





The Johns Hopkins Medical Institutions

Department of Pathology

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Director's Corner

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

Despite the high gas prices and start of the economic downturn this past year, the Department of Pathology has witnessed another year of growth in most areas.

The number of laboratory tests performed by Johns Hopkins Pathology as reflected in Relative Value Unit (RVUs) increased by 1.6%



Dr. J. Brooks Jackson

and outreach RVUs increased by 3.2%. Together with good cost control measures Pathology earned a contribution margin incentive of more than \$850,000 while meeting the care needs of our patients. Congratulations are in order for the Pathology laboratory staff, lab management and directors for working to achieve this favorable balance which is essential 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 by 3.4% and 1.3%, 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

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Spotlight: Johns Hopkins Bayview Pathology

Introduction and History

Pathology is an integral part to the patient care provided at Bayview Medical Center, its outpatient clinics, the Johns Hopkins Care Center, and the surrounding community. Pathology at Bayview has undergone several changes during the past two decades and currently has seven faculty members. In addition to the clinical services provided, the faculty is involved in teaching residents and medical students, as well as research in various areas.

In 1773, the Maryland legislature authorized the purchase of 20 acres for an Almshouse "for the reception and the lodging of the poor." In 1774, the Baltimore City and County Almshouse, the first institutional ancestor to the Baltimore City Hospitals and ultimately the Johns Hopkins Bayview Medical Center, opened its doors. Throughout the 1800s the structure of Maryland hospitals underwent some restructuring, and the Almshouse assumed a greater role in medical care for patients. In 1853, Baltimore City and Baltimore County became separate legal entities, and this change also affected the role and location of the Almshouse. After the purchase of additional land outside the city limits a new building was established and the residents of the former "Calverton Almshouse" were moved to the new "Baltimore Bay View Asylum." Over the next century this new structure underwent many changes. By 1929, with the influence of The Johns Hopkins University and the University of Maryland, Baltimore City completed a new general hospital, a tuberculosis sanitarium, a service building and a nurse's

home for the then renamed City Hospitals. As an aside, many of the photographs used by Arnold Rich in his textbook on tuberculosis come from patients hospitalized in the sanitarium. In 1935, a new 450-bed hospital, the present day A-building, opened. After several decades of great achievements but also troubled financial times in an ever changing healthcare environment, City Hospital was transferred in 1984 to The Johns Hopkins University; the name was changed from City Hospital to Francis Scott Key Medical Center in 1984, and ultimately to Johns Hopkins Bayview Medical Center in 1992. The Johns Hopkins Department of Pathology assumed administrative functions for the Clinical Pathology Laboratories in July of 1989 and for the Anatomic Pathology

Director's Corner

patient outcomes and more cost effective care. Achievements include less wastage of blood, fewer mislabeled specimens, fewer unsuccessful phlebotomy attempts, and faster reporting of critical test values. Barbara Parsons and her staff, working with 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 program, 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 for our residency program. Women are well represented in Pathology training programs constituting 16 of 33 residents in the Residency program and 26 of 39 in the Pathobiology graduate student program. In the past two years, 5 of 14 (36%) faculty promoted to Professor of 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, pro fee income increased by 11% driven primarily by an increase in outside consults for interpretation.

Research funding reached another all time high with an annual increase of 3.1% at a time when the NIH budget was flat (see figure 1). Over 250 first or last author peer-reviewed articles were published by primary faculty in Pathology. In addition, donations of over \$6.7 million dollars were 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, 7 excellent pathology residents started this past July and 12 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 plays in year 2.

Despite the notable achievements this past year, the current academic year will bring new challenges including the change from JCAHO to the College of American Pathology for survey accreditation of the laboratories, probable reductions in philanthropy, flat NIH funding for grant awards, proposed government reductions in pathology pro fee 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



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Services in January of 2005.

The Anatomic Pathology Service

The Anatomic Pathology Service at Bayview provides a full array of services to the practicing physicians at The Johns Hopkins Bayview Medical Center and the surrounding community.

The Surgical Pathology Service is staffed by six pathologists: Fred B. Askin is Chief of Pathology and a world authority in adult and pediatric pulmonary pathology. Edward Gabrielson is a senior surgical pathologist with extensive research in lung cancer. Frank Kuhajda is another senior surgical pathologist with a strong research program in fatty acid synthase and its role in cancer. Mostafa Fraig is an experienced surgical pathologist and cytopathologist with training and experience in pulmonary pathology, especially in non neoplastic lung diseases. He also directs the Cytopathology Service. Zahra Maleki is an experienced surgical pathologist and cytopathologist with an interest and experience in gynecologic pathology. Jill Allbritton is a dermatopathologist and a practicing dermatologist who serves as the primary dermatopathologist on the service.

Two experienced pathology assistants are on staff: Leigh Plomchok and Gerrun March. In addition, two residents from the Department of Pathology rotate and assist with the duties in anatomic pathology at any given time.

The Section provides routine surgical pathology service with a well balanced mix of small biopsies and large specimens. Frozen sections and gross assessments are available 24/7. A state-ofthe-art fine needle aspiration (FNA) clinic is available on the premises for the performance of FNA on superficial and accessible masses. Two experienced cytotechnologists are available for assisting with on-site evaluation and screening of cytolopathologic material and preparations.

The Service benefits and makes full use of the resources available at The Johns Hopkins Hospital including the superb expertise available for consultation. In addition, the immunohistochemical, molecular and flow cytometric laboratories are used on a daily basis for ancillary studies.

The concentration of pulmonary pathology expertise at Bayview Medical Center pathology

makes it the main point for consultations from within and from outside Johns Hopkins.

The Service handles approximately 9000 surgical pathology cases every year. The cytology service handles about 600 cytologic preparations and FNA biopsies each year. The pulmonary pathology consultation service signs out more than 1200 cases each year with the vast majority coming from outside Johns Hopkins. The staff participates in many activities on campus including a weekly tumor board and Cyto/Histpathologic correlation conference.

