





The Johns Hopkins Medical Institutions

Department of Pathology

Volume 8, Winter 2008

Director's Corner

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

This past academic/fiscal year has witnessed another year of growth for Pathology in a number of areas.

The number of laboratory tests performed by Johns Hopkins Hospital Pathology as reflected in RVUs increased by 3.6% and outreach RVUs increased by 2.9%. Together with good



Dr. J. Brooks Jackson

cost control measures Pathology exceeded its budgeted contribution margin by more than \$800,000 while meeting the care needs of our patients. Congratulations are in order for the Hospital Pathology laboratory staff, lab management and directors for working to achieve this favorable balance which is critical to the funding of the new critical care towers due to open in January 2011, and the capital equipment needs of Pathology. The workload in Pathology has also increased at Bayview Hospital and Howard County Hospital increasing by 6.7% and 3.0%, respectively.

In the area of patient safety, additional initiatives have been implemented with improvement in all patient safety dashboard goals to date. Continuous improvement in patient safety is an ongoing process which we believe will lead to better patient outcomes and more cost effective care.

Continued on page 2

volume 8, winter 2008					
Inside					
• Director's Corner	Pg. 1				
• Cardiovascular Pathology Spotlight	Pg. 1				
• Margaret Lee Fellows	Pg. 4				
• New Hospital Under Construction	Pg. 5				
• Al Valentine Named Administrator	Pg. 5				
• Yener Erozan and Ed Pigo Retire	Pg. 6				
• Grants and Contracts	Pg. 7				
• Donald L. Price Research Fund	Pg. 8				
• For Our future	Pg. 9				
• Primary Faculty Changes	Pg. 10				
Welcome New Professors	Pg. 10				
• Pathobiology Graduate Students	Pg. 11				
• Pathology Incoming House Staff	Pg. 12				
• Awards/Recognition	Pg. 14				
• On The Web	Pg. 15				
• Calendar	Back				

Spotlight: The Division of Cardiovascular Pathology

Overview

Tn 2003, the Department of Pathology rec-Lognized the need to enhance its expertise in the area of cardiovascular disease and formed a stand alone Division of Cardiovascular Pathology. Previously, the cardiovascular service was within the Cardiopulmonary Division. The Division of Cardiovascular Pathology is thus a new, albeit small division, with aspirations for future expansion and development. The Division currently has three primary faculty whose activities include clinical diagnostic service, research, and teaching. Primary faculty include Charles Steenbergen, M.D., Ph.D. (Director), Marc Halushka, M.D., Ph.D., and Grover Hutchins, M.D. Secondary pathology faculty in the Division include Ralph Hruban, M.D., a former

director of the Cardiopulmonary Division, and William Baldwin III, M.D., Ph.D. The Division is responsible for the diagnostic interpretation of endomyocardial biopsies obtained from heart transplant patients and from cardiology patients with unexplained heart failure or arrhythmias, and for the evaluation of explanted hearts from transplant recipients. There are approximately twenty heart transplants performed at Johns Hopkins each year, and these patients typically undergo endomyocardial biopsy throughout their life since there is still no better method for assessing cardiac allograft rejection. The Division also receives consult cases from around the country. Faculty meet with the heart transplant and heart failure cardiology team twice a week to review biopsies (see photo on page 4).

In addition to their clinical responsibilities, the Division is actively involved in teaching, research, and the autopsy service. Heart disease is the most common cause of death in the United States and a thorough cardiovascular evaluation is an essential component of a complete autopsy. Dr. Hutchins was formerly the director of the autopsy service and is still prominent in its operation. Dr. Halushka is also an attending on the autopsy service. Members of the Division participate in teaching medical students, pathology and medicine residents, graduate students and cardiology fellows. Members of the Division are also actively involved in basic and applied research on cardiovascular disease. Research focuses on several aspects of cardiovascular disease, ischemia-

Director's Corner

Achievements include less wastage of blood, fewer mislabeled specimens, and faster reporting of critical action values. Barbara Parsons and her staff, working Division leaders and QA/QC staff deserve much of the credit.

Pathology is playing a leading role by implementing initiatives to increase the diversity of the workforce of Pathology at all levels. These initiatives include increasing the pipeline of underrepresented minority and women trainees in Pathology for student Pathology electives, the residency and graduate student programs, and hospital staff positions through outreach programs at local high schools and active recruitment of underrepresented minorities from Johns Hopkins Medical School and traditionally African American medical schools. Women are well represented in Pathology training programs constituting the majority in the Residency program and Pathobiology graduate student programs. In terms of full-time Pathology faculty, 46% of Assistant Professors are women, 34% Associate Professors, and 17% Professors compared with 41%, 28%, and 18% respectfully for the School of Medicine as a whole. In the past two years, 4 of 9 or 44% promoted to Professor in Pathology have been women. This trend is very likely to continue as a larger number of women advance through the academic ranks and move into leadership positions.

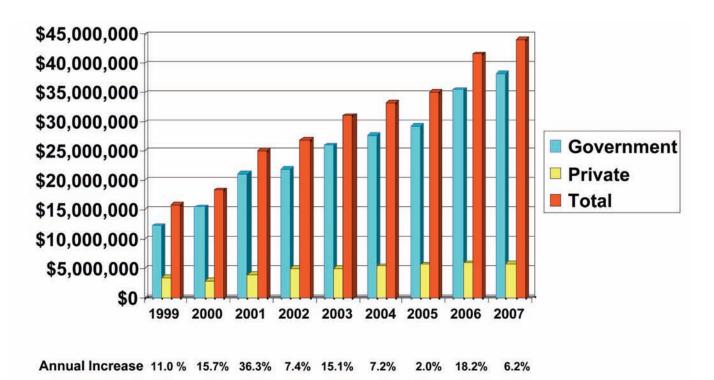
On the university side of the Department, profee income increased by 19% driven primarily by an increase in outside consults for interpretation

and addition of the Eye Pathology service. Research funding reached another all time high with an annual increase of 6.2% at a time when the NIH budget was flat (see figure below). Over 200 first or last author peer-reviewed articles were published by primary faculty in Pathology. In addition, donations of over \$4.3 million dollars were also received this past year from generous donors to support research in pancreatic cancer, neuropathology, and HIV research in Uganda. These funds will support innovative research projects by junior investigators.

