaining the functional significance of these interactions. Additionally, she is studying the expression of FLT-3 in various neoplasms other than leukemia, including B-cell lymphomas.

Education

Our division is very proud of the role we play in education at Johns Hopkins. Residents spend two months rotating through core hematology and coagulation, and another two months in morphologic hematopathology and flow cytometry; many residents choose to do additional elective months. We have an ACGME-accredited one-year hematopathology fellowship, and have two hematopathology fellows at any one time. This has been one of the most popular fellowships in the department, and more often than not there are many residents lined up for the fellowship years in advance. Three of our current faculty, Drs. Burns, Vuica-Ross and Duffield, completed the fellowship here. Fellows spend half their time on the routine

diagnostic service, where their responsibilities include running both the flow cytometry laboratory and the second opinion consult service. The remaining time is spent rotating through hematology/coagulation, or molecular diagnosis/cytogenetics, and most fellows pursue an elective month at the National Institutes of Health, working with Dr. Elaine Jaffe. All of the fellows we have trained over the past 18 years have pursued either academic or private practice careers in which hematopathology plays a major role.

Divisional educational efforts reach beyond this, however. We work closely with our clinical colleagues in both hematology and oncology, and participate in semi weekly case conferences in leukemia and lymphoma, where we play a major role teaching fellows in those departments about diagnosis and classification of hematologic neoplasias. Our division also plays an important role educating trainees in adult and pediatric hematology and oncology; fellows from those divisions rotate through our diagnostic service and through the hematology and coagulation laboratories as part of their training.

Fellows in other pathology subspecialties, notably dermatopathology and molecular pathology, also rotate through our service. In addition, we also train fellows from the NIH, and residents from outside institutions, most frequently the University of Maryland, Georgetown, and George Washington. These experiences not only are useful for those rotating here, but also provide our trainees with a perspective on how things are done elsewhere.

In sum, we are a small but busy division, always open to the possibility of new collaborations. Come visit our labs, drop in on signout, or catch or email any one of us if you want to learn more about what we do.

TRY YOUR HAND WITH OUR WEEKLY SURGICAL PATHOLOGY UNKNOWN CONFERENCE

<http://pathology2.jhu.edu/sp/>

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Dr. Fred Askin – Best in Show

which dog in the ring more closely embodies the ideal of their breed. The First Place or Group Winner goes on to Best in Show.

Seven dogs, each a winner of their respective Group, enter the ring for Best in Show. Again, the judge picks the dog that most closely approaches the ideal of its breed. The Westie is judged on his or her merit, not against the Doberman. The winner is announced; everyone (or almost everyone) claps and then it is time to pack or clean up for the next show.

In addition to showing Westies, the Askins breed them and have a litter of puppies every once in a while. Finding good homes is always a problem and every potential puppy buyer is regarded as a possible serial killer until otherwise proven respectable! The whole idea is to breed so that the health and genetic composition of the Westie is optimal. Interestingly, Westies are said to have a type of interstitial lung disease that is likened to Idiopathic Pulmonary Fibrosis, but the histopathologic documentation of that claim

is sadly lacking and many Westies diagnosed clinically as having "Westie Lung Disease" actually have chronic bronchitis at autopsy.

Interested in the sport of purebred dogs? Many people at Johns Hopkins Hospital and Johns Hopkins Bayview Medical Center actually show dogs. The AKC has a very good Web site (www.AKC.org) with information about breeds and how to get started in dog events. Some performance activities sponsored by the AKC do not require your dog to have a fancy pedigree.

Dr. Askin wants you to be aware that there are animal "rights" groups that would like to keep you from having dogs as pets, and which spend little if any of their money collected as donations on actually helping shelters or saving dogs. Interested in adding a dog to your life? He suggests that you should not buy a puppy from a pet store. Go to a reputable breeder (preferably a member of a national breed club), to Breed Rescue or to a local shelter!

Pathology Employee Appreciation Picnic



Lions and tigers and bears, oh my! The rain did not dampen the spirits of the 700 guests that braved the weather for this year's Pathology Employee Appreciation Day held at the Maryland Zoo in Baltimore on Sunday, September 12, 2010.

Welcome to the Graduate Training Program in Pathobiology 2010-2011 Incoming Students (continued)

Weijie Poh

Born in the sunny tropical nation of Singapore, Weijie obtained a B.Sc (Hons) in Molecular and Cell Biology from the National University of Singapore in 2009. During his undergraduate days, he took up a six-month internship at a biotech startup in Philadelphia while attending technopreneurship classes at the University of Pennsylvania, and he has been eager to return to the U.S.



ever since. Research-wise, Weijie has previously conducted an independent study into the human innate immunity system response to viruses. His latest project involves characterizing a novel role of a co-receptor protein involved tyrosine kinase signaling in hepatocellular carcinoma under Professor Axel Ulrich. Weijie is confident that the invigorating research culture offered by the Pathobiology Graduate Program will enable him to subsequently contribute significantly to developing effective and safe therapies for cancer patients. Weijie is one of our Margaret Lee students.