There is ample research activity within the department including basic science research conducted mainly by Drs. Gabrielson's and Kuhajda's labs. Independent as well as collaborative research is provided by the other staff members in their respective fields of expertise.

The Clinical Pathology Laboratories

The clinical pathology laboratories provide a wide variety of services in clinical chemistry, hematology, coagulation, urinalysis, immunology, medical microbiology, and transfusion medicine to the patients at Bayview Medical Center, its outpatient clinics, and the Care Center, as well as the surrounding community, including the National Institute on Drug Abuse (NIDA). The clinical pathology department is staffed by one pathologist, Stefan Riedel, a clinical pathology resident, and 105 technical and clerical staff. During the fiscal year 2008, the clinical laboratory processed 1,088,841 specimens/test requests in the core laboratory and 63,961 specimens/test requests in microbiology. The blood bank provides basic transfusion services for patients at Bayview Medical Center, with an average annual volume of 7800 (+) requests for L-RBCs, 400 (+) platelets, and many other blood products and components, accounting for a total volume of 11,822 blood products, 8427 transfusions, and 15,250 crossmatches. In addition, Dr. Riedel provides consultation services to Bayview physicians for questions related to clinical pathology, including appropriate antimicrobial management, transfusion practices, specialty products, and transfusion reactions.

In the sections of microbiology and clinical chemistry, recent upgrades and improvements in laboratory technology, including newer improved blood culture technology, antimicrobial susceptibility testing, and new integrated chemistry analyzers, have improved the laboratory services provided to patients and physicians at Bayview.

As a clinical pathologist, Dr. Riedel specializes in Medical Microbiology; his research is focused on the epidemiology and mechanisms of emerging bacterial resistance, and the improvement of laboratory methods for detection of bacterial resistance. Of special interest are the emerging resistances in gram-negative bacteria, such as Acinetobacter baumanii and Pseudomonas aeruginosa in patients with bacteremia/sepsis and burn wounds. Current studies investigate susceptibility testing of aforementioned organisms against all current carbapenems, as well as newer investigational antimicrobials.

An additional area of research focuses on the development of newer methods and improved algorithms for the detection of bacteremia/sepsis. Studies in this focus area include the evaluation of newer inflammatory markers (e.g. procalcitonin) together with blood cultures in the diagnostic assessment of presumed bacteremic patients in the emergency department, ICU, and burn/wound center. Various collaborative research initiatives exist with the departments of Infectious Diseases and Infection Control, Orthopaedic Surgery, as well as the Burn Center and the Asthma and Allergy Center.

Through the "senior clinical pathology resident" rotation, residents in the pathology training program receive comprehensive instruction in all administrative areas of the pathology department. During this two-month rotation and through various other educational modules, Dr. Riedel instructs pathology residents in the basic and advanced concepts of laboratory management, healthcare economics and laboratory finance management, effective leadership and personnel management, various approaches to quality improvement processes, and laboratory utilization management. The pathology residents are actively engaged in the everyday operations of the laboratory assisting Dr. Riedel

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in his various functions, and participate in some of the financial and laboratory utilization management projects, conducted jointly between the clinical pathology department and the administrative offices at Bayview.

Since August 2007, the department has instituted regularly scheduled educational

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activities ("Lab-Rounds"), during which various topics in clinical laboratory medicine as well as current research topics are presented by Dr. Riedel, the CP residents, or invited speakers from other departments at Bayview. Pathology at Bayview also provides training of students in medical technology through a collaborative effort with Morgan State University and the University of Maryland. In addition, Dr. Riedel provides teaching to medical students, Bayview house staff and infectious disease fellows.



From the left: Mostafa Fraig, Jill Allbritton, Fred Askin, Zahra Maleki and Stefan Riedel

New Director of Postdoctoral Fellowship Programs

In July 2008, Christine Iacobuzio-Donahue, M.D., Ph.D., was appointed the Director of Postdoctoral Fellowship Programs for the Department of Pathology, a position that was held by David Berman for four years. There are 112 clinical and research fellows in the department from 22 different countries, and it is the goal of Dr. Iacobuzio as fellowship director to represent the diverse interests of all of our fellows, to facilitate continuous quality improvement of fellowship programs, and to make available opportunities within the department to supplement the fellowship experience.



Johns Hopkins to Install New Laboratory Information System

The Department of Pathology and the Johns Hopkins Health System recently finalized a contract with SCC Soft Computer (Clearwater, FL) for a new laboratory information system (LIS) for Johns Hopkins Pathology. This new system, which will be deployed initially in the Core, Microbiology, Immunology and other selected laboratories, will eventually replace most of the functions currently performed by Johns Hopkins' aging in-house developed LIS.Pathways recently spoke to Dr. Robert Miller, Director of the Pathology Informatics Division, about the replacement of the current Pathology Data Systems (PDS) laboratory information system.

What are the benefits of switching from an in-house developed system to a turnkey system from an LIS vendor?

We know that the current system (PDS) has features that were developed over the years specifically for our laboratories. The state-of-the-art in computer hardware and software, and the state-of-the-LIS industry have all advanced enormously since the early days of PDS in the 1970s and 1980s. The primitive LISs of three decades ago required 50-100 person-years of software development, compared to the thousands of person-years of programming required for a comprehensive contemporary LIS. Software development costs (and opportunity costs) now make in-house LIS development impractical and imprudent, but at the same time, such investments in software development by vendors mean that the modern LIS has very extensive and rich functionality and is unlikely to be missing essential features needed by institutions such as Johns Hopkins. Additionally, and perhaps more importantly, we now have a faculty and staff who are sophisticated computer users who can make use of new LIS functionality to provide improved laboratory services and to conduct novel research studies that previously may not have been possible. The principal advantages of switching to a vendor LIS include improved overall LIS functionality: an improved graphical ("Windows") user interface that helps reduce training time and minimize user errors; greater involvement of laboratory service levels, and easier system expansion for new automation and additional outreach work. Important advantages of a vendor LIS to the PDS staff include help from vendor personnel with system support and troubleshooting – especially after hours and on weekends, and freeing of additional PDS staff time for other projects.