In terms of our educational programs, 11 new excellent pathology residents started this past July and 6 new graduate students started in the Pathobiology program in September. A number of our faculty have been involved in the School of Medicine's plan to redesign the medical school curriculum which will be implemented in 2009. It is envisioned that Pathology will play a major role in all four years, not just the predominant role it now plays in year 2.

Despite the notable achievements this past year, the current academic year will bring new challenges including another full Joint Commission survey of the laboratories this fall, more stringent ACGME reviews of our fellowship programs, possible further reductions in NIH funding for new grant awards, government reductions in pathology profee reimbursement, and increasing documentation requirements in a number of regulated areas. Given the talent and hard work of our faculty, trainees, and staff, I am confident we will deal with these challenges successfully as well.

Pathology Research Expenditures Growth



Spotlight: The Division of Cardiovascular Pathology

Continued from page 1

reperfusion injury and diabetic cardiovascular disease, and our faculty are also interested in immune-mediated cardiovascular disease. The Division collaborates extensively with faculty in other departments, notably the Division of Cardiology in the Department of Medicine, in their effort to develop stem cell therapies for the treatment of patients with endstage heart failure, and as consultants in other projects involving histologic evaluation of the myocardium in animal models of disease.

Research

Basic cardiovascular research is directed by three faculty working on the sixth floor of the Ross Building, Drs. Halushka, Baldwin and Steenbergen. In addition, clinical research derived from biopsy and autopsy material is also undertaken.

Dr. Steenbergen's research is primarily focused on ischemia/reperfusion injury. He began working in the area as a graduate student at the University of Pennsylvania, working on metabolic regulation in ischemic myocardium, and training for many years with Drs. Robert Jennings, Keith Reimer, and Donald Hackel at Duke. His research is on basic mechanisms of ischemia/reperfusion injury, and on endogenous cardioprotective mechanisms which can be activated to minimize or delay ischemic injury. It has become clear over the past 20 years, that there are endogenous protective mechanisms that can reduce the amount of cell death that occurs with a given duration of ischemia by up to 75%. The focus of Dr. Steenbergen's laboratory is the signaling pathways that are activated immediately, and how they confer the protective effect. Current research is targeted at the downstream mechanisms of protection, and the possible role of mitochondria in these mechanisms. A current concept of cell death during ischemia-reperfusion involves the opening of a large channel in the mitochondrial membrane, the mitochondrial permeability transition pore (mPTP), as a final event in cell death. Opening of the mPTP would rapidly dissipate the membrane potential, precluding ATP synthesis, and would allow release of ions and proteins from the matrix, including potentially calcium and activators of

apoptosis, which would lead to cellular disintegration. This opens the possibility that a final common pathway of cardioprotection could be inhibition of the opening of the mPTP. How the cardioprotective signaling pathways accomplish this remains to be determined. Since ischemic heart disease is the number one cause of mortality in the United States today, and since infarct size is a major determinant of outcome in patients with a myocardial infarction, better understanding of the mechanisms of lethal ischemic injury is likely to lead to better strategies for treating patients with acute coronary syndromes.

In addition to research on basic mechanisms of cell injury, Dr. Steenbergen has also been involved as a collaborator in studies of stem cell engraftment into the myocardium in models of myocardial infarction and in normal myocardium. These studies have been performed in the Department of Medicine, Cardiology Division. At the present time, stem cell therapy is the most promising option for treating patients who have already had one or more myocardial infarcts and are in heart failure. The utility of this therapy is limited at the present time, in large part because of the poor survival of the injected stem cells. Don't worry, these projects have exclusively involved adult stem cells, either mesenchymal stem cells or cardiac derived stem cells. In contrast to what was common dogma just a few years ago, it is now clear that there are stem cells in adult myocardium, which can be induced to proliferate in culture, and which can be injected into patients. Stem cells can be obtained from endomyocardial biopsies from patients with heart failure, expanded in culture, and potentially injected several weeks later into the same patient to avoid rejection. This is an exciting and rapidly evolving field that is likely to have major clinical impact over the next decade.

Dr. Halushka started his scientific career in genetics at Case Western Reserve University, working in the laboratory of Dr. Aravinda Chakravarti. This initial work described the rates of genetic variation in candidate genes for hypertension. After training in Anatomic Pathology at Johns Hopkins, Dr. Halushka shifted his focus to working directly with diseased human tissues.

Dr. Halushka's research is now focused on dia-

betic vascular disease. Dr. Halushka has taken two approaches to understanding the cause of strokes, myocardial infarctions, and renal failure in diabetic subjects. The first was to develop a novel set of vascular tissue microarrays (TMAs) containing over 1,500 tissues collected from 100 adult autopsies in patients with and without diabetes. From this collection, his laboratory has been investigating the expression of a wide range of proteins related to advanced glycation end products (AGEs) and their receptors in a global distribution of blood vessels. The initial steps of this project have been to validate the role of immunohistochemistry in autopsy tissues and to validate TMAs for vascular disease study.

A second project has been initiated to investigate the role of diabetes in vascular memory using primary human endothelial cell cultures. This project will determine whether high glucose or AGEs result in continued endothelial cell dysfunction, even after a return to normal glucose levels. The goal of this study is to identify pathways that need to be targeted to improve endothelial function in diabetic subjects.