Joshua Weiyuan Wang

Joshua Wang comes from Singapore, well known on the world map for good food, clean streets as well as the infamous chewing gum ban. Joshua has a BSc in Biology from Imperial College in London, United Kingdom where he spent three futile years trying to convert his die-hard English football fan friends into basketball players.



Joshua's main research interests lie in the biology of infectious diseases. He truly believes that undiscovered knowledge in these areas can be translated into potential solutions in medicine. Joshua's undergraduate final year project under the guidance of Professor Wendy Barclay was on investigating the efficacy of natural herbal remedies against pandemic H1N1 influenza virus. His other biology-related experiences include two other summer laboratory internships at the Singapore Immunology Network, A*STAR Singapore (2008) and at Imperial College's Division of Biology (2009). Outside of the lab, Joshua spends his time watching films, reading as well as trying to organize outings to play his favorite sport – basketball. He is excited to join the Pathobiology Program and is looking forward to the exciting opportunities in research at Johns Hopkins. Joshua is one of our Margaret Lee students.

Samantha Semenkow

Samantha Semenkow was born in Chester, Pennsylvania. She graduated from Towson State University in May, 2010 with a B.S. in Molecular Biology. She is interested in Infectious Diseases and Autoimmunity. Samantha is also interested in academic research. For now she is content to learn more about broader fields of interest and to allow that knowledge to shape the direction of her future.



Shu-Han Yu

Shu-Han Yu was born in Taipei, Taiwan. Shu-Han has a B.S. in Microbiology and Plant Pathology and a M.S. in Biochemistry and Molecular Biology from National Taiwan University. She graduated in June 2009. Shu-Han is seeking further study in different signaling pathways that induce cancer and other phenomena. The Pathobiology Graduate Program offers her an opportunity to explore this interest and network across disciplines via interdisciplinary rotations and coursework. Shu-Han wants to ultimately build a career in academia and investigate cancers caused by defective signaling systems, generating novel applications for future medical research.



New Grants and Contracts Awarded to Pathology Faculty, 11/01/09 - 12/31/10

Faculty Member	Award Type	Agency	Dates	Total Funding
Anders, Robert	R01 Grant	NIH/NIDDK	4/5/10 - 1/31/15	1,763,409
Borowitz, Michael	Contract	Beckman Coulter	4/1/10-3/31/11	32,118
Borowitz, Michael	Contract	Sysmex Corporation	4/14/10-4/19/11	71,354
Bova, Steven	Contract	Lockheed Martin	8/19/10-6/30/11	100,000
Bova, Steven	Contract	Purdue University	10/1/10-9/30/11	16,400
Burns, Kathleen	Grant	American Brain Tumor Association	7/1/10 - 6/30/11	50,000
Carroll, Karen	Contract	Becton Dickinson	8/1/09-7/31/10	4,000
Carroll, Karen	Contract	Akonni Biosystems	2/1/10-7/31/10	79,440
Carroll, Karen	Contract	Becton Dickinson	9/1/10-12/31/10	6,244
Caturegli, Patrizio	R56 Grant	NIH/NIDDK	9/1/10-8/31/11	246,000
Chan, Daniel	U01 Grant	NIH/NCI	7/1/10 - 6/30/15	2,148,598
Cihakova, Daniela	Grant	Autoimmune Related Diseases Assn	9/30/10-9/29/11	10,000
Clarke, William	Contract	Roche Diagnostic Systems	1/1/10-12/31/10	62,080
Clarke, William	Contract	Thermo Fisher	7/1/10 - 6/30/12	50,135
Dumler, Steven	R01 Grant	NIH/NIAD	6/1/10-5/31/15	1,640,000
Dumler, Steven	Contract	Clinical Research Management	5/1/10-4/30/11	10,780
Eberhart, Charles	Grant	Childhood Brain Tumor Fdtn.	9/1/10-8/31/11	30,000
Eberhart, Charles	Grant	Children's Cancer Foundation	11/1/10-10/31/11	50,719
Eberhart, Charles/Raabe E.	Grant	Childhood Brain Tumor Fdtn.	11/1/10-10/31/12	150,000
Epstein, Jonathan	Contract	USHIFO	2/1/10-1/31/11	80,000
Eshleman, James	Grant	Garvan Institute/Australia	9/1/09-9/30/12	503,968
Eshleman, Susan	R01 Grant	NIH/NIAD	2/1/10-1/31/14	2,447,548
Fowler, Mary Glenn	S07 Grant	NIH/NIAD	9/29/10-9/28/11	50,000
Gocke, Christopher	R21 Grant	NIH/NHGRI	4/28/10-3/31/12	447,104
Guan, Bin	Grant	HERA Foundation	4/1/10-3/31/11	20,000
Hamad, Abdel	Grant	American Heart Association	7/1/10-6/30/12	154,000
Hamad, Abdel	Grant	Juvenile Diabetes Research Fdtn.	9/1/10-8/31/11	110,000
Hamad, Abdel	R56 Grant	NIH/NIAD	9/1/10-8/31/11	410,000
Hruban, Ralph	Grant	Lustgarten Foundation	2/15/10-2/14/12	1,041,500
Hruban, Ralph	Grant	AACR	7/1/10 - 6/30/12	100,000
Iacobuzio-Donahue, Chris	Contract	Morphotek	11/1/09-10/31/12	270,728
Koliatsos, Vassilis	Contract	ATRM	1/1/09-7/1/10	153,804
Koliatsos, Vassilis	Grant	TEDCO	6/30/10-6/29/12	230,000
Lai, Shenghan	R01 Grant	NIH/NIDA	9/1/10-7/31/15	3,565,581
Lai, Shenghan	Contract	Alkermes, Inc.	7/28/10-7/27/11	5,000
Lotan, Tamara	K08 Grant	NIH/NIDDK	9/15/10-8/31/15	781,380
Maitra, Anirban	R01 Grant	NIH/NCI	3/1/10-2/28/15	1,581,640
Maitra, Anirban	Contract	Sanofi-Aventis	9/1/10-8/31/13	750,000
Martin, Lee	R01 Grant	NIH/NINDS	2/1/10-1/31/15	1,793,750
Meeker, Alan	Contract	Geron Corporation	8/1/10-7/31/11	13,040
Meeker, Alan	Contract	NIH/NCI	9/9/10-9/8/11	40,000
Ness, Paul	Grant	NERI	6/1/10-12/31/10	12,500
Ness, Paul	Grant	NERI	1/1/10-6/30/11	54,000
Ness, Paul	Grant	NERI	1/1/10-12/31/11	323,910
Parrish, Nicole	Contract	TREK Diagnostic Systems	11/1/09-7/31/10	39,945
Price, Donald	R03 Grant	NIH/Fogarty	12/1/09-11/30/12	115,480
Price, Donald/Albert, M.	P50 Grant	NIH/NIA	4/1/10-3/31/15	10,069,444
Reller, Megan	K23 Grant	NIH/NIAD	4/12/10-3/31/13	406,632

