



Director's Corner

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

The Department of Pathology was successful in meeting or exceeding all its goals this past fiscal/academic year due to the strong efforts made by our faculty, fellows, residents, students and staff. Financial targets were exceeded for the University side of the Department, The Johns Hopkins Hospital,



Dr. J. Brooks Jackson

Bayview Medical Center, and Howard County General Hospital budgets in terms of generating surpluses which are critical for supporting the new buildings, new equipment, and money for research projects, especially for junior investigators.

February 2006 saw the opening of the second Cancer Research Building (CRB II) in which Pathology cancer researchers moved into 13,500 square feet of new space on the third floor. This new space allowed the expansion of neuropathology, immunology, pulmonary pathology, and cardiac pathology on Ross 5 and 6. Despite the difficulty in obtaining NIH funding for research, the Department's spending on extramural research increased by 18.2% over FY 2004-2005. NIH grant and contract awards were at an all time high up by 11.3% over the previous year placing our Department second in NIH funding for

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Spotlight: The Division of Gynecologic Pathology

Overview

The Division of Gynecologic Pathology has seven tenure track faculty members whose activities include clinical practice, teaching, and research. Faculty include Robert J. Kurman, M.D. (Director), Chien-Fu Hung, Ph.D., Richard Roden, Ph.D., Brigitte M. Ronnett, M.D., Ie-Ming Shih, M.D., Ph.D., Russell Vang, M.D., and T-C Wu, M.D., Ph.D. The pathologists in the Division provide diagnostic interpretations for all surgical specimens removed from the female reproductive tract for patients at The Johns Hopkins Hospital and outpatient clinics. The Division also provides a diagnostic consultation service for pathologists, clinicians, and patients throughout the United States and abroad. In addition to clinical service duties, the members of the Division teach medical students and train residents and fel-

lows in gynecologic pathology. Members of the Division are also engaged in a variety of research areas, primarily ovarian cancer, cervical cancer and papillomavirus infection, uterine cancer and trophoblastic tumors. The main focus of the ovarian cancer research program is aimed at early detection and novel approaches to treatment including vaccines. In the areas of cervical cancer and papillomavirus infection, the main focus is in vaccine development.

History of the Division

The Gynecologic Pathology Laboratory at The Johns Hopkins Hospital was established in 1893 under the direction of Dr. Thomas Cullen, who was a resident in gynecology under Dr. Howard Kelly, Chief of Gynecology, and Dr. William Welch, Chief of the Department of Pathology. Dr. Cullen was the first in this country to examine gynecological tissues removed in

the operating room, using the microscope to make diagnoses. He thus pioneered what was to become the field of gynecologic pathology in the United States. During his tenure as Chief of the Laboratory and then Chairman of the Department of Gynecology, Dr. Cullen wrote several definitive textbooks in various areas of gynecologic pathology. When Dr. Cullen retired, the Laboratory came under the direction of Dr. Emil Novak, a gynecologist who was to achieve an international reputation for his work in gynecologic pathology. The textbook that he wrote served as the standard for nearly three decades. In 1952, Dr. Novak's pupil, Dr. J. Donald Woodruff, a consummate gynecologic surgeon with extensive training in pathology, assumed the Directorship of the Gynecologic

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Departments of Pathology (see below). However, it should be noted that many of these new awards went to senior investigators whereas junior investigators have had more difficulty. Helping talented junior investigators obtain support has and will continue to be a priority for the Department. The Department continues its tradition of excellent scholarship publishing over 175 first or last author peer-reviewed articles in the scientific literature.

In terms of patient safety we had a number of successful initiatives such as reducing the number of mislabeled specimens, documenting the correct receipt of verbal test results, assuring the timely report of critical action values, and assuring the presence of correct orders and consent forms in patient pheresis charts. Improvement was noted in all of these areas.

In terms of our educational programs, eight new excellent residents were accepted through the MATCH program (see page 16) and eleven new graduate students started in the Pathobiology program this fall including four new students from Singapore (see page 14). We now have a total of 32 residents and 35 graduate students enrolled, respectively. 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 2008. It is envisioned that Pathology will play a major role in all four years, not just the predominant role it plays in year 2.