Wink Baldwin studies components of innate immunity (complement, macrophages and platelets) that modulate adaptive immunity (T and B lymphocytes, and antibodies) to heart transplants. His research training began in the MST program at the University of Rochester with Dr. Nicholas Cohen on phylogenetic aspects of immunity. His interests in transplantation were enhanced during his residency in Pathology at the Peter Bent Brigham Hospital, where Drs. Dammin (Pathology), Merrill (Nephrology) and Murray (Surgery), who were members of the team that performed the first successful renal transplant, were still active. A fellowship at The Academic Hospital in Leiden, The Netherlands, where Eurotransplant is centered, brought him experience in tissue typing and complement. His research in these areas continued to evolve as a faculty member at Duke and then at Hopkins. He collaborates extensively with Drs. Barbara Wasowska, Craig Morrell (graduate of our

Spotlight: The Division of Cardiovascular Pathology

Patholobiology Program and now Assistant Professor of Comparative Medicine) and Charlie Lowenstein (Cardiology and Pathology) to study interactions of complement with macrophages, platelets and endothelial cells. His research uses clinical observations to develop clinically relevant models of cardiac transplantation between inbred rats and mice with defined natural and engi-

Continued from page 3

neered genetic deficiencies. Potential mechanisms for in vivo findings are tested with cellular and molecular assays on tissues and cells cultured from human as well as animal transplant recipients. The studies have pathological and potential therapeutic relevance not only to cardiac transplants, but also to vascular biology and pathology in general.



Reviewing Heart Biopsies From left to right: Stuart Russell, Charles Steenbergen, Wink Baldwin, Ralph Hruban, Marc Halusbka, Rosanne Rouf, Deb Carter (Not pictured: Grover Huchins)

Future Directions

The Division would like to expand eventually to include a vascular biologist who would have an interest in signaling mechanisms, potentially involved in both diabetes and ischemia-reperfusion injury, and also immunologic mechanisms of injury. This would allow the research efforts of the Cardiovascular Division to concentrate in related areas, and also promote more interaction with the Immunology Division. An example would be integrated studies, together with members of the Immunology Division, of heart transplant vasculopathy. The interplay between humoral and cellular immunologic mechanisms in the development of transplant vasculopathy remains to be established, and this could be a very fruitful area of collaboration. The development of new therapeutic approaches to prevent, delay, or reverse transplant vasculopathy could have major translational impact.

We welcome clinical, teaching and research collaborations, and look forward to a growing role in the Pathology Department!

Margaret Lee Fellows

Thanks to the generosity of the Family of Magaret Lee we are able to continue our very successful partnership with Singapore. In 2006 we were pleased to have four gifted students from Singapore join our Graduate Training Program in Pathobiology (Sophie Lin, Shaaretha Pelly, Koh Meng Aw Yong, Kai Lee Yap), and this year (2007-2008) we are pleased to announce that Kah Jing Lim and Yiting Lim (see page 11) are our new Margaret Lee fellows. Congratulations to all of our fellows from Singapore and a special thanks to Margaret Lee and Al Njoo for making this possible.



Group Photo: Front Row—Sophie Lin, Shaaretha Pelly, Margaret Lee, Al Njoo, Kai Lee Yap; Back Row—Ed Gabrielson, Koh Meng Aw Yong, Noel Rose

New Hospital Under Construction

As the new Johns Hopkins clinical building is being constructed, it's interesting to see the Core Lab in its initial stages. Expected to be approximately 22,000 square feet, the new Core Lab design specifications are still under development. The building is expected to open in early 2011.







Allen Valentine Named Administrator for Clinical and Financial Affairs



Dr. Brooks Jackson announced that Mr. Allen ("Al") Valentine has been appointed Administrator for Clinical and Financial Affairs for the Department of Pathology effective September 17, 2007. Mr. Valentine graduated from the Pennsylvania State University with a B.S. degree in Medical Technology and holds an M.B.A. from Loyola College in Baltimore. He started his career at The Johns Hopkins Hospital in 1980 as a medical technologist in Special Chemistry and later held positions as QC Technologist, Outreach Manager, and Financial Manager. Since 2001, he has served as the Assistant Administrator of Clinical Services in the Department of Pathology, responsible for the clinical and financial operations of The Johns Hopkins Hospital Core Laboratories, the Howard County General Hospital's Laboratories, and all Johns Hopkins Outreach sites.

Working closely with faculty, administration, and staff, Mr. Valentine has played a key leadership role within The Johns Hopkins Medical Institutions. He facilitated automated technologies in Chemistry and Hematology, and supported an enhanced Phlebotomy service that ensures that laboratory results are available to Surgery by 5:00 a.m. and Medicine by 7:00 a.m. each day. He has championed numerous Pathology Data Systems projects which support both our laboratories as well

as our clinical customers. He has taught laboratory management to residents and fellows, served on numerous Hospital committees, and has been working closely with the new clinical building committee. His clinical laboratory management expertise and dedication and commitment to the mission of The Johns Hopkins Medical Institutions have been clearly evident, and we wish him all the best in his new role as Administrator of Clinical and Financial Affairs.