Continued from page 4

New Grants and Contracts Awarded to Pathology Faculty, 11/01/09 - 12/31/10

Faculty Member	Award Type	Agency	Dates	Total Funding
Riedel, Stefan	Contract	IRIS Diagnostics	2/1/10-10/31/10	84,766
Roden, Richard	Contract	Sanofi Diagnostics	3/1/10-2/28/12	254,443
Rose, Noel	R56 Grant	NIH/NHLBI	9/1/09 - 8/31/11	369,000
Rose, Noel	Grant	American Heart Association	7/1/10-6/30/12	154,000
Savage, William	Grant	Sickle Cell Disease Association	7/1/10-6/30/12	50,000
Savage, William	Grant	Thomas Wilson Sanitarium	7/1/10-6/30/11	20,000
Sokoll, Lori	Contract	Roche Diagnostic Systems	1/1/10-2/28/10	10,529
Sokoll, Lori	Contract	Roche Diagnostic Systems	1/15/10-3/14/10	10,529
Sokoll, Lori	Contract	Roche Diagnostic Systems	6/1/10-8/31/11	20,338
Sokoll, Lori	Contract	Bio Rad Laboratories	6/25/10-3/24/11	88,270
Wu, TC	R21 Grant	NIH/NIAID	6/1/10-5/31/12	464,742
Yemelyanova, Anna	R21 Grant	NIH/NCI	2/1/10-1/31/12	384,170
Zhang, Hui	U01 Grant	NIH/NCI	9/1/10 - 6/30/15	2,331,778
Total				\$25,072,375

Expanded in-house laboratory testing menu

The Department of Pathology is committed to our clinicians and patients. We have therefore expanded our in-house laboratory testing menu over the past year and a half to include the following assays:

Prenatal Testing: The Prenatal Cytogenetics Laboratory in the Division of Molecular Pathology at Johns Hopkins Hospital offers a variety of prenatal testing services including standard chromosome analysis and fluorescent in situ hybridization (FISH). Specimens accepted for cytogenetic analysis include amniotic fluid, chorionic villi, products of conception, and blood. Work is referred through the physicians and counselors of the Prenatal Diagnostic Center at The Johns Hopkins Hospital and others within The Johns Hopkins Health System. This laboratory utilizes state-of-the-art cytogenetic technology, including an automated karyotyping and metaphase-finding, scanning-to-capture system. The Prenatal Cytogenetics Laboratory is under the direction of Cheryl DeScipio, Ph.D. who came to Johns Hopkins in September of 2009.

Vitamin D Testing: In July of 2009, the Pathology Department began testing all Vitamin D in-house in the Immunology Lab. We utilize a Vitamin D chemiluminescence immunoassay to measure vitamins D2 and D3 together and report as a total 25 (OH) Vitamin D. Testing is run Monday through Friday and results are provided generally on the same day. Most Americans are low in Vitamin D and any level less than 32ng/mL is considered inadequate.