Through the efforts of Ralph Hruban, Sandy Markowitz, and several faculty, gifts exceeding \$3.6 million were donated this past year from over 1,000 generous alumni, patients, and friends of the Department. These funds will support innovative research projects by junior faculty, fellows,

and residents and provide stipends for some of our graduate students.

A new institutional and Departmental initiative this past year has been to focus our efforts to increase the diversity of our faculty, teaching programs, and staff. The Department has developed and implemented a plan which we believe will help us achieve this important objective. A university department diversity committee and a hospital department diversity committee have been established headed by Juan Troncoso, M.D. and Jim Creech, respectively, to spearhead these efforts.

Despite the notable achievements this past year, the current academic year will bring new challenges including another tough year for obtaining NIH funding, and increased regulatory compliance requirements. Given the talent and hard work of our faculty, trainees, and staff, I am confident we will deal with these challenges successfully as well.

2005 NIH Award Ranking – Top 10 Pathology Departments

| Rank | University | Amount Awarded |
|------|--|----------------|
| 1 | University of Pennsylvania School of Medicine | \$35,417,699 |
| 2 | Johns Hopkins University School of Medicine | \$34,708,101 |
| 3 | University of Washington School of Medicine | \$32,300,252 |
| 4 | University of Pittsburgh School of Medicine | \$22,060,118 |
| 5 | Columbia University College of Physicians and Surgeons | \$21,845,273 |
| 6 | University of Texas Med Branch/Med School at Galveston | \$19,267,205 |
| 7 | Washington University School of Medicine | \$18,669,958 |
| 8 | Emory University School of Medicine | \$17,468,471 |
| 9 | Stanford University School of Medicine | \$16,557,776 |
| 10 | University of Minnesota Medical School | \$15,547,891 |

Johns Hopkins Medicine Building Campaign

The skyline of East Baltimore continues to change as Johns Hopkins moves forward with its ambitious master plan to rebuild and upgrade five acres of the medical campus. Buildings that were state-of-the-art a few decades ago are outmoded today. New approaches to patient care, collaborative research, and flexibility for emerging medical technology were incorporated in the designs. These design approaches will make Hopkins Medical Campus a model for others to follow.

Construction is already underway for a new Children's Hospital and the Cardiovascular and Critical Care Tower, the core of the medical campus \$1.2 billion redevelopment plan. These two patient friendly clinical facilities are the new face of a modern academic medical center. The towers will frame a new main entrance to The Johns Hopkins Hospital from Orleans Street. The 913,000 square foot Children's Hospital tower will be the home of the new Johns Hopkins Children's Center. It will house emergency, surgical, interventional, critical and acute care for infants and children and will integrate care of high-risk obstetrics patients and newborns. The new facility will have sufficient capacity to maintain its current status as the designated pediatric trauma center for the State of Maryland. The new 560,000 square foot Cardiovascular and Critical Care Tower will be designed to support current and future technologies and techniques for surgical, interventional and emergency procedures as well as critical and acute patient care. This tower will house the new Johns Hopkins Heart Institute. The project is scheduled to be completed in 2009.

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Pathology Laboratory, remaining in that position until 1989.

In 1989, Dr. Robert J. Kurman became the Director of the Laboratory. Dr. Kurman is board-certified in Obstetrics and Gynecology and Pathology, and is the editor of Blaustein's "Pathology of the Female Genital Tract" which has replaced the Novak and Woodruff text as the "bible" of gynecologic pathology. Thus, there has been a long tradition of excellence in gynecologic pathology at The Johns Hopkins Hospital and Medical School.

In 1991 upon the death of Dr. Richard W. TeLinde, who was the Chairman of the Department of Gynecology from 1939 to 1960, an endowed chair in gynecologic pathology was established. This is the only one of its kind in the United States. Dr. Woodruff was the first to hold this chair, which is currently held by Dr. Kurman. When the endowment was created, it was envisioned that the annual proceeds would be used to fund pilot research projects. Once these projects generated preliminary data, investigators could then apply for extramural sources of funding. This has turned out to be a highly successful endeavor, as demonstrated by the fact that since its inception, extramural funding in the Division, largely from grants from the National Institutes of Health, has nearly quadrupled. Thus, for every dollar from the endowment, four dollars have come into the Division from federally funded research grants. This is a tribute to the accomplishments of the investigators in the Division and to the vision of Dr. TeLinde who provided the funding for the endowment.