Why was the SCC LIS chosen from among the other potential vendors?

SCC Soft Computer (Clearwater, FL) is a privately owned, 30 year-old company with more than 1300 employees, 400 of whom are devoted to LIS development, installation and support. The SCC LIS was selected to replace our current system because of its extensive functionality for multiple areas of our service laboratories – although we will be deploying the system initially only in the Core, Microbiology, Immunology and selected other laboratories. Soft's LIS product has the richness of functionality and maturity that is unmatched by other vendors – much less by ongoing in-house software development.SCC has approximately 500 systems installed under 300 contracts in hospital and commercial reference laboratories, mostly in North America. In addition to Johns Hopkins, recent contracts include M.D. Anderson, the University of Michigan, the Mayo Clinic, the NIH Clinical Center, and Mount Sinai Hospital in Toronto, where the system supports a third of all microbiology testing done in the Toronto region.

How was the new SCC LIS selected?

Our selection process for the new LIS has been a complex and rigorous one, with assistance from internal IT and legal staff, and help from outside LIS consultants and attorneys. The evaluation and selection process has been overseen by a multidisciplinary steering committee that included Departmental and Institutional members. Multiple on-campus system demonstrations were provided by LIS vendors, and site visits were made to other institutions. The SCC LIS was clearly the system of choice.

What is the initial deployment plan for the SCC LIS here, and when will all areas of Johns Hopkins Pathology be using the system?

It will take approximately 20 months to configure and test the new system and to convert the Core, Microbiology, Immunology and selected other laboratories and functions from PDS to the new SCC LIS. The Surgical Pathology leadership has requested that upgrading of the Anatomic Pathology computer system be deferred until such time as SCC and/or other LIS vendors have developed additional desired functionality — which is anticipated to happen in the next two years. Transfusion Medicine has expressed interest in new computerization for the Blood Bank, and is currently investigating systems that may be suitable for Johns Hopkins. Plans for use of the new system in other Johns Hopkins Pathology service areas are currently being developed.

Page 6 New Grants and Contracts Awarded to Pathology Faculty, 2008

FACULTY MEMBER	AWARD TYPE	AGENCY	DATES	TOTAL FUNDING (\$)
Anders, Robert	R01 Grant	NIH/NIDDK	6/1/08 - 5/31/13	1,742,500
Bagnasco, Serena	Grant	National Kidney Foundation	7/1/08-6/30/09	7,827
Begum, Shahnaz	Grant	FAMRI	7/1/08 - 6/30/11	325,500
Berman, David	Grant	Children's Cancer Foundation	10/1/07 - 9/30/08	45,000
Berman, David	Contract	Stemline Therapeutics	8/1/08 - 7/31/10	57,997
Borowitz, Mike	Subcontract	National Childhood Cancer Fdtn.	3/12/07 - 3/12/09	37,943
Borowitz, Mike	Subcontract	National Childhood Cancer Fdtn.	3/1/08 - 2/28/09	517,034
Burger, Peter	Subcontract	National Childhood Cancer Fdtn.	3/1/08 - 2/28/09	21,762
Burns, Kathleen	K08 Grant	NIH/NCI	8/1/08 - 7/31/13	702,675
Burns, Kathleen	Grant	Burroughs Wellcome Fund	9/1/08 - 8/31/13	700,000
Carroll, Karen	Contract	Geneohm Sciences Canada	9/18/07 - 9/17/08	41,171
Carroll, Karen	Contract	Prodesse, Inc.	4/15/08 - 10/31/08	39,715
Carroll, Karen	Contract	MicroPhage	9/1/08 - 1/31/09	23,530
Caturegli, Patrizio	R21 Grant	NIH/NIDDK	2/1/08 - 1/31/10	410,000
Chan, Daniel	Contract	Vermillion	1/1/08 - 12/31/10	1,854,540
Chan, Daniel	Contract	ThermoFisher Scientific	1/1/08 - 12/31/09	110,000
Chan, Daniel	Contract	Beckman Coulter	6/1/08 - 5/31/09	69,500
Cihakova, Daniella	Grant	Myocarditis Foundation	7/1/08 - 6/30/09	30,000
Eberhart, Charles	Grant	Children's Cancer Foundation	10/1/07 - 1/31/09	166,000
Eberhart, Charles	R21 Grant	NIH/NCCAT	5/1/08 - 4/30/10	451,000
Epstein, Jonathan	Contract	Veridex, LLC	9/19/08 - 9/4/09	90,000
Eshleman, Jim	R01 Grant	NIH/NCI	9/1/08 - 7/31/12	1,225,080
Eshleman, Susan	Contract	Social & Scientific Systems	1/1/08 - 5/31/09	250,000
Eshleman, Susan	Contract	Social & Scientific Systems	6/1/08 - 5/31/09	85,840
Gabrielson, Edward	T32 Grant	NIH/NCI	9/1/07 - 8/31/12	2,052,883
Gabrielson, Edward	Contract	KangLaiTe USA	2/1/08 - 1/31/09	137,600
Gabrielson, Edward	Grant	Susan G. Komen Foundation	9/19/08 - 9/18/11	600,000
Gabrielson, Edward	Grant	Lung Cancer Research Foundation	9/1/08 - 8/31/09	50,000
Goggins, Michael	Grant	The V Foundation	11/1/07 - 10/31/10	600,000
Goggins, Michael	Grant	Lustgarten Foundation	1/1/08 - 12/31/08	100,000
Illei, Peter	Contract	Cerus Corporation	9/15/07 - 9/30/07	6,269
Jagu, Subhashini	Grant	Glaxo SmithKline	5/1/08 - 4/30/10	158,979
Jagu, Subhashini	Grant	Prevent Cancer Foundation	7/15/08 - 7/14/10	80,000
Kimura, Hiroaki	Grant	American Thyroid Association	7/1/08 - 6/30/09	28,750
Koliatsos, Vassilis	Contract	Ethicon, Inc.	12/17/07 - 12/16/08	
Koliatsos, Vassilis	Contract	Novartis	7/1/08 - 6/30/10	402,970
Lai, Shenghan	R01 Grant	NIH/NIDA	9/30/08 - 6/30/13	3,803,616
Lee, Michael	Grant	Alzheimer's Association	9/1/07 - 8/31/10	240,000
Machairaki, Vasiliki	Grant	Maryland Technology Dev. Corp.	7/1/08 - 6/30/10	110,000
Maitra, Anirban	Contract	Sign Path Pharma, Inc.	9/18/07 - 9/17/08	164,000
Maitra, Anirban	Grant	Lustgarten Foundation	1/1/08 - 12/31/08	97,845
Maitra, Anirban	Contract	Novartis	4/30/08 - 4/29/09	146,500
Ness, Paul	U01 Grant	NIH/NIAID	9/1/07 - 8/31/12	817,398
Ness, Paul	Contract	New England Research Institutes	9/1/07 - 8/31/12	146,574
Ness, Paul	Contract	Bioarray Solutions	5/15/08 - 5/14/09	42,451
Riedel, Stefan	Contract	Brahms Diagnostics, LLC	2/1/08 - 1/31/09	70,000
Savonenko, Alena	Grant	Wallace Foundation	7/1/08-6/30/09	100,000
Savonenko, Alena	P01 Grant	NIH/NIAID	9/1/08 - 8/31/13	10,200,464