H1N1 Virus Testing: In November of 2009, Pathology began to offer our clinicians two separate respiratory virus detection panels: one for standard (immune-competent) patients; and one for immunocompromised patients. The initial test in both panels is the DFA test, the gold standard in rapid time-to-result virus tests. If the DFA is positive, the virus is reported and no further tests are performed. If the DFA is negative, shell vial culture will be performed for standard patients, and multiplex PCR will be performed for immunocompromised patients. The multiplex PCR can detect 10 respiratory viruses (RSV, influenza A, influenza B, parainfluenza virus types 1-4, hMPV, adenoviruses, and rhinoviruses). All respiratory virus test results should be finalized 48 hours after specimen receipt. In addition, the Clinical Molecular/Virology Laboratories only accept nasopharyngeal swabs collected with a Flocked Swab for the PCR assay. The Flocked Swab and NPAs are accepted for the standard panel. Ultra-rapid antigen detection assays and tube cultures for respiratory viruses have been discontinued.

Welcome to the Graduate Training Program in Pathobiology 2010-2011 Incoming Students

Michael Ayars

Michael Ayars grew up in Deerfield, Illinois and is still getting used to winter ending before April. Michael recently completed a ScM degree in Molecular Microbiology and Immunology at Johns Hopkins School of Public Health. His primary research interests are in strategies of pathogenesis and host/pathogen interactions. Outside of research, he loves games of any kind, painting, and coin tricks, although he's never learned any good ones.



Briana Coles

Briana Coles comes to Hopkins from San Jose, California. She was born in Portland, Oregon and received her B.S. in Biology from San Jose State University in May 2010. She has worked in Microbiology and Immunology and recently published a paper, "Study of 5MPCA regulation by *Pseudomonas aeruginosa* in co-culture with *Candida albicans*." She is interested in disease and in experimental approaches focused on animal-based disease models.



Annie Hsieh

Annie Hsieh was born in Gaithersburg, Maryland. She received her M.D. from the Tzu Chi University, Taiwan in June 2010. Annie is interested in Neuroscience and in academic medicine. Annie would like to continue her research on the molecular mechanisms of disease in the Pathobiology Graduate Program.



Byung-Hak Kang

Byung-Hak Kang was born in Seoul, Republic of Korea. He received his D.V.M. from Seoul National University in February 2007. Byung-Hak is interested in cancer and genomics. His ultimate goal is to find effective measures to help those who are suffering from complex genetic diseases such as cancer and diabetes. Byung-Hak is one of our Margaret Lee students.



Alvin Makohon-Moore

Alvin Makohon-Moore was born in Ann Arbor, Michigan. He graduated from Michigan State University with a B.S. in Zoology, with a concentration in Cell and Developmental Biology in May 2010. Alvin's fascination with Pathology began with the observation that many diseases are caused by typically normal developmental and physiological mechanisms gone awry. He comes to Johns Hopkins to practice innovative research while learning from premier scientists and mentors. His overall career goal is to become a research scientist who teaches students in both laboratory and classroom settings. Alvin also enjoys reading, running, and playing guitar.



James Pendleton

James was born and raised in the central California city of Visalia where he first became interested in science and medicine. He graduated from Morehouse College with a B.S. in Biology in 2004. Recognizing the link between basic science and medical practice he decided to pursue a combined M.D./Ph.D. degree program. He is now a member of the MSTP program and is joining the Pathobiology Graduate Program after completing three years of medical school coursework. James has developed an interest in traumatic brain/spinal cord injury and regenerative medicine. Throughout the last year he conducted research in the laboratory of Dr. John McDonald specifically investigating the manner in which the inhibitory cascade following spinal cord injury creates an environment restrictive to neuroregeneration.



Continued on page 16

In Memorium



Grover M. Huchins, M.D.
August 17, 1932 - April 28, 2010



Francis P. Kuhajda, M.D.
September 12, 1953 - November 10, 2010

Department of Pathology Incoming House Staff, 2010-2011

Grzegorz (Greg) Gurda

Greg was born in Piotrkow Trybunalski, Poland. He earned his B.A. in Molecular Biology at the University of Chicago, where he was inducted into the prestigious Phi Beta Kappa honor society. As an undergraduate, Greg researched the role of TRPC1/TRPC3 store-operated calcium channels in the differentiation of H19-7 hippocampal neurons. He also completed a Howard Hughes Undergraduate Research Fellowship. Greg entered the M.D./Ph.D. program at the University of Michigan, where he studied calcineurin-dependent transcriptional regulation of pancreatic growth, as well as the importance of organic osmolytes in neuronal response to hyposmotic stress. Greg speaks Polish and Spanish, and has volunteered as a medical translator. His other interests include medical history, sports and music. Greg will be pursuing combined AP/CP training.

**Brittany Holmes**

Brittany was born in Cleveland, Ohio. She earned her B.A. in Biochemistry at the University of Colorado, where she graduated summa cum laude. For her honors thesis, she sought to better understand antimicrobial resistance by comparing the structure and catalytic mechanism of bacterial ArnA to eukaryotic homologues. As a participant in the Howard Hughes Medical Institute's Exceptional Research Opportunities program, Brittany studied the duration of antigen presentation to CD8 T cells during infection. Brittany completed a post-baccalaureate research fellowship at the National Institutes of Health where she investigated the immunological response to Hepatitis C infection. Brittany went on to earn her M.D. from Vanderbilt University. Brittany also speaks Spanish, and generously devoted her time volunteering as a Spanish interpreter during medical school. She is also a classically trained pianist. Brittany will be pursuing combined AP/CP training.