The In-House Gynecology Pathology Service

All M.D. faculty in the Division rotate on in-house gynecologic pathology service. Dr. Ronnett serves as the director of this service. Each month, two pathology residents rotate on this service and learn to process and diagnose all types of lesions of the female genital tract. The service handles about 5,500 specimens each year, ranging from biopsies to major resections, which are derived from general gynecology/obstetrics services as well as a gynecologic oncology service staffed by four full-time gynecologic

oncologists. Outside slides from patients coming to The Johns Hopkins Hospital for clinical consultation and treatment are reviewed as well.

The Gynecologic Pathology Consultation Service

The Gynecologic Pathology Consultation Service is staffed by three faculty pathologists with expertise in gynecologic pathology: Robert J. Kurman, M.D. (Director), Brigitte M. Ronnett, M.D. (Associate Director), and Russell Vang, M.D. This service offers consultative diagnostic interpretation of pathologic material concerning all diseases of the female genital tract for practicing pathologists desiring assistance with difficult cases, as well as for gynecologists and patients wanting a second opinion. The gynecologic pathology consultation service receives over 2,000 cases each year covering all aspects of pathology of the female reproductive organs. (To learn more about how to consultation, visit <http://pathology.jhu.edu/gyn>.)

Research

Dr. Robert J. Kurman's studies are aimed at elucidating the pathogenesis of a variety of neoplasms in the female reproductive tract. In collaboration with other members of the Division, he is particularly interested in the morphologic and genetic alterations associated with the early events in carcinogenesis. We have proposed a dualistic model for the pathogenesis of endometrial, vulvar and ovarian cancer with distinctive precursor lesions and genetic alterations for each of these lesions. Correlated morphologic and molecular studies are being conducted, aimed at developing new approaches to early diagnosis and novel methods of treatment.

Dr. Chien-Fu Hung's research centers primarily on developing oncolytic and immunotherapeutic strategies for treatment of ovarian cancers. His laboratory has developed an ovarian tumor model that can be used to investigate the interaction of the immune system with the establishment, progression, and treatment of ovarian cancer in immunocompetent mice. They have employed a non-invasive luminescence imaging system to measure tumor loads in the peritoneal cavity of mice, and have recently demonstrated that the vaccinia virus can infect and kill both human and murine ovarian cancer cells in vitro. Furthermore, they have shown that a vaccinia virus adminis-

tered to mice intraperitoneally preferentially infects ovarian tumor cells but not normal tissue and generates significant antitumor responses. His data suggest that the use of the oncolytic vaccinia is a potentially effective strategy for controlling ovarian cancer and represents an important method for delivering genes of interest to ovarian cancer cells. The lab has also demonstrated that vaccination with an irradiated murine ovarian tumor cell line secreting HSP70 resulted in significant antitumor effects against the parental ovarian cancer cells in vaccinated mice. Thus, they are developing a combination of oncolytic and immunotherapeutic therapies to treat ovarian cancers. The successful implementation of the proposed studies will provide a novel therapeutic method for the control of lethal ovarian cancer. Furthermore, the data generated from the proposed preclinical model will serve as an important foundation for further clinical translation of this new therapeutic approach for the control of ovarian cancer.

Dr. Richard Roden's primary research goal is to prevent cervical cancer through the development of a preventative vaccine that is active against all oncogenic types of human papillomavirus. He has shown that the minor capsid protein, L2, is required for infection. Vaccination with L2 induces protection from viral challenge mediated by neutralizing antibody. Notably, the neutralizing antibodies are active against a broad range of human papillomavirus types, both oncogenic and benign. Unfortunately, L2 is significantly less immunogenic than L1. Virus-like particles, the vaccine currently approved for prophylaxis against a limited set of viral types. Therefore, his research focuses upon improving the immunogenicity of L2 through a better understanding of L2 biology, neutralization and adjuvant technology. He plans early phase clinical trials of L2 with industrial partners in the near future.