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FACULTY MEMBER	AWARD TYPE	AGENCY	DATES	TOTAL FUNDING (\$)
Shih, Ie-Ming	R01 Grant	NIH/NCI	12/5/07 - 11/30/12	1,555,480
Shih, Ie-Ming	R01 Grant	NIH/NCI	4/1/08-1/31/13	1,701,500
Torbenson, Michael	R01 Grant	NIH/NIDDK	1/15/08 - 11/30/11	1,394,000
Troncoso, Juan	Contract	UC - Irvine	3/1/08 - 2/28/09	80,495
Valsamakis, Alexandra	Contract	Roche Molecular Systems	3/3/08 - 9/3/08	13,365
Wasowska, Barbara	Contract	Talecris Biotherapeutics	7/1/08 - 6/30/10	300,000
Wasowska, Barbara	Grant	American Heart Association	7/1/08 - 6/30/10	132,000
Webb, Tonya	K01 Grant	NIH/NCI	7/1/08 - 6/30/13	662,580
Westra, William	Contract	Rosetta Genomics	8/27/08 - 8/26/09	839
Wong, Philip	Grant	Met Life Foundation	1/1/08 - 12/31/09	175,000
Xiao, Zuoxiang	Grant	American Heart Association	7/1/08 - 6/30/10	80,000
Zhang, Hui	Pilot Project	NIH/NCI	8/1/08 - 7/31/10	110,000
			Total	\$35,519,324

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Johns Hopkins to Install New Laboratory Information System

What are the Pathology faculty and staff's views about this change to a new LIS?

Everyone who has been involved in this project to date has become very enthusiastic about changing to the new LIS. All stakeholders including Institutional, Department and Divisional leadership and faculty, the Laboratory and PDS staffs, as well as our Institutional IT group — both support and will benefit from this conversion.

How much will it cost to switch from PDS to the new vendor LIS?

The new LIS is a big project, time and dollar-wise, that will be paid for out of Johns Hopkins Health System capital budgets and operating budgets. Although the project will be incrementally funded, the 10-year total cost of ownership (TCO) for the new LIS will likely be about \$20,000,000 – with an interesting cost breakdown: \$5 million for software licenses and hardware, of which only \$500,000 dollars will be spent for server hardware and storage; \$5 million for configuration and testing, much of which will be done in the first two years; \$5 million to the vendor and others for ongoing hardware and software maintenance; and \$5 million for equipment upgrades, additional system support, and software customization. This cost breakdown is quite different than those of the early computer era, where 90% of the costs for an IT project were related to the hardware!

Any closing comments about this exciting new change?

This is a huge project, but I am confident we are doing the right thing. We have support from all involved, and we have a superb team to make the project a success by every measure.

New Human Resources Manager



Doris Pendergrass recently joined the Department of Pathology as Human Resources Manager bringing 14 years of human resources, recruiting/employment, compensation, and leadership experience in public, private, not-for-profit, and university settings. In her new role, Doris will be responsible for both University and Hospital, working closely with the hospital Human Resources Consultants and the School of Medicine Divisional Human Resource teams. While much of her day will be filled with employee relations, she will also work on a number of department wide projects and initiatives. Doris is already formalizing our process for immigration/work visa's and will be responsible for management/coordination of our H1 and permanent residency applications and extensions. She will be working with those that have developed successful onboarding programs and expand onboarding for all new hires across the department. Doris completed a Train-the-Trainer course and will be facilitating "Conversations on Diversity" workshops. She will be taking on many special projects like our annual Employee Appreciation Picnic and will be working with our managers, supervisors, and staff on employee engagement & recognition programs.

Citation Wall

The Department of Pathology has a legacy of high-impact scientific and pathologic discovery. From the discovery of Reed-Sternberg cells to new mouse models of human disease our faculty have made major contributions to the life sciences. In an effort to highlight some of the strong research and diagnostic provess currently being generated in our department, we have created a "Wall of Science" that is comprised of reprints of the first pages of seminal manuscripts to come from faculty in Pathology Department. While there is no perfect measure of the importance of a scientific paper, each paper on the wall has been cited a minimum of 250 times. A bronze plaque is placed on the wall when a paper has been cited over 500 times. Our "Wall of Science" is updated yearly and continues to grow — now with over 50 papers from 28 faculty.