**David Nauen**

David was born in Ada, Oklahoma. He earned his B.A. in East Asian Studies at Harvard University. Before entering medical school, he worked as an editor and writer at multiple media organizations in Beijing, China. While in China, he also served as a volunteer English teacher. Upon returning to the United States, he entered the M.D./Ph.D. program at the University of Pittsburgh with an interest in the neurophysiology of learning and memory. For his thesis project, he designed and built software and hardware capable of recording neuronal synaptic activity of individual boutons. David is fluent in Mandarin and French. In addition he enjoys photography, cooking, sailing, soccer and volunteering. In fact, he served as an assistant basketball coach for the Special Olympics. David will be pursuing combined AP/NP training.

**Justin Poling**

Justin was born in Beckley, Virginia, however, he considers Bowling Green, Kentucky as his hometown. He earned his B.S. in Biologic Sciences at Vanderbilt University, where he graduated summa cum laude. For his honors thesis, he investigated the role of the Notch signaling pathway in neuronal cell fate in zebrafish. While earning his M.D. at Vanderbilt University, Justin's interests in research continued. He identified TGFb1 polymorphisms and BMP2 mutations modulate the age of onset of Familial Pulmonary Arterial Hypertension. He was also awarded a one-year research fellowship at the National Institutes of Health as part of the Howard Hughes Medical Institute - National Institutes of Health Research Scholars Program. At the NIH, he investigated the role of sialic acid in renal development and disease. In his free time, Justin enjoys reading American and British history, particularly medical history. With his research experience and interest in medical history, Justin should feel quite at home at Johns Hopkins. Justin will be pursuing combined AP/CP training.

**Nathan Smith**

Nathan was born in LaGrange, Georgia. He earned his B.S. in Biochemistry at Clemson University, where he graduated summa cum laude. For his honors thesis, he investigated the conformational rearrangements of anthrax toxin using fluorescent resonance energy transfer microscopy. He went on to earn his M.D. from Vanderbilt University where he studied the differences in splenic gene expression between mice inoculated with the conventional BCG vaccine and mice inoculated with a modified BCG vaccine using gene microarray and real-time PCR. Nathan is an outdoor enthusiast who enjoys running, cycling, and backpacking. He is also an accomplished musician who plays multiple instruments including the tuba, trombone, baritone and piano. Nathan is also a member of the US Air Force. Nathan will be pursuing combined AP/CP training.



New Faculty

Timothy Amukele, M.D., Ph.D.

Timothy Amukele, M.D., Ph.D. was born in Ohio, but spent his formative years in the Delta region of Nigeria. He obtained his bachelor's degree in Biochemistry from the City University of New York, where he also graduated 16 credits shy of a music degree. His M.D. and Ph.D. degrees were obtained at the Albert Einstein College of Medicine in the Bronx, New York. Dr. Amukele's Ph.D. research was on the enzymatic mechanism and inhibitor design of Ricin A-chain. While at the Albert Einstein College of Medicine, he revived the Einstein Chamber Music Society and ran it for two years. After medical school he "went west" and completed a residency in clinical pathology, and a global health fellowship at the University of Washington in Seattle, Washington. During his fellowship he worked with pathologists overseas to improve laboratories in Bhutan, Eritrea and Uganda. This included the setup of country-wide External Quality Assurance laboratory monitoring in Eritrea and Bhutan. His research interests are two-fold: the study of chronic and autoimmune disease in sub-Saharan Africa, and the establishment of laboratory Quality Assurance systems in laboratories in low-resourced countries.



Elizabeth C. Burton, M.D., FCAP



Elizabeth C. Burton, M.D., FCAP completed her medical school and pathology residency training at Louisiana State University (LSU) School of Medicine in New Orleans, Louisiana. During her first year of residency training, she became interested in autopsy pathology and in particular how autopsy information could be used to improve health care quality. Her first research project assessed diagnostic concordance of malignancies found at autopsy and was published in the *Journal of the American Medical Association*. Following her residency training, she completed one year of fellowship training with the Veterans Administration National Quality Scholars Program with the San Francisco Veterans Administration and University of California San Francisco followed by a one-year fellowship in Forensic Pathology at LSU and the Orleans Parish Coroner's Office in New Orleans. She has been Director of Autopsy Pathology at Baylor University Medical Center in Dallas for the past nine years where she was also a Clinical Scholar in Pathology and Laboratory Medicine with the Institute for Health Care Research and Improvement. She has authored over 30 articles, abstracts, book reviews, and textbook chapters mostly in the area of Autopsy Pathology. She serves as an ad hoc reviewer for multiple medical journals and was previously on the editorial board for *Medscape General Medicine*. She is a past member of and editor for the Autopsy Pathology Program for the College of American Pathologists (CAP) Autopsy Committee and remains active with the CAP as an international laboratory inspector.