Brigitte Ronnett's research interests are focused on clinicopathologic, immunohistochemical, and molecular studies in gynecologic pathology. Many of her studies concern the pathology of ovarian mucinous tumors, with particular emphasis on the distinction of

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primary ovarian mucinous tumors from metastatic mucinous tumors in the ovary and on the relationship between these tumors and pseudomyxoma peritonei. Other areas of interest include gynecologic cytopathology, pathology of cervical and endometrial carcinomas, and the utility of ancillary diagnostic techniques to distinguish tumors of the female genital tract that simulate one another (e.g., cervical and endometrial adenocarcinomas) as well as primary ovarian tumors from non-gynecologic metastases involving the female genital tract. She has also been involved in the ongoing Merck HPV vaccine trials as a member of the expert pathology panel (along with Dr. Kurman) providing diagnoses for cervical, vaginal, and vulvar specimens to determine trial end-points and thus vaccine efficacy.

Dr. Ie-Ming Shih's laboratory focuses on the studies to understand the molecular changes leading to the development of ovarian carcinoma, and to develop molecular diagnostic tools for early cancer detection including ovarian cancer and other types of cancer. Specifically, he determines the molecular genetic alterations during the progression of ovarian serous carcinomas with molecular and morphologic correlations. This research employs an array of new technologies to achieve these goals. Besides the conventional cell and molecular biology methods, he uses digital karyotyping, digital PCR analysis, serial analysis for gene expression, somatic cell knockout, nanobiotechnology, mathematical and computer simulation. Further studies will focus on specific molecular or genetic alterations (i.e., new oncogenes or tumor suppressors) to determine their biological functions in the development of cancer and to assess their clinical significance. Engineered mouse models will also be used to assess the functional roles of newly identified genes. Finally, he will develop the body fluid-based assays to analyze molecular and genetic tumor markers identified for molecular cancer diagnostics. The successful development of molecular diagnostic approaches may hopefully provide a simple and cost effective tool to detect and follow ovarian carcinomas, which would

greatly facilitate clinical management of this deadly disease.

Russell S. Vang's research interests have included clinicopathologic and immunohistochemical studies of epithelial and non-epithelial tumors of the ovary. Currently, he is in the process of investigating various immunohistochemical markers that may help distinguish metastatic carcinoma involving the ovary from primary ovarian mucinous tumors. In addition, he is undertaking two major clinicopathologic studies of surface epithelial-stromal tumors of the ovary. One involves the histologic reproducibility of the WHO classification of carcinomas. This study, linked with clinical and molecular features, may provide modifications for the current histologic classification system. The other study pertains to serous borderline tumors of the ovary (atypical proliferative serous tumor and non-invasive micropapillary serous carcinoma). Using a large population-based cohort from Denmark, it is hoped that this study will clarify the behavior of both micropapillary serous borderline tumors and tumors with extra-ovarian implants.

Dr. Tian-Li Wang's research team focuses on understanding the molecular genetic basis in the development of ovarian carcinomas, and applying the molecular genetic findings to develop new cancer diagnostics and therapeutics. In order to elucidate the genetic alterations at both DNA sequence and copy number levels she has developed approaches including high throughput mutational detection and digital karyotyping, a technology that permits the identification of copy number alterations in cancer on a genome-wide scale with high resolution. Using both strategies, she has recently performed a comprehensive genetic analysis of ovarian carcinomas and has identified several novel potential oncogenes and tumor suppressors in ovarian carcinomas. Currently her research team is developing a genetic test based on Rsf-1 amplification to predict clinical outcome in ovarian cancer and novel therapeutic strategies to treat ovarian cancers addicted to Rsf-1 other aberrant signaling pathways in ovarian carcinomas.