Yener Erozan, M.D. Officially Retires



Yener Erozan and Prabodh Gupta



Brenda Erozan, Doug Clark, Yener Erozan, Syed Ali, Karen Gustafson



Yener Erozan and Doug Clark

Good Luck Ed Pigo - Have a Happy Retirement



Ed and Myrna Pigo



Brooks Jackson and Ed Pigo



Mark Bunich, Barbara Crain, Jonathan Epstein, Serena Bagnasco, Ed Pigo

New Grants and Contracts Awarded to Pathology Faculty, 2007

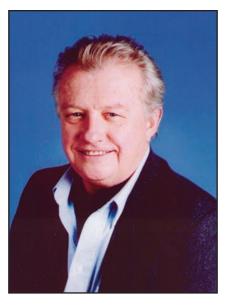
CULTY MEMBER	AWARD TYPE	AGENCY	DATES	TOTAL FUNDING (\$)
Bagnasco, Serena	Grant	National Kidney Foundation	7/1/07-6/30/08	10,000
Berman, David	Contract	Eli Lilly	9/1/07-1/31/08	41,000
Borowitz, Mike	Contract	Genzyme Corporation	6/27/07-6/30/08	33,937
Carroll, Karen	Contract	Becton Dickinson	4/1/07-3/31/08	40,006
Caturegli, Patrizio	Grant	Sjogrens Foundation	7/1/07-6/30/08	35,000
Chan, Daniel	Contract	Dade Behring	11/1/06-10/31/08	3,811
Clark, Douglas	Contract	TriPath Oncology	2/1/07-1/31/08	485,919
Clark, Douglas	Contract	BioMarker Strategies	5/1/07-4/30/09	394,430
DeMarzo, Angelo	Inst. Grant	Patrick Walsh Award	4/1/07-3/31/08	50,000
DeMarzo, Angelo	Contract	Targepeutics	2/1/07-1/31/08	83,905
DeMarzo, Angelo	Contract	Eli Lilly	9/1/06-8/31/07	246,650
DeMarzo, Angelo	Contract	Nuclea Biomarkers	9/1/05-9/30/07	109,875
Dumler, Steve	Contract	Binax, Inc.	12/8/06-11/30/07	67,680
Dumler, Steve	R56 Grant	NIH/NIAID	8/15/07-7/31/08	450,281
Eberhart, Charles	R01 Grant	NIH/NINDS	7/1/07-6/30/12	1,793,750
Eshleman, Jim	Grant	Lustgarten Foundation	1/1/07-12/31/07	100,000
Eshleman, Jim	R21 Grant	NIH/NCI	9/1/07-8/31/09	360,800
Fan, Xing	Grant	Amer. Brain Tumor Association	7/1/07-6/30/08	50,000
Fan, Xing	Grant	Accelerate Brain Cancer	7/1/07-6/30/08	120,000
Gocke, Christopher	R21 Grant	NIH/NHGRI	9/1/07-6/30/09	451,000
Guay, Laura	U01 Grant	NIH/NIAID	2/1/07-1/31/14	4,301,253
Guay, Laura	Subcontract	Family Health International	7/1/07-2/29/08	1,849,616
Haas, Mark	Grant	Kidney/Urology Fdtn. Of America	3/1/07-2/29/08	5,000
Hamad, Abdel	Grant	Proctor & Gamble	7/1/07-6/30/08	15,000
Hung, Chien-Fu	Grant	American Cancer Society	7/1/07-6/30/11	720,000
Iacobuzio, Christine	Grant	PanCAN Foundation	7/1/07-6/30/08	60,000
Jackson, Brooks	U01 Grant	NIH/NIAID	7/1/07-1/31/14	2,675,528
Koliatsos, Vassilis	Grant	Muscular Dystrophy Association	1/1/07-12/31/09	498,554
Kurman, Robert	R01 Grant	NIH/NCI	4/1/07-1/31/11	1,242,232
Kurman, Robert	Contract	Fujireibo Diagnostics	4/1/07-3/31/08	75,000
Lee, Michael	R21 Grant	NIH/NINDS	4/1/07-3/31/09	394,461
Li, Qing Kay	Grant	American Society of Cytopathology	12/1/06-11/30/07	30,000
Maitra, Anirban	Grant	JHU Tech/Alliance	1/1/07-12/31/07	50,000
Maitra, Anirban	Grant	Lustgarten Foundation	1/1/07-12/31/07	100,000
Maitra, Anirban	Contract	Merck & Company	4/4/07-4/3/09	301,933
Meeker, Alan	Inst. Grant	Patrick Walsh Award	4/1/07-3/31/08	50,000
Murphy, Kathleen	Contract	Nanogen, Inc.	8/20/07-2/19/08	34,314
Netto, George	Inst. Grant	Patrick Walsh Award	4/1/07-3/31/08	50,000
Parrish, Nicole	Contract/SBIR	MIDI, Inc.	8/1/06-7/31/08	294,891
Roden, Richard	R01 Grant	NIH/NCI	7/19/07-5/31/12	1,402,200
Savonenko, Alena	Grant	BioGen IDEC, Inc.	8/9/07-8/8/08	70,051
Shih, Ie-Ming	Contract	Oncotech	12/11/06-12/10/07	16,236
Shih, Ie-Ming	Grant	Chinese Medical University	10/1/06-9/30/07	54,000
Steenbergen, Charles	R01 Grant	NIH/NHLBI	7/1/07-6/30/11	1,476,000
Tuder, Rubin	Grant	Alpha One Foundation	7/1/06-6/30/09	130,000
Wong, Philip	R01 Grant	NIH/NINDS	4/1/07-3/31/12	1,793,477
U″ 1			50	TOTAL \$22,617,790

The Donald L. Price, M.D. Research Fund

It is with great pleasure that we announce a campaign to endow a fund for research by trainees in neuropathology in honor of Dr. Donald Price. The Donald L. Price, M.D. Research Fund will not only honor one of our most respected scientists and mentors, but it will also support research in neuropathology at Johns Hopkins.

Dr. Price came to The Johns Hopkins Medical Institutions in 1971 as the Director of the Division of Neuropathology and since 1985 he has been the Director of the Alzheimer's Disease Research Center. He is a Professor in the Departments of Pathology, Neurology and Neuroscience.

For over four decades Dr. Price has made important contributions to the understanding of a variety of diseases, particularly peripheral neuropathies, disorders caused by toxins (tetanus toxin, botulinum toxin), and, most significantly, over the past two decades, neurodegenerative disorders such as Alzheimer's Disease (AD), Amyotrophic Lateral Sclerosis (ALS) and Parkinson's Disease (PD). Dr Price's major research interest is to move between bedside and bench and back again through the development and analysis of animal models that can be used to examine pathogenic mechanisms, to identify possible therapeutic targets, and test novel therapies. These approaches have become particularly important with the recent progress in



identifying genes linked to diseases, and the power of transgenic and knockout approaches to clarify the biology of normal and abnormal gene products in vivo.

Dr. Price has recruited an outstanding cohort of young scientists to work on neurodegenerative diseases, and it is therefore only appropriate that we honor him by creating an endowment that will fund research by trainees in neuropathology to carry on the outstanding programs he has established.