Amy Duffield, M.D., Ph.D.

Amy Duffield, M.D., Ph.D. grew up in Delaware, and completed her undergraduate work at Wesleyan University in Middletown, Connecticut. She worked briefly for Bristol-Myers Squibb before attending Yale University for her M.D., Ph.D. training. She studied the intracellular trafficking of membrane transport proteins during graduate school. Dr. Duffield completed the anatomic and clinical pathology residency program as well as the hematopathology fellowship at Johns Hopkins University. Currently she is doing research in the laboratory of Dr. Donald Small in the Division of Pediatric Oncology studying the expression and protein-protein interactions of FMS-like tyrosine kinase 3 (FLT-3). Her research has been published in various journals including *Proceedings of the National Academy of Sciences* and *American Journal of Surgical Pathology*. Dr. Duffield joined the faculty as an Instructor in Surgical Pathology at Johns Hopkins Bayview in July 2010, and will become a member of the Hematopathology Division at The Johns Hopkins Hospital in July 2011.



Primary Faculty Changes - 2010-2011

New Faculty

Elizabeth Burton
Dennis Grab
Timothy Amukele
Ming-Tseh Lin
Fausto Rodriguez
Karen Sfanos
Aaron Tobian
Sean Zhang
Amy Duffield
Danni Meany
Justin Bishop
Joel Borgen
Kristina Borgen
Alex Chang
Toby Cornish
Mamta Gupta
Emily Maambo
Rose Li
Lily Chen
Sachin Hebbar
Balasubramanian Karanam
Yan Li
Olga Nicolskaia
Yuan Tian

Visiting Associate Professor
Associate Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant Professor
Instructor
Instructor
Assistant
Assistant
Assistant
Assistant
Assistant
Assistant
Assistant
Assistant
Assistant
Research Associate
Research Associate
Research Associate
Research Associate
Research Associate
Research Associate

Autopsy
Microbiology
Diagnostic Immunology Service
Molecular Pathology
Neuropathology
Kidney/Urologic
Transfusion Medicine
Mycology Service
Surgical Pathology, Bayview
Clinical Chemistry
Surgical Pathology
Surgical Pathology
Surgical Pathology
Surgical Pathology
GI/Liver Pathology
Gynecological Pathology
Gynecological Pathology
Gynecological Pathology
Clinical Chemistry
GI/Liver Pathology
Gynecological Pathology
Clinical Chemistry
Medical Microbiology
Clinical Chemistry

Departures

Mostafa Fraig
Maria Theresa Lee
Jose Garcia-Garcia
Hind Nassar-Warzecha
Jonathan C. Cuda
Meredith A. Lakey
Michael T. O'Malley
Jason Y. Park
Ahren Rittershaus

Visiting Associate Professor
Assistant Professor
Assistant Professor
Assistant Professor
Assistant
Assistant
Assistant
Assistant
Assistant

University of Louisville, KY
Covance, Indianapolis, IN
Proctor and Gamble, OH
Germany
Bethesda Dermopath Lab, Silver Spring, MD
Tulane University, New Orleans, LA
Sinai Hospital, Baltimore, MD
University of Texas at Southwestern, Dallas, TX
GI Fellowship, University of Michigan, Ann Arbor, MI
Vanderbilt University, Nashville, TN
Wentworth-Douglas Hospital, Dover, NH
North State Pathology, Highpoint, NC
Food & Drug Administration, Fellow
Elizabeth Glasser Foundation, Washington, DC
Japan

Promotions

Syed Ali
Barbara Detrick
James Eshleman
Anirban Maitra
Robert Anders
William Clarke
Zahra Maleki
Tatiana Melnikova

Professor
Professor
Professor
Professor
Associate Professor
Associate Professor
Assistant Professor
Instructor

Cytopathology
Immunology
GI/Liver Pathology
GI/Liver Pathology
GI/Liver Pathology
Clinical Chemistry
Cytopathology
Neuropathology

New Faculty (cont.)

Fausto Rodriguez, M.D.

Fausto Rodriguez was born in Baltimore, Maryland and spent his growing childhood and teenage years in the Dominican Republic. He completed his undergraduate studies and medical school at the University of Missouri-Columbia, followed by anatomic pathology residency and a neuropathology fellowship at the Mayo Clinic in Rochester, Minnesota. His training at the Mayo Clinic also included a neuro-oncology postdoctoral fellowship under a T32 training grant in neuro-oncology. During this time his research efforts focused on gene expression analysis of pediatric gliomas arising in the setting of neurofibromatosis, and pathologic and molecular characterization of murine high grade astrocytomas developing in the Sleeping Beauty transposon system. After his training he remained at Mayo and worked as a consultant in anatomic pathology for almost two years before moving to Hopkins, a time when he also acquired experience in central pathology review for clinical trials in gliomas, and supported pathology-based research in murine models and glioblastomas xenografts. His current clinical and research interests focus on pathologic classification and identification of prognostic molecular markers and signatures of pediatric brain tumors.



Aaron Tobian, M.D., Ph.D.