Construction of the New Autopsy Suite Continues



Jim Creech's Retirement

The Department of Pathology hosted a retirement reception for Jim Creech, Administrator of Clinical Services in July 2008, to celebrate his 20 years of service and wish him well. Pathology Chairman, Dr. J. Brooks Jackson, and Administrator, Al Valentine, thanked Jim for his dedication and presented him with a watercolor print of the Hospital by artist Martin Barry, and a new leather briefcase. Jim has since moved back to his home state of North Carolina, where his plans include spending more time with family and flying his airplane.







Jim Dick's Retirement

The Department of Pathology hosted a retirement reception for Jim Dick, the Faculty Director of the Bacteriology Section of the Clinical Microbiology Laboratory, to celebrate his 30 years of service as teacher, mentor, scientist and valued collaborator. Always a researcher, Jim continues his scientific pursuits outside of Johns Hopkins as a member of the Board of Directors for FASgen, a Baltimore-based biotech company developing therapeutics for cancer, tuberculosis, and obesity. Without question though, Jim's favorite pastime is spending time with his 3 children and their families.







Pancreatic Cancer Genome Initiative

In a great example of the power of partnerships between philanthropists and scientists, the complete genetic blueprint for pancreatic cancer, one of the most lethal of all of the cancers, was decoded by a team at the Sol Goldman Pancreatic Cancer Research Center at Johns Hopkins. The study was led by Dr. Vogelstein, who has a secondary appointment in Pathology, and it included a number of other faculty from our department.

The team sequenced more than 20,000 genes in a series of 24 well-characterized pancreatic cancers and discovered over 1,500 DNA mutations in these cancers. The scientists identified 12 core signaling pathways and processes that were each altered in more than two-thirds of the cancers. These 12 core pathways provide the basis for novel diagnostic and therapeutic approaches in pancreatic cancer. The landmark study will guide research on this disease for the next decade. The project was mostly privately funded, with the major funding coming from the Sol and Lillian Goldman Charitable Trusts.



Ralph Hruban, Ken Kinzler, Ben Lewis (busband of Jane Goldman) and Bert Vogelstein

Dr. Jackson and Our New Professors



Michael Goggins, Douglas Clark, Constance Griffin, Brooks Jackson, Angelo De Marzo, Juan Troncoso and Ie-Ming Shih (Not Pictured) - Pedram Argani and Elizabeth Montgomery

Funding Our Future

Private giving is more important than ever in these hard economic times. 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. Please consider supporting the department.

The Joseph Eggleston Fund in Surgical Pathology

The Joseph Eggleston Fund continues to support research conducted by our residents. In 2008, Justin Bishop studied the classification of non-small cell lung cancer, and Alex Hristov examined the expression of HMGA1 in pancreatic cancer. Newly awarded recipients include Amy Duffield who will study the expression of FLT3 in B-cell lymphomas and Lisa Stoll who will investigate the prognostic significance of HPV-16 in *in situ* and invasive anal squamous cell carcinoma.

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 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.

The Donald L. Price Research Fund

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



Joseph C. Eggleston





Mabel Smith



William Welch



Gerald S. Spear



Donald L. Price

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 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 John H. Yardley Fellowship in Gastrointestinal Pathology

Dr. Yardley has now retired, but he still is an active participant in GI Pathology Journal Conference. Dr. Jason Park is the Yardley Fellow for 2008-2009.

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

Our New Hospital









Page 13 Primary Faculty Changes - 2008

New Faculty

Tamara Lotan Eli Bar Shanaz Begum Kathleen Burns Jose Carlos Garcia-Garcia Borislav Alexiev Vishesh Chhibber Kristin Galan Jonathan Koehler Malti Kshirsagar Christopher Przybycin Jennifer Scudiere Brant Wang Alicia Gable Hiraoki Kimura Tatiana Melnikova Mahnaz Motevalli-Oliner

Departures

William Baldwin Rubin Tuder James Dick Laura Guay

Jason Daniels

Jeffrey Iding William Ingram, III Shien Micchelli Cuong Nguyen Joshua Wisell Chisa Yamada Mohammed Farah Iwona Fijalkowska Baojin Fu Fiona Laird Ergun Velidedeoglu

Promotions

Pedram Argani Douglas Clark Angelo De Marzo Michael Goggins Constance Griffin Elizabeth Montgomery Ie-Ming Shih Juan Troncoso David Berman Kathleen Murphy Hua Shan Maria Teresa Lee Tong Li Anna Yemelyanova Daniela Cihakova

Assistant Professor Instructor Instructor Instructor Instructor Assistant Assistant Assistant Assistant Assistant Assistant Assistant Assistant **Research Associate** Research Associate Research Associate Research Associate

Professor Professor Associate Professor Associate Professor

Assistant

Assistant Assistant Assistant Assistant Assistant Research Associate Research Associate Research Associate Research Associate Research Associate

Professor Professor Professor Professor Professor Professor Professor Associate Professor Associate Professor Associate Professor Assistant Professor Assistant Professor Assistant Professor Assistant Professor Kidnev/Urologic Neuropathology Head & Neck Hematopathology Microbiology Surgical Pathology Transfusion Medicine Surgical Pathology Surgical Pathology Gynecologic Pathology Gynecologic Pathology **GI/Liver** Pathology Surgical Pathology HIV Research Immunology Neuropathology HIV Research

Cleveland Clinic, Cleveland, OH University of Colorado, Denver, CO Retired Elizabeth Glaser Pediatric AIDS Foundation, Washington, DC Abbott Northwestern Hospital, Minneapolis, MN Franklin Square Hospital, Baltimore, MD Presbyterian Hospital, Charlotte, NC St. Johns Hospital, St. Louis, MO Medical College of Georgia, Augusta, GA University of Colorado, Aurora, CO University of California, Irvine, CA **IHU**, Neurology JHU, Pulmonary Medicine Georgetown University, Washington, DC Returned to England Food and Drug Administration

Surgical Pathology Cytopathology GU Pathology GI/Liver Pathology GI/Liver Pathology GJ/Liver Pathology Gynecologic Pathology Neuropathology Molecular Pathology Transfusion Medicine Immunology Neuropathology Gynecologic Pathology Immunology

Congratulations to Toni & Customer Services!