If you would like to support this important fund, please send your tax-deductible contributions payable to The Donald L. Price, M.D. Research Fund to:

Fund Office Department of Pathology The Johns Hopkins Hospital 600 North Wolfe Street Carnegie 439 Baltimore, MD 21287-6417

Lydia Nelson Named Assistant Administrator, Core Laboratories

Allen Valentine announced that Lydia Nelson has been named Assistant Administrator for the Core Laboratories, effective November 12, 2007. She will be responsible for the overall clinical and financial operations of The Johns Hopkins Hospital Core Laboratories. Ms. Nelson holds a B.S. degree in Medical Technology from Shepherd College in Shepherdstown, West Virginia, and an M.S. in Biotechnology from Hood College in Frederick, Maryland. She has been employed by The Johns Hopkins Hospital since 1979 when she began her career as a Medical Technologist in the Hematology Laboratory. She was subsequently promoted to Lead Technologist and Laboratory Specialist in Coagulation, and has served as the Core Lab Evening Shift Supervisor since 1998.

Ms. Nelson coordinated the technical development of both the Special Coagulation and the Flow Cytometry Labs, and played a leading role in the establishment of QC, QA and competency guidelines for



various areas of the Core Laboratory. She has been actively involved in mentorship and development of personnel for advancement on all levels of the laboratory career ladder and has spearheaded numerous community support programs, including the annual Departmental "Clean Out Your Closets" food and clothing drive. With extensive expertise in all aspects of the Core Lab and known for her tireless dedication to Johns Hopkins, Ms. Nelson is wished continued success in her new position as Assistant Administrator.

Funding Our Future

Our funds and fellowships honor some of our treasured faculty and staff, and the funds and fellowships provide critical support for the training of talented physicians and scientists. We are pleased to announce a campaign to endow a fund to support research by trainees in neuropathology in honor of Dr. Donald Price. This endowment honors one of our most respected scientists and mentors. Please see page 8 to learn more about The Donald L. Price, M.D. Research Fund, and also consider supporting this fund or one of the other opportunities listed below.

The Joseph Eggleston Fund in Surgical Pathology

The Joseph Eggleston Fund continues to support research conducted by our residents. The results of Dr. Danielle Wehle's research have recently been submitted to *Modern Pathology* and the test she developed using funds from the Eggleston Fund, a FISH test for i12p on paraffin embedded tissue, has been approved as a clinical test.

The Yener S. Erozan Fellowship in Cytopathology

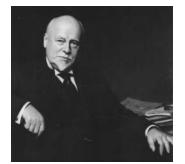
Although Yener Erozan officially retired in July, he continues to play an important role in the Division of Cytopathology as a mentor, teacher, and consultant. One way to express your appreciation for all that Yener has done for the Department and for the Division of Cytopathology over the years is to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

The Robert H. Heptinstall Fellowship

Heppy is still active, continuing to teach, and in 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



William Welch

The Mabel Smith Endowment for Resident Research

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 a talented student into the field of pathology.

The John H. Yardley Fellowship in Gastrointestinal Pathology

Dr. Yardley has now retired but he still is an active participant in GI Pathology Journal Conference and in the weekly GI/Liver interesting case conference. Dr. Jennifer Scuidere is the Yardley Fellow for 2007-2008.







Gerald S. Spear

The William Welch Award

The William Welch Award is named for the pre-eminent 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.

Please consider supporting one or more of these activities. We are enclosing a selfaddressed 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 use a separate envelope, please send your tax-deductible contributions payable to Johns Hopkins University to:

> Fund Office Department of Pathology The Johns Hopkins Hospital 600 North Wolfe Street Carnegie 439 Baltimore, MD 21287-6417

Page 10 Primary Faculty Changes 2007 - 2008

New Faculty

Mostafa Fraig Hind Nassar Megan Reller Stefan Riedel Zahra Maleki Jason Daniels Jeffrey Iding William Ingram Thomas McConnell Shien Micchelli Joshua Wisell Fiona Laird

Departures

- Soner Altiok John Ticehurst Dengfeng Cao Jon Davison Hubert Fenton
- Kara Judson Diana Molavi Natasha Rekhtman

Promotions

Patrizio Caturegli

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

Bayview Pathology Surgical Pathology Microbiology Bayview Pathology Bayview Pathology GI/Liver Pathology Surgical Pathology Surgical Pathology Surgical Pathology Surgical Pathology Surgical Pathology Neuropathology

Moffitt Cancer Center, Tampa, FL JHU, Applied Physics Lab, Laurel, MD Washington University, St. Louis, MO University of Pittsburgh, Pittsburgh, PA University of California at San Francisco, San Francisco, CA Lenox Hospital, New York, NY Sinai Hospital, Baltimore, MD Memorial Sloan-Kettering Cancer Center, New York, NY

Associate Professor

Immunology

Dr. Jackson and Our New Professors



Lee Martin, Mary Glenn Fowler; Susan Eshleman, Brooks Jackson, Brigitte Ronnett, Walter Kaufmann, Charles Steenbergen

Welcome to the Graduate Training Program in Pathobiology 2007-2008 Incoming Students

Kristen Bankert

Born in York, Pennsylvania, Kristen received her B.S. in Genetic Engineering from Cedar Crest College in May 2007. While at Cedar Crest she was a member of the Hale Lab where, for her senior thesis, she worked to understand the variability of hemolytic activity in Chromobacterium violaceum, an opportunitistic pathogen. She was the President of the Cedar Crest Chapter of Beta



Beta Beta, a research director, and a lab assistant. In the summer of 2006 she completed a summer internship at Johns Hopkins where she cloned and overproduced two enzymes of the MEP pathway and performed Michaelis-Menten kinetic assays on another enzyme in the pathway. Kristen would like to study microbial pathogenesis.

Jessica Lidstrom

received her B.S. and M.S. in Biology from American University in May 2004 and August 2005 respectively. Her M.S. thesis focused on lung cancer research and was performed at the National Cancer Institute. She is currently completing pre-doctoral research at the National Institute on Alcohol Abuse and



Alcoholism, conducting a combined genetic and expression analysis in human postmortem samples. Jessica would like to explore the different tracks in the Pathobiology program and her career goal is to become a researcher who can contribute to the field of biomedicine.