Dr. T.-C. Wu is currently developing vaccines and immunotherapeutic strategies for human papillomavirus (HPV)-related cervical cancer. He has created a unique preclinical murine tumor model that expresses HPV-16 oncogenic proteins, E6 and E7, and simulates specific molecular events in the progression of HPV+ precancerous lesions (CIN 3) to invasive cancer. This preclinical tumor model has been widely used and tested by researchers worldwide for HPV vaccine development. He has focused on developing vaccines and immunotherapeutic approaches to enhance antigen processing and presentation by dendritic cells, such as intracellular targeting strategies. Dr. Wu has also developed strategies to enhance the activation of T cells by prolonging dendritic cell life. Intracellular targeting strategies direct antigen to different subcellular locations and enhance antigen processing and presentation. Recently, he has created an innovative approach that combines both antigen-specific immunotherapy and anti-angiogenesis to treat HPV E7-expressing tumors. Encouraging preclinical data has led to several therapeutic HPV DNA vaccine clinical trials. Dr. Wu is the Director of the Cervical Cancer Specialized Program of Research Excellence (SPORE) at Johns Hopkins. The SPORE program supports the therapeutic HPV vaccine clinical trials. The continued development of these strategies will facilitate the development of vaccines that generate a potent immune response and antitumor effect against cervical cancer. He is also actively involved with investigating mechanisms of immune evasion of tumors, identifying new tumor-specific antigens, and applying vaccine strategies to other gynecological malignancies.

EDUCATION

The Division has provided a fellowship training program in gynecologic pathology since 1989 when Dr. Kurman assumed the directorship of the Division. The fellowship program is widely regarded as the premier, most sought after gynecologic pathology fellowship in the United States if not in the world. Currently there are three fellows/assistants: Drs. Anna Yemelyanova, Dengfeng Cao, and Kara

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Judson. This is a two-year combined clinical and research fellowship and is ideal for individuals pursuing academic careers in surgical pathology and/or gynecologic pathology but is not restricted to such individuals. The program combines advanced training in diagnostic gynecologic pathology with clinical/translational/basic research and teaching. Fellows spend half of their time engaged in clinical service activities including evaluation of consultation cases; sign-out of in-house material; interpretation of frozen sections; supervision and instruction of residents in the gross room; and presentation of cases at the gynecologic oncology tumor board, colposcopy correlation conference, and reproductive endocrinology and infertility conference. During the off-service time, the fellows are engaged in research activities. These activities can include clinicopathologic and immunohistochemical studies as well as translational research in one of five Divisional laboratories. Many Hopkins' pathology residents as well as numerous excellent trainees from outside pathology programs have successfully completed this program and graduated to a variety of academic and private practice positions. To learn more about this fellowship, visit

<http://pathology.jhu.edu/gyn>.

For the past nine years, the Division also has educated many practicing pathologists by

offering an annual CME course on Current Topics in Gynecologic Pathology.



The Division of Gynecologic Pathology

Cytopathology Division Heads North for Annual American Society of Cytopathology Meeting

In November, The Cytopathology Division packed up its posters and headed North to Toronto for its Annual Meeting. Once again this year, Dr. Douglas Clark, Division Director, chaired the Scientific Program Committee to assemble the entire meeting.

Hopkins came away with many of the major awards from the meeting. A new Bayview faculty member, Dr. Kay Li, received the prestigious ASC Foundation's Research Seed Award for a collaborative project she proposed with Dr. Clark. In addition, a new cytotechnologist in the Division, Heather Sabaka, received a scholarship to travel to next year's meeting. Heather was formerly a Cytotechnology student of Fran Burroughs in the Hopkins School of Cytotechnology.

Dr. Syed Ali captivated the crowd with an overwhelming set of nine posters and one platform presentation prepared with the following Hopkins residents and fellows: Chung Shum, Chris Owens, Jeff Schowinsky, Sophie Hsieh, and Julie Wu. Drs. Soner Altioek and Karen Gustafson each presented a poster. Defying her semi-retired status, Dorothy Rosenthal presented a platform presentation on the cost-effectiveness of HPV testing schemes for cervical cancer. Former Hopkins fellow, Bin Yang, continues to shine, as evidenced by his platform presentation on DNA methylation.