The Patient Safety Committee awarded Antonia (Toni) Alexander from Pathology Customer Services with a Johns Hopkins Safety Star. Toni was recognized for extraordinary actions taken to improve patient safety - ensuring a patient seen at a non-Hopkins outpatient site was contacted regarding a glucose critical action value. Toni received a congratulatory letter from the President of The Johns Hopkins Hospital and the Chairman of the Patient Safety Committee.



Beryl Rosenstein, Toni Alexander and Barbara Parsons

Pathology Employee Appreciation Picnic

Over the years, the Employee Appreciation Picnic has been held at a variety of locations in the Baltimore area. In the past several years, the picnic has returned to Conrad's Ruth Villa, a waterfront park located in Middle River, Maryland. This location is ideal for the large number of employees and families in the Department. With 12-1/2 acres on beautifully shaded grounds, waterfront views and cool breezes, the picnic provides the perfect place to relax, enjoy good food and have a good time with family and co-workers.

"My family and I look forward to the Department's annual picnic. We love the food, especially the steam crabs, and we love Conrad's Ruth Villa! The location provides variety—eat in the sun, shade, or indoors. You can take a stroll and view the waterfront. There is space for the children to enjoy crafts, although the adults like the crafts too. It was a beautiful day for my family and me to relax and eat together!" - *Penmy Wallace*



Welcome to the Graduate Training Program in Pathobiology 2008-2009 Incoming Students

Kathleen Brennan

Kathleen was born in Baltimore County, Maryland. She received her B.S. in Biology from Towson University and her D.V.M. from North Carolina State College of Veterinary Medicine in May of 2003. Kathleen is currently a Postdoctoral Fellow in the Department of Molecular and Comparative Medicine at Johns Hopkins. She is currently working with Dr. Joseph Mankowski in the Retrovirus Lab investigating the



pathophysiology of HIV cardiomyopathy in an SIV/macaque study using longitudinal echocardiographic evaluations to assess alterations in clinical cardiac phenotype. Her objective in obtaining a Ph.D. is to acquire the tools that will allow her to pose and answer essential questions about disease mechanisms to advance understanding of diseases.

Jacqueline Brosnan

Acqueline was born in Haverhill, Massachusetts and graduated from Bowdoin College in May 2008 with a B.A. in Biology. She worked in the Susan Braunhut lab at University of Massachusetts at Lowell and the Sandra Gaston lab at Beth Israel Deaconess Medical Center in Boston, where she focused on breast cancer and prostate cancer, respectively. Jacqueline completed Honors research in



a neurobiology lab at Bowdoin. She is interested in researching the molecular biology of the hallmarks of cancer and would like to help prevent the loss of loved ones as a result of cancer.

Yu-Min Chuang

Yu-Min received his M.D. from the National Cheng Kung University, Tainan, Taiwan in June 2001. He received training as a pulmonary physician in Taiwan. He is interested in pathogen and host interaction. Yu-Min has published several articles and abstracts and was co-investigator in two research projects. These research projects involved clinical studies using pneumonia severity index to evaluate patients



with health-care associated pneumonia. The other research project was a year-long project of the Center for Disease Control, Taiwan focusing on patients with tuberculosis. Yu-Min would like to make a contribution to science by studying both the clinical and academic aspects of medicine. He is especially interested in interaction of intracellular pathogen and host and the mechanism of pulmonary disease.

Melek Erdinc

Melek was born in Baltimore, Maryland, and Genetics from the University of Maryland, College Park in June 2006. During undergraduate school she received a Howard Hughes Undergraduate Fellowship for her thesis project "A genetic approach to phagosome maturation in Drosophilia melanogaster." She worked for two years as a senior laboratory technician in Dr. William Baldwin's laboratory where she studied



cardioallograft rejection. Melek has co-authored two publications in Transplantation. She feels confident that the Pathobiology Graduate Program will prepare her for a career as a research scientist.

Arvin Gouw

Arvin was born in Medan, Indonesia. He has a B.A. in Molecular Cell Biology, Neurobiology and an M.A. in Endocrinology from the University of California, Berkeley. Arvin received his M.S. in May 2008. He is interested in Neuroscience, has published several papers and abstracts and now would like to study more neuropsychology. Arvin would like to be like his mentors, doing research and teaching to inspire



others. He comes to Johns Hopkins to work with the premier neuroscientists in the world.

Kihyuck Kwak

Kipyuck was born in Daegul, South Korea. He graduated from Sung Kyun Kwan University with a B.S. in Genetic Engineering in February 2006. He is interested in Microbiology and Infectious Disease, and his goal is to develop a vaccine that can bring hope to third-world countries. He plans to work for an international health-related organization so he can devote himself to the provision of inexpensive vaccines to low-income populations. His work in the



Salk Neuroscience Laboratory established a scientific reason for hyper-responsiveness in children with fetal alcohol syndrome. Kihyuck is especially interested in the work of Dr. Sue Eshleman on HIV-1 mother-to-child transmission and HIV-1 drug resistance.

Welcome to the Graduate Training Program in Pathobiology 2008-2009 Incoming Students

Kah Suan Lim

Kah Suan was born in Singapore. She obtained a B.S. in Biology from Nanyang Technological University in July 2008. Kah Suan is interested in cancer stem cells. She interned with the Singapore Oncogenome Project where she identified and character-



ized various tyrosine kinsae gene mutations and postulated associations to different cancer types. Kah Suan is interested in exploring novel therapeutic strategies against cancer and is certain that this is an area she will enjoy working in.