Kah Jing Lim

Kah Jing was born in Singapore and received Singapore in 2006 where she graduated with honors in Life Science with a concentration in Biomedical Sciences. Kah Jing spent a year in a developmental neurobiology laboratory at the Institute of Molecular and Cell Biology, working on projects that aimed at identifying novel pro-



teins involved in Drosophila neuroblast asymmetric division in an attempt to elucidate its underlying molecular mechanisms. Her long term goal is to be a research scientist, focusing on understanding genetic and molecular changes that lead to cancer development. Kah Jing is one of our Margaret Lee fellows.

Yiting Lim

Yiting was born in Johor Bahru, Malaysia, and received all her education in Singapore. She graduated from the National University of Singapore with a B.S. (honors) in Life Science, concentration in Molecular and Cellular Biology, in 2007. Her research experience includes working with transcription factors in embryonic stem cells at the Genome Institute of Singapore, developmental neurobiology over a sum-



mer at Caltech, and an internship in a biotech company. At Johns Hopkins she would like to deepen her understanding of Neuroscience and study the molecular pathogenesis of neurodegenerative disorders. Yiting is fascinated by the application of basic research in translational research and medicine; one of her many interests would be to work on treating neurodegenerative diseases such as ALS and Parkinson's using stem cells. She hopes to establish a career in translational research and holds on to the dream of applying breakthroughs in basic research in the clinics. Yiting is one of our Margaret Lee fellows.

Ayon Nandi

A yon was born in Calcutta, India, and grew up in central New Jersey. He attended Yale and received his B.S. in Molecular Biophysics and Biochemistry in 2001, and an M.S. from Johns Hopkins in 2004. His research experiences include summer research fellowships at Yale, a post-baccalaureate fellowship at the NIH and a research assistant at JHU. Ayon has co-authored several publications, and was first author on a paper describing a novel



serotonin inhibitor. Ayon's other post-baccalaureate research experiences included work in neurotransmitter interactions, and imaging neuroreceptors in drug abuse, Tourette's syndrome, Rett's syndrome and schizophrenia. Ayon's goal is to pursue translational research on neurological disorders — to look at clinical and pathological correlations to different disease states. He is interested in researching novel medications and clinical treatments for neurological disorders.

Denise Schultz

Denise was born in Denison, Iowa and currently lives in Baltimore, Maryland. She received a B.S. in Biology from the University of Dubuque in 1989, an M.S. in Biology from the University of Northern Iowa in 1999, and a D.V.M. in Veterinary Medicine and Surgery from Iowa State University in May 1997. Her interests are focused on infectious diseases. Prior to starting at Johns



Hopkins, Denise had worked in developing an animal model for monkeypox virus. Her long term goal is to work within an academic or government setting as a researcher and a board certified veterinary pathologist.

Department of Pathology Incoming House Staff, 2007-2008

Joseph Aoki

Joseph was born in Honolulu, Hawaii. He completed his undergraduate training at the University of Washington where he received a degree in Zoology with a



minor in Medical History and Ethics. He subsequently returned to his home state to attend the University of Hawaii, John A. Burns School of Medicine. While in medical school, Joseph studied the Wiscott Aldrich Syndrome protein as a Howard Hughes Medical Institute-National Institutes of Health Research Scholar. His research led to several awards including recognition as the "Scholar of the Year" in 2006. A surfing enthusiast, Joseph spends his free time "hangin' loose" on the beaches of Honolulu. He will be pursuing AP/CP training.

Wei Jiang

Wei was born in Beijing, China. She received her medical education at Beijing Medical University where she was in the top 5% of her class. Following graduation, she



enrolled at Syracuse University and went on to receive a Ph.D. As a post-doctoral fellow at Harvard she studied mammalian cell growth and differentiation, leading to publications in several high impact journals. While at Harvard, Wei developed an interest in pathology during a clinical rotation at Massachusetts General Hospital. She hopes to apply her strong basic science background to translational research within the field and to one day be an academic pathologist. She will be pursuing AP/CP training.

Matthew Karafin

Matthew was born in Philadelphia, Pennsylvania. He graduated from Grinnell College in Grinell, Iowa where he received a degree in Biology. He



then proceeded to the University of Iowa College of Medicine where he received several scholarships and was elected to Alpha Omega Alpha. In medical school, he conducted a retrospective study on the circadian patterns of seizures in patients with temporal lobe epilepsy. Outside of work Matthew's interests range from ancient cultures to music, and he is a talented saxophonist. He will be pursuing AP/CP training.

Carla Ellis

Columbus, Georgia. She graduated from Howard University in Washington, DC, with a degree in psychology. Carla comes to us with significant experience in pathology,



having received a Masters degree in Anatomic Pathology from the University of Maryland and subsequently worked as a Pathologist's Assistant. She received her medical education at the University of Nevada School of Medicine in Las Vegas where she was involved in microvascular research. In addition to taking in an occasional Wayne Newton concert, Carla was very active at the community and national level, spending time in Washington, DC as a lobbyist for global AIDS prevention. She is pursuing AP/CP training.

Kathryn Jockovic

Kathryn Jockovic was born in Nancy, France. As an undergraduate at the University of Colorado she majored in Biochemistry and Women's Studies. While there, she ambitiously



sought to design a silicon chip with an embedded nanopore that was capable of discriminating between the bases of long strands of DNA. Finally coming to her senses as a medical student at George Washington University, Kathryn decided to pursue pathology. In addition to her academic endeavors, she is an accomplished dancer and is currently studying Argentine tango. She is interested in AP/CP training.

Oliver McDonald

Oliver McDonald was born in Jackson, Tennessee. Following his undergraduate education at the University of Tennessee, he entered the Medical Scientist Training Program at the



University of Virginia where he studied histone modification as it relates to smooth muscle cell physiology and pathology. A prolific researcher, his work was recognized with several awards and training grants. While not reading and thinking about medicine and science, Oliver is an ardent sports fan. He will be pursuing AP/CP training.