In keeping with tradition, the current Hopkins team had the opportunity to visit with former Hopkins colleagues at the annual Hopkins Breakfast Reunion. In addition to the people already mentioned, attendees this year included: Yener Erozan, Karen Plowden, Erik Kincaid, Robert Pu, Prabodh and Jean Gupta, Terina Chen, Sherry Li, Momin Siddiqui, Jun Zhang and Chenny Xu.

One final bittersweet note, soon we will be celebrating the retirement of Dr. Yener Erozan. After a long and distinguished Hopkins career, Dr. Erozan will be retiring in July of 2007. We fully anticipate that he will continue to be a valuable colleague through his mentoring and advice. One great way to show appreciation for all of Dr. Erozan's contributions is to honor him through a donation to the fund for the Yener S. Erozan Fellowship in Cytopathology. For more information on how to make a donation, see the Funding Our Future section of this issue of Pathways (on page 11).

Donald L. Price Symposium

Johns Hopkins Medicine and the Department of Pathology Division of Neuropathology presented an inaugural program in honor of Dr. Donald L. Price on September 25, 2006. The Donald L. Price Symposium focuses on the dissemination of recent, exciting research findings in the area of neurobiology of disease. The symposium will serve as a medium to convey novel findings about mechanisms, models and experimental therapeutics of neurodegeneration and will provide a forum for continuing education for years to come.



Don, wife Helen with Juan Troncoso with wife Gloria



Donald Price, Jr., also a neurologist, pays tribute to his father



John "Jack" Griffin was MC for the symposium dinner, presented a synopsis of the early work of the Division of Neuropathology and was a speaker at the symposium



Joseph Coyle, M.D., Eben S. Draper Professor of Psychiatry and of Neuroscience, Harvard Medical School, shares an anecdote about Don. Dr. Coyle was also a speaker at the symposium



Linda Cork, D.V.M., Ph.D., Professor & Chair of Dept. of Comparative Medicine, Stanford Univ. SOM, shared stories about Don at the dinner and was a chairperson for the symposium



Bill Price, Don's son, currently an M.D. working in emergency medicine, imitates Don

New Ophthalmic Pathology Division



An Ophthalmic Pathology Division has been formed with the support of the Departments of Pathology and Ophthalmology, and Dr. Charles Eberhart has been named as the first Chief. The Division is located within the Wilmer Eye Institute on the fourth floor of the Maumenee Building. Grossing, processing, and sign-out of specimens will occur in this existing laboratory. The Ophthalmic Pathology Division

is currently staffed by two fellows, Drs. Katy Ebrahimi and Robert Bell. Ophthalmology residents also regularly rotate in the Division, where they are involved in the grossing and previewing of cases. Electives in Ophthalmic Pathology will be available for pathology residents interested in learning about this specialty. With support from the Wilmer Eye Institute, Dr. Eberhart plans to build a program of eye pathology research focused on ocular tumors, including melanoma, retinoblastoma, and optic nerve glioma, to complement his existing brain tumor studies.

Welcome the New Director of Cardiac Pathology

Charles Steenbergen, M.D., Ph.D. recently took over as the new Director of the Division of Cardiac Pathology. His medical career began as an M.D., Ph.D. student at the University of Pennsylvania from 1972 to 1979, ultimately completing a Ph.D. in Biophysics in 1979 after receiving his M.D. in 1978. He did his pathology training at Duke University working with Dr. Robert B. Jennings on mechanisms of myocardial ischemia/reperfusion injury in the laboratory while completing AP training with a concentration in cardiac pathology, working with Drs. Donald Hackel and Keith Reimer. Dr. Steenbergen joined the faculty at Duke in 1984, where he remained until 2006. During that time, he worked continuously on various basic science aspects of myocardial ischemia/reperfusion injury in experimental models. He also did cardiovascular consults for the autopsy service and attended on the autopsy service. With his interest in cardiovascular pathology, he became involved in the heart biopsy service upon joining the Duke faculty, initially working with Dr. Jennings, and then taking over the service a couple years later when there were few biopsies being performed. When the heart transplant program started, he had more experience than anyone with heart biopsies at Duke, so he became the heart transplant biopsy expert. As the program grew, he was eventually evaluating about 1,200 biopsies a year. He