Laxmi G. Pellakuru

Laxmi was born in LPune, Maharashtra, India. "Lucky" graduated from Johns Hopkins University in May 2008 with a B.S. in Biomedical Engineering. Lucky would like to study



medicine now that she has studied engineering, and she wants to learn more about disease processes and work towards prevention as well as treatment. She is currently working in the Sidney Kimmel Comprehensive Cancer Center studying nitric oxide and prostate cancer. She will present her research this year.

Renata Shraybman

Renata was born in Kishinev, Moldova, but was raised in Boca Raton, Florida. She graduated from Cornell University in May 2008 with a B.A. in Neurobiology and



Behavior and a concentration in Education. Renata has spent the past several years conducting research in immunology and virology, most recently with the entry pathways of feline coronaviruses. However, she is most interested in neuropathology both its molecular and behavioral manifestations. After her graduate work, she hopes to go on to an academic research setting, where she can continue to make an impact in the neuropathology field and impart knowledge unto others.

Teraneh Zarififar

Teraneh was born in Orange County, California. She graduated from the University of California, Riverside in 2008 with a B.S. in Biology and Botany. She is interested in neoplasia. As a graduate student she hopes to pursue the study of cancer in areas that focus on



treatment and prevention. Teraneh would like to be part of the vanguard that leads in new discoveries on the progression and development of cancer, enabling the creation of better treatment options for individuals who suffer from the disease.



Hong Yuen was born in Singapore and graduated from Nanyang technological University in July 2008 with a B.S. in Biological Sciences. He is interested in Cancer Biology and hopes to find a cure for cancer in the future. His honors year project involved the con-



struction of RNAi-resistant POPX2 phosphatase mutants via site-directed mutagenesis. The engineered mutants performed phenotype rescue to ascertain the role of POPX2 and the requirement of its phosphatase activity in maintaining cellular stress fibers.

Department of Pathology Incoming House Staff, 2008-2009

David Baewer

David was born in Milwaukee, Wisconsin. He completed his B.S. in Medical Laboratory Technology at Marquette University, his Ph.D. in cellular biology



and his M.D. at Medical College of Wisconsin. He has published numerous papers in the American Society of Gravitational Space Biology Bulletin. During his free time he enjoys hunting, home remodeling and spending time with his wife and infant son. David is pursuing AP/CP training.

Erin Carney

Erin was born in EKnoxville, Tennessee. She earned her M.D. from Vanderbilt University School of Medicine and previously completed her B.S. in Biology at the



University of Tennessee. She is ready for Baltimore and has been teaching self-defense classes for two years. When she is not volunteering or giving a Dean's lecture, she enjoys reading, hiking, skiing, and scrapbooking. Erin is pursuing AP/CP training.

Ashley Cimino

Ashley was born in Asunny Gilroy, California. She earned her M.D. from Cornell University and graduated with the distinction of summa cum laude. Before



medical school, Ashley earned a full academic scholarship to attend Emory University in Atlanta, Georgia. Ashley was awarded a B.S. in Biology and Spanish. Between research projects, she enjoys dancing ballet, flamenco, and other cultural dance forms. You may even catch her playing a flute. Ashley is pursing AP/CP training.

Hillary Elwood

Hillary was born in Leonardtown, Maryland. She earned her M.D. from the University of Pittsburgh. Before medical school, she received a B.A. in Biology



from Oberlin College. Nearing the end of college, Hillary spent a month abroad in Tanzania comparing coral biodiversity at two reef sites near Zanzibar. A cat lover at heart, she worked with the Albuquerque Cat Action Team in New Mexico as a volunteer, fostering stray cats and transporting them to adoption clinics until they found a permanent home, or until she got too attached and adopted them herself! Hillary loves the outdoors and is always up for a game of kickball. Hillary is pursuing AP/CP training.

Ming-Tseh Lin

Ming was born in Tainan, Taiwan. He earned his M.D. from National Taiwan University. He subsequently was awarded a Ph.D. in molecular biology where he stud-

ied molecular epidemiology and the integration site of human T-lymphotropic virus. Ming was an attending hematologist in Taiwan before settling down in the United States. He began his residency training at the Albany Medical Center in Albany, New York. After two years of training, he took the opportunity to come to Johns Hopkins for a 2-year fellowship in Molecular Genetics. Ming likes all kinds of sports including tennis and baseball. He especially enjoys watching Major League Baseball with his sons. Ming is with us for one year completing his AP training.



Mathew Olson

Mathew was born in Tulsa, Oklahoma. He earned his M.D. from George Washington University. During medical school, Mathew held a research position in the



Proteomics Core Facility at George Washington. He subsequently participated in a research fellowship at the NIH in the National Institute of Child Health and Human Development in the Section of Mass Spectrometry and Metabolism. He is an avid member of the American Society for Mass Spectrometry and enjoys photography in his free time. Mathew is an AP/CP resident.

Awards/Recognition

2008 Jacob Churg Award

Gary Hill, M.D. received the 2008 Jacob Churg Award from the International Renal Pathology Society. The Jacob Churg Award is presented annually at the United States and Canadian Academy of Pathology's Renal Pathology Society meeting to an individual who has had broad influence and leadership in the field of renal pathology. The award is supported by a fund established by Barnert Hospital, where Dr. Churg spent a large portion of his career.





2009 Ramzi Cotran Young Investigator Award

Christine Iacobuzio-Donahue, M.D., Ph.D., Associate Professor of Pathology and Oncology, will receive the 2009 Ramzi Cotran Young Investigator Award from the United States and Canadian Academy of Pathology at their 98th Annual Meeting in Boston, Massachusetts, for her contributions to the understanding of the genetic and genomic features of pancreatic cancer, including the recent sequencing of the pancreatic cancer genome (see page 10). 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.