Department of Pathology Incoming House Staff, 2007-2008

Brent Orr

Brent Orr is a native of Bloomington, Illinois. His undergraduate, graduate and medical education was undertaken at the University of Illinois. During his Ph.D. work, he



investigated tumor immunobiology and demonstrated the role of CD28 ligand density in T-cell stimulation. Outside of the lab Brent was committed to the service of indigent populations through community activities. In his free time he enjoys outdoor sports including wakeboarding, which Wikipedia defines as "a water sport which involves riding the wake of a speed boat on a single board." He will be pursuing AP/CP training.

Hillary Ross

Hillary was born in New York, New York. She majored in Neuroscience as an undergraduate at Pomona College and subsequently served as a



research assistant at the Cognitive Neuropharmacology Unit in Bethesda, Maryland where she studied dementia. Hillary excelled as a medical student at the University of Arizona College of Medicine where she was elected to Alpha Omega Alpha in addition to receiving recognition for her commitment to underserved populations. Her interests include tennis, travel and literature. She will be pursuing AP/CP training.

Safia Salaria

Safia was born in Cincinnati, Ohio. Following her undergraduate education at the University of the Punjab in Lahore, Pakistan, she went on to receive her



medical degree from King Edward Medical College, Pakistan. More recently, Safia was a familiar member of our Department, conducting pancreatic cancer research with Drs. Maitra and Goggins. When not discovering biomarkers, she enjoys traveling and learning about different cultures and is fluent in French, Arabic, Urdu, Punjabi and Hindi. Safia will be pursuing AP/CP training.

Aatur Singhi

Achicago, Illinois. After studying Chemistry as an undergraduate at Northwestern University, he entered the M.D./Ph.D. program at the University



of Illinois, Chicago where he developed a new genetic methodology for discovering potential tumor suppressors. After being dragged to Cleveland by his thesis advisor, Aatur proved his resilience by receiving several research awards before completing his training at Case Western Reserve University. In his spare time, he is an avid tennis player and helped to set up a tennis club at the Cleveland Clinic Lerner Research Institute. He will be pursuing AP/CP training.

Rui Zhe

R China. She received multiple academic honors as a medical and Ph.D. student at Beijing Medical University and somehow managed to squeeze in an



internal medicine residency. Following completion of her training, she came to Johns Hopkins where she has spent time as a postdoctoral fellow and research associate. Her work has clarified the role of the FLT3 receptor and its ligand in leukemogenesis, leading to publications in several prestigious journals. In her free time, Rui enjoys cooking, hiking and spending time with her family. She is interested in AP/CP training.

News from the Fellowship office

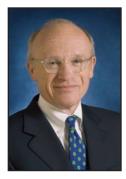
Recruiting fellows: For the first time, our Department will have a booth at the annual USCAP Fellowship Fair for Pathologists-in-Training. The Fair will be held at the Annual Meeting in Denver on Sunday, March 2, from 5:00 - 7:00 p.m. in the Four Seasons Ballroom at the Colorado Convention Center.

Please contact Dr. David Berman or Terry Aman if you would like more information about Pathology's representation at the Fellowship Fair.

Awards/Recognition

International Skeletal Society

Edward McCarthy, M.D., has been awarded the Medal of the International Skeletal Society. This award was presented in Budapest on October 8, 2007.



The 2007 Fred Stewart and 2007 Distinguished Pathologist Awards

Peter Burger, M.D. received the 2007 Fred Stewart Award from Memorial Sloan-Kettering Cancer Center, and the 2007 Distinguished Pathologist Award from the United States and Canadian Academy of Pathology. The Distinguished Pathologist Award is presented to an individual who is recognized as making major contributions to pathology over the years.

The Herman and Gertrude Silver Award



J. Brooks Jackson, M.D., M.B.A. received the Herman and Gertrude Silver Award from Children's Hospital of Philadelphia for his work in preventing the transmission of HIV from infected mothers to their newborn babies. This award honors individuals who have made significant contributions in the field of pediatric HIV and AIDS. In conjunction with this award, Dr. Jackson delivered a lecture titled "Advances in the Prevention of HIV Perinatal Transmission."

Physician-in-Training Award

Janis Taube, M.D., M.Sc. won the Physician-in-Training Award for the best resident/fellow oral abstract presentation titled "Inverse relationship of HPV16 infection and disruptive p53 mutations" at the 2007 American Society for Dermatology Annual Meeting. Her work has also been accepted for publication in *Clinical Cancer Research*.

Ramzi Cotran Young Investigator Award

Anirban Maitra, M.B.B.S. will receive the 2008 Ramzi Cotran Young Investigator Award from the United States and Canadian Academy of Pathology at their 97th Annual Meeting in Denver, Colorado. The Ramzi Cotran Young Investigator Award recognizes a body of work, by a USCAP member under the age of 45, which has contributed significantly to the diagnosis and understanding of human disease.

Translational Research Award

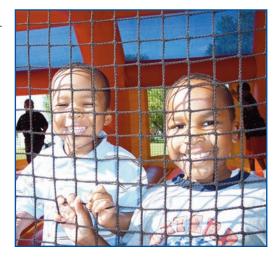
Xing Fan's abstract received a Translational Research Award at the Society of Neuro-Oncology Annual Meeting on November 17, 2007. Dr. Fan received a plaque and \$2,000 award.

Pathology Employee Appreciation Picnic

After many months of careful behind-the-scenes planning, the Pathology Department held its annual Employee Appreciation Picnic on Sunday, September 16, 2007, at Conrad's Ruth Villa, a private waterfront park in Middle River, Maryland.

A chilly morning gave way to a sunny balmy afternoon. Overlooking the sparkling waters of Frog Mortar Creek as sailboats glided by, employees and their families relaxed and enjoyed the beautiful scenery. Steamed crabs, corn on the cob, crab soup, and ice cream were among the menu items. A disc jockey provided music, and volleyball and ultimate Frisbee games were played in the park. This year's picnic had special activities for younger children.