Aaron Tobian, M.D., Ph.D., grew up in Michigan, and graduated from Hanover College in Hanover, Indiana. He attended Case Western Reserve University in Cleveland, Ohio for his M.D., Ph.D. training. His Ph.D. research was in a basic mouse immunology lab evaluating how bacterial heat shock proteins assist in antigen processing. He also spent one year during medical school conducting field research on lymphatic filariasis in Papua New Guinea. During medical school, Dr. Tobian was inducted into the Alpha Omega Alpha (AOA) medical honor society. Dr. Tobian completed the clinical pathology residency program and transfusion medicine fellowship at Johns Hopkins University. He was chief resident in 2007. Dr. Tobian worked closely with the Rakai Health Sciences Program for his postdoctoral fellowship and evaluated the efficacy of male circumcision in the prevention of sexually transmitted infections in men and their female partners. Dr. Tobian published his work in various leading journals including the *Journal of Immunology*, *American Journal of Transplantation*, *Journal of Infectious Diseases*, *Transfusion*, *Proceedings of the National Academy of Sciences*, *New England Journal of Medicine*, and most recently in *Lancet*. Dr. Tobian joined the faculty in July 2010, and is looking forward to continuing his transfusion medicine and international infectious disease research.



Sean Zhang, Ph.D.

Sean Zhang, Ph.D. was born in Shanghai, China where he earned his M.D. from Shanghai Second Medical University. He then received a Ph.D. in Microbiology and Immunology from University of Turku in Finland. His Ph.D. thesis work had led him to win the European Young Investigator Award in 2000. Dr. Zhang continued his postdoctoral research fellowship at the University of Toronto in Canada, and completed a three-year fellowship in Clinical Microbiology at the University of Toronto where he received the Norman Bethune Award for research in Clinical Microbiology. In 2007, Dr. Zhang joined the Department of Laboratory Medicine and Pathobiology, University of Toronto as Assistant Professor, and was appointed as the Head of the Mycology Laboratory, in the Ontario Agency for Health Protection and Promotion in Toronto, Canada. This is the largest Mycology laboratory in Canada. In August 2010, Dr. Zhang joined the Department of Pathology at Johns Hopkins as Assistant Professor, and Director of the Mycology Laboratory. Dr. Zhang's research interest and expertise include validating and developing new molecular assays for rapid and early diagnosis of invasive fungal infections in immunocompromised hosts, conducting clinical trials for evaluating new diagnostic assays, discovering new emerging fungal pathogens, detecting anti-fungal drug resistant organisms and understanding their resistant mechanisms, and studying interaction between host and fungal pathogen.



New Faculty (cont.)

Dennis J. Grab, Ph.D.

Dennis J. Grab earned his Ph.D. from Cornell University Graduate School of Medical Sciences, Sloan-Kettering Division, in 1977. He went on to do a postdoctoral fellowship in the laboratory of Dr. Philip Siekevitz at The Rockefeller University and after that he joined the biochemistry department at the International Laboratory for Research in Animal Diseases (ILRAD) stationed in Nairobi, Kenya in 1981. In addition to having befriended a Rothschild Giraffe named Betty June, he researched the biology of protozoan parasites including *Theileria parva*, the cause of a fatal cattle disease called East Coast Fever. However, his main focus was the African trypanosome, a parasite-transmitted tsetse flies and the cause of African sleeping sickness, one of the most fatal of parasitic diseases. In 1993, he accepted a dual appointment as Assistant Professor in the Department of Tropical Medicine at Tulane University Medical Center, and as an Associate Scientist at Tulane Regional Primate Research Center. There he began work on Lyme disease and the role of fibronectin and collagen in *Borrelia burgdorferi*-host cell interactions. After spending more than 16 years overseas, he returned to the United States and joined Johns Hopkins early in 2001. As Assistant Professor in Pediatrics, he studied pathogen/BBB interactions. In 2002 he was promoted to Associate Professor and in 2009 joined the Department of Pathology where he continues his studies on the mechanisms used by CNS pathogens to spread from the blood to brain.



Ming-Tseh Lin, M.D., Ph.D.

Ming-Tseh Lin, M.D., Ph.D. received his M.D. degree from the National Taiwan University College of Medicine in 1984 and completed his Ph.D. in Molecular Biology in 1996. He served as a hematologist and director of the bone marrow transplantation unit at the National Taiwan University Hospital before he came to the United States in 1996. He worked at the Fred Hutchinson Cancer Research Center in Seattle, Washington where his research focused on the association of genetic variations with outcomes of bone marrow transplantation. The results were published in the *New England Journal of Medicine* and *Blood*. In order to pursue a career in molecular pathology, he completed two years of residency in pathology at the Albany Medical Center from 2004 to 2006, two years of fellowship in molecular pathology, one year of residency in pathology and one year of gastrointestinal/liver pathology at the Johns Hopkins University from 2006 to 2010. He joined the faculty in July 2010 in the Division of Molecular Pathology.



Danni L. Meany, Ph.D.