Metlife Foundation Award Winner

Philip C. Wong, Ph.D., Professor of Pathology and Neuroscience, was one of three recipients of this year's MetLife Foundation Award for medical research in Alzheimer's disease. This award was made in recognition of Dr. Wong's outstanding work on the molecular mechanism and experimental therapeutics of Alzheimer's disease. His laboratory focuses on the enzymes (namely β - and γ -secretase) that are necessary for the generation of amyloid-b which is central to the pathogenesis of this illness. This award included \$175,000 to Dr. Wong's laboratory at Johns Hopkins to further his Alzheimer's research in addition to a personal prize of \$25,000.





2008 Louis Schmidt Award Winner

Norm Barker, M.S., M.A., R.B.P, Associate Professor of Pathology and Art as Applied to Medicine, was named the 2008 recipient of the BioCommunications Association's Louis Schmidt Award, the professional society's highest award. This award was given at the association's 78th annual international meeting in Rochester, New York in July. The award is given for outstanding contributions to the progress of communications in the life sciences, promotion of understanding and cooperation within the field of biocommunications, maintenance of an ethical approach to professional relationships, and a willingness to freely share scientific information.

UNCF-Merck Graduate Science Research Dissertation Fellowship

Shamayra Smail, a graduate student in the Pathobiology program, has been awarded a UNCF-Merck Graduate Science Research Dissertation Fellowship. The fellowship spans two years, and she will travel to Merck headquarters in Pennsylvania to give a poster presentation and meet with other Merck fellows.



...On The Web

The Department of Pathology has a new web service available for faculty and staff – WordPress blogs. A blog (a contraction of the term "web log") is a software application that allows people to publish content on the web quickly and easily. The content, usually called a "post," can contain images, video, audio and links to other places on the web. Blog posts typically allow readers to comment and ask questions.



Blogs are an essential part of the online Universe. Like their cousins the wiki and the podcast, they provide another outlet for collaboration and building community, and are used by organizations such as Harvard, the U.S. Government, Ebay, Sony and the New York Times. WordPress makes web publishing as easy as using Microsoft Word. It's a flexible platform that allows authors to create web pages and blog posts on the fly.

Why You Should Consider a Blog

- You can publish a disease or research-based web site yourself
- It's quick and easy to use
- It will increase your visibility on the web
- It's free
- You can track visitors to see who is searching for your blog and what content is most popular

Common Questions

How do people find blogs?

Blogs are found through search engines, links from other blogs (blogrolls) and through free subscription services (RSS). Often, people will subscribe to your blog and follow it with their favorite RSS tool (Bloglines, Google Reader, Firefox, etc.).

Is it difficult to manage comments?

No. Authors receive an e-mail stating that a comment has been submitted, and a link to the blog. They can approve the comment when convenient - it takes seconds to do.

How often should I write blog posts?

Some bloggers post things multiple times a day, some post monthly. You only need to write a post when there's something to say. Quality is preferable to sheer volume.



Some early adaptors have created pathology blogs about Pancreatic Cancer, Bladder Cancer and Barrett's Esophagus Cancer. For a look, please visit http://apps.pathology.jhu.edu/blogs/ and then write to Jim Doran [doran@jhu.edu] to start your own pathology blog.

...In The Photo Lab



The Pathology Photography, Digital Imaging and Computer Graphics Laboratory ("Path Photo") has a brand new HP Designjet Z6100ps poster printer we would like to tell you about. With a full range of colors including 2 shades of gray plus true photo black, the HP Dreamcolor system produces brilliant photographic images in addition to the even crisper, cleaner text of a postscript 3 printer. Printing on high quality satin finish paper enhances the accurate presentation of your scientific materials, and makes your photomicrographs pop off your poster. Production time is faster, enabling us to meet your needs in an even more efficient and timely fashion than before. Seeing is believing. Come to "Path Photo" to see a sample of the fine quality our new printer can deliver.

Calendar

March 7-13, 2009

United States and Canadian Academy of Pathology 98th Annual Meeting John B. Hynes Convention Center; Boston, Massachusetts

March 8, 2009

United States and Canadian Academy of Pathology Fellowship Fair – Room 311 John B. Hynes Convention Center; Boston, Massachusetts

March 9, 2009

Johns Hopkins Pathology Alumni Reception United States and Canadian Academy of Pathology Sheraton Boston Hotel - Commonwealth; Boston, Massachusetts

April 7, 2009

Pathology Young Investigators' Day 2009 Turner Concourse, The Johns Hopkins University School of Medicine; Baltimore, Maryland

April 29-May 1, 2009

10th Annual Mastering the Challenges of Cytopathology Tremont Plaza Hotel; Baltimore, Maryland Independent Slide Review Day – May 2, 2009

May 15, 2009

Pathology Awards Dinner The Belvedere; Baltimore, Maryland

September 13, 2009

Employee Recognition Picnic Conrad Ruth's Villa Waterfront Park; Chase, Maryland

Congratulations to the 10th Annual Pathology Young Investigators' Day Awardees April 17, 2008

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

For Excellence in Basic Research

Jobert G. Barin, B.A. Geral C. Baldeviano, M.S. Kathleen H. Burns, M.D., Ph.D. Toby C. Cornish, M.D., Ph.D. Samarjit Das, Ph.D. Melissa Landek-Salgado, B.A. Joon T. Park, M.S. Chanjuan Shi, M.D., Ph.D. Brian Simons, D.V.M. Yuan Tian, Ph.D. Zuoxing, Xiao, Ph.D.

For Excellence in Clinical Research

Julie K. Karp, M.D. Joseph J. Maleszewski, M.D. Andrea P. Subhawong, M.D. Janis M. Taube, M.D.

For Excellence in Translational Research

Subhashini Jagu, Ph.D. Tory P. Johnson, M.S. Balasubramanyam Karanam, M.Sc., Ph.D. Jinong Li, Ph.D. Aaron A. Tobian, M.D., Ph.D.

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