Approximately 1,200 Pathology employees and family members attended this summer's Appreciation Picnic. Dr. Jackson would like to again thank Rosemary Hines, Susan Carreira, and Stacey Morgan for their hard work in making the day a special and memorable one for employees and their families.



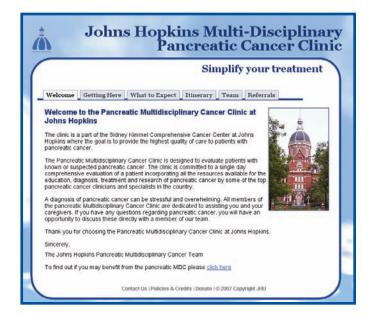






...On The Web

The new Multi-Disciplinary Pancreatic Cancer Clinic Web site has been a big success. Launched last spring, it provides patients and families quick access to important information such as services provided by the clinic, which patients are appropriate candidates for the clinic, and how to reach clinic members.



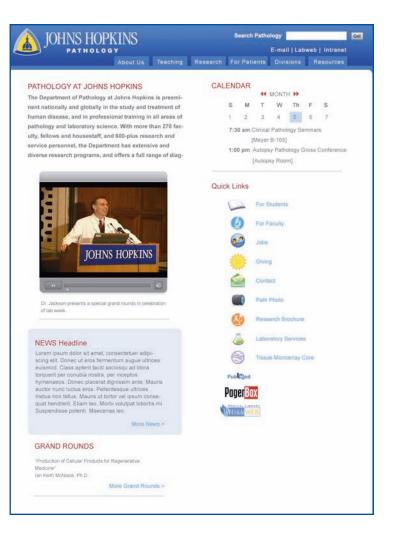
The Pathology Department has a new Web server for the division and disease Web sites, and as older sites are migrated to the new hardware, they will be optimized for accessibility and generally spruced up. Coldfusion 8.0 and PHP are available, as well as SQL Server 2005. Any pathology staff currently maintaining a lab or division site can contact Jim Doran for more information.

We also recently piloted an online training system using Moodle, a free, open source course management system. Peggy Coulter implemented a training

HU Pathology Moodle			You are not logged in. (Logi English (en)							
Available Courses		Cale	ndar							
DHSI ME600.700 Health Sciences Informatics Systems Admin: Robert Miller	[Miller - Second Quarter]	< Sun 4 11 18		Tue 6	Wed 7 14 21	Thu 1 8	Fri 2 9	3 10		
PDS Staff Training Admin: Martine Uveges	Training resource center for PDS staff members	25	26	27	28		30	24		
Coordinator Training 101 Trainer: Peggy Coulter Trainer: Erin Gover Trainer: Heidi Hanes [™] [™]	Before being assigned to work with an international Laboratory Site under the SMILE contract, the Coordinator will undergo an 10 week training period. This training is to familiarize the employee with the SMILE contract and the Johns Hopkins University procedures, policies and Information Systems. Training will be conducted by an assigned coordinator with assistance from all members of the team.									

program for coordinators scheduled to work with international laboratory sites under the SMILE contract. Moodle has proven to be flexible and powerful, and we are excited about extending this service for other distance and on-site learning opportunities.

Finally, the pathology Web site is currently being developed with a new look. The site has been designed to improve the service provided to our thousands of daily visitors. In addition to a new look, the site will provide functionality such as pod casting, RSS feeds and more streaming video. Pathology staff and house resources are also getting a new area, to better find your favorite tools. Coming soon to your browser...



Have an idea for a new Web project? Need help updating an existing Web site? Contact Jim Doran at jdoran5@jhu.edu.

Calendar

March 1-7, 2008

United States and Canadian Academy of Pathology 97th Annual Meeting Colorado Convention Center; Denver, Colorado

March 2, 2008

United States and Canadian Academy of Pathology Fellowship Fair - Four Seasons Ballroom Colorado Convention Center; Denver, Colorado

March 3, 2008

Johns Hopkins Pathology Alumni Reception United States and Canadian Academy of Pathology Hyatt Regency Denver at Colorado Convention Center - HH Centennial B; Denver, Colorado

April 17, 2008

Pathology Young Investigators' Day 2008 The Johns Hopkins Medical Institutions Campus; Baltimore, Maryland

April 16-19, 2008

9th Annual Mastering the Challenges of Cytopathology Tremont Plaza Hotel; Baltimore, Maryland Home Study - February-April 2008 Course - Tremont Grand Conference Center Baltimore, Maryland - April 16-18, 2008 Independent Slide Review Day - April 19, 2008

May 16, 2008

Pathology Awards Dinner The Belvedere; Baltimore, Maryland

Department of Pathology

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Department of Pathology Web site: http://pathology.jhu.edu

Congratulations to the 9th Annual Pathology Young Investigators' Day Awardees April 5, 2007

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

For Excellence in Basic Research

Jose Garcia-Garcia, Ph.D. Paul Esteso, M.D., Ph.D. Yen-Chun Liu, M.D. AeRyon Kim, B.A. Kazunori Murata, B.A. Davinna Ligons, B.S. Abdiaziz Mohamood, Ph.D. Kedar Naraya, B.A. Noriyuki Omura, Ph.D.

For Excellence in Clinical Research

Denfeng Cao, M.D., Ph.D. Wenle Wang, M.D., Ph.D. Tamara S. Flys, B.S. Basim Soliman Mohammed, M.D. Zsolt Jobbagy, M.D., Ph.D. Shu-Ling Liang, Ph.D. Adeboye O. Osunkoya, M.D. Janis Marie Taube, M.D., M.Sc. Julie Wu, M.D.

For Excellence in Translational Research

Eli E. Bar, Ph.D. Yu Li, B.A. Bruce Huang, B.A. Xiaobing He, Ph.D. Jesse Rowley, B.S. Shien Tsui Liu Micchelli, M.D., M.S.