Danni L. Meany, Ph.D. was born in Hengyang, Hunan, China. She earned a B.S. in Chemistry from Zhejiang University in Hangzhou, Zhenjiang, China. She came to United States in 2002, and earned a Ph.D. in Analytical Chemistry from the University of Minnesota. She then completed the clinical chemistry fellowship at Johns Hopkins University. Danni joined the faculty in July 2010, and is the Director of the General Chemistry Laboratory and is certified by American Board of Clinical Chemistry.

Danni's research focus is on the discovery of biomarkers for cancer using proteomic technologies such as mass spectrometry and microarray, and validation using multiplexed immunoassays. Currently, she is working on identifying PSA glycoforms that may distinguish lethal from indolent prostate cancer using lectin microarray and other technologies.



Our New Professors



From left to right: Mabel Smith, Drs. Vassilis Koliatsos, Richard Roden, James Esbleman, Barbara Detrick, Syed Ali, Anirban Maitra, Brooks Jackson

Blast from the Past



December 28, 1967

Front row: Dr. William Shbelly, Helen Keith; Second row: Rita Zukas, Margie Bishop, Vilma Reich, Lillian Gable, Marilyn Peper (still here); Third row: Linda Hasal, Eva Hildebrant, Dr. George Bannayan, Pat Burgess, Linda Caruthers, George Pettis, Grace Loftus, Barbara Ames (still here), Steve Adams, Rose Strobecker, Dr. Perry Lambird; Back row: Dr. Joseph Eggleston, Dr. Robert Kapelowitz, Rick Hasal, Donald Meyers

Funding Our Future

In these hard economic times private giving is more important than ever. Our funds and fellowships honor some of our treasured faculty and staff, and, at the same time, provide critical support for the training of talented physicians and scientists. Please consider supporting the department.

The Grover M. Hutchins, M.D. Memorial Fund

The friends and family of Grover Hutchins have joined together to establish The Grover M. Hutchins, M.D. Memorial Fund. Grover spent 56 years at Johns Hopkins and during that time had a profound impact on our residency training program, as well as advancing the understanding of cardiovascular and pediatric diseases. The endowment honors Grover and will provide research support for young trainees and junior faculty in the Department of Pathology, helping them transition to their independent careers.

The Joseph Eggleston Fund in Surgical Pathology

The Joseph Eggleston Fund in Surgical Pathology honors one of the true giants in the field of surgical pathology. Dr. Eggleston was not only a leading authority on the pathology of lung cancer, but he also educated a generation of outstanding surgical pathologists. This fund supports the clinical and/or research activities of an outstanding resident or junior faculty member in surgical pathology. This year's grantees are residents Drs. Carla Ellis and Zina Meriden.

The Yener S. Erozan Fellowship in Cytopathology

Yener Erozan continues to play an important role in the Division of Cytopathology as a mentor, teacher, and consultant. One way to express your appreciation for all that Yener has done for the Department and for the Division of Cytopathology over the years is to donate to this important fellowship.

The Robert H. Heptinstall Fellowship

Heppy is now retired, but comes in periodically to visit friends. Paralleling Heppy's emphasis on research excellence, the Robert H. Heptinstall Fellowship promotes research activities and clinical training of outstanding young pathologists pursuing careers in research.



Joseph C. Eggleston



Mabel Smith



Donald L. Price



William Welch



Grover Hutchins



Gerald S. Spear

The Donald L. Price Research Fund

This endowment in neuropathology honors Don's many major contributions to neuroscience and to the Department.

The Mabel Smith Endowment for Resident Research & Education

Mabel is as busy as ever handling the academic affairs of the Department and providing words of wisdom to those who drop by her office for advice. The Mabel Smith Fund is used to support special courses, research projects, travel and other needs of our residents.

The Gerald S. Spear JHU-UCI Medical Student Pathology Fellowship

This program was established in 2005 to commemorate Dr. Spear's retirement. The Spear Fellowship provides a UC Irvine student with the opportunity to participate in a one month elective in the Department of Pathology at Johns Hopkins. The goal is to inspire respect for, and possibly a career in, pathology. Nhu Thuy Can received this year's award.

The John H. Yardley Fellowship in Gastrointestinal Pathology

Dr. Yardley has now retired, but his impact on the Division of GI Pathology is as strong as ever. Dr. Karen Matsukuma is the Yardley Fellow for 2010-2011.

The William Welch Award

The William Welch Award is named for the preeminent pathologist who was one of the founding fathers of The Johns Hopkins Hospital and School of Medicine. It was established to acknowledge outstanding achievement in pathology by a second year medical student. The award is announced each year at the Residents Award Dinner. The 2010 Award was presented to Julia Smart.

Please consider supporting one or more of these activities. We are enclosing a self-addressed return envelope to facilitate your contribution. If you have any questions please contact Dr. Ralph Hruban (rhruban@jhmi.edu or 410-955-2163).

If you would like to donate to one of these funds online, please visit our secure server at: <https://jhweb.dev.jhu.edu/eforms/form.do?formId=8525>

If you would like to use a separate envelope, please send your tax-deductible contributions payable to Johns Hopkins University to:

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