also coordinated the core pathology course for the medical students at Duke for ten years. Therefore, he comes to Hopkins with experience in all aspects of academic pathology: research, service, and teaching. Dr. Steenbergen's goal for the Division of Cardiac Pathology is to have a well-rounded division with excellence in basic research, translational research, cardiac biopsy interpretation, and teaching. With the exceptional Cardiology Division in the Department of Medicine and the active heart transplant program, there are ample opportunities for collaborative research that he would like to expand upon and develop. Drs. Marc Halushka and Charles Steenbergen will be the foundation of the Division, and we will be looking for opportunities to expand in the future, perhaps with more emphasis on vascular biology, to create a true cardiovascular Division, that could interact more closely with the immunology group in this Department. Dr. Steenbergen is excited to be joining the Department and looks forward to the development of the Division of Cardiac Pathology as an integral part of the Department.



New Webmaster Joins the Pathology Team

Jim Doran recently joined the department as the Web Development Coordinator, having previously worked at the Johns Hopkins Mt. Washington campus for the Student Information Systems ISIS project. Jim joins RJ Malacas who has been with the Pathology Web office since 2004.

Jim studied music and art at Washington College, and has worked as a music therapist, studio musician and recording engineer. Jim has spent the past eight years working as a multimedia/Web developer. He has scored several video game soundtracks, numerous audio CDs and created many, many Web applications. He currently teaches Web development courses at the Community College of Baltimore County, and is working on his master's degree at Johns Hopkins School of Professional Studies in Business and Education. When Jim isn't programming, teaching or learning, he enjoys Chinese martial arts, gardening, and skateboarding with his daughters.

Jim has already hit the ground running relaunching the Pancreatic Cancer Web page with a new look and feel. The launching of this patient friendly Web page coincides with the recent opening of the Multi-

Disciplinary Pancreatic Cancer Clinic. The Core Specialty lab also has a new intranet site, which contains useful information, including procedures and lab policies. The Phlebotomy Lab Web site has been reworked and it too will be launched shortly. Jim will also be reworking the Pathology home page. The new home page will feature search functionality powered by Google, as well as useful tools for staff and faculty. If you have an idea, request or suggestion, or if departmental members are interested in developing new Web pages or multimedia projects, please contact Jim at doran@jhu.edu.



New Grants and Contracts Awarded to Pathology Faculty, 2006

| <u>FACULTY MEMBER</u> | <u>AWARD TYPE</u> | <u>AGENCY</u> | <u>DATES</u> | <u>TOTAL FUNDING (\$)</u> |
|------------------------------|--------------------------|-------------------------------|---------------------|----------------------------------|
| Altio, Soner | Grant | National Kidney Foundation | 7/1/06-6/30/07 | 40,000 |
| Altio, Soner | R21 Grant | NIH/NCI | 8/25/06-7/31/08 | 465,109 |
| Anders, Robert | K08 Grant | NIH/NIDDK | 7/1/05-6/30/09 | 540,000 |
| Baldwin, William | Contract | Navigant Biotechnologies | 9/27/05-9/26/06 | 11,837 |
| Bazzaro, Martina | Grant | HERA Foundation | 3/1/06-2/28/07 | 20,979 |
| Berman, David | Grant | American Cancer Society | 1/1/06-6/30/06 | 90,213 |
| Berman, David | Grant | Prostate Cancer Foundation | 2/1/06-1/31/07 | 75,000 |
| Berman, David | Grant | Prostate Cancer Foundation | 2/1/06-1/31/07 | 100,000 |
| Berman, David | R01 Grant | NIH/NIDDK | 7/1/06-4/30/11 | 1,679,975 |
| Borowitz, Michael | R01 Grant | NIH/NCI | 8/1/06-7/31/11 | 2,606,015 |
| Borowitz, Michael | Contract | BD Biosciences | 9/1/06-8/31/07 | 23,853 |
| Bova, Steven | Subcontract | Biofortis, Inc. | 10/1/06-3/31/07 | 150,230 |
| Bright, Patricia | Grant | Doris Duke Foundation | 3/1/06-2/29/08 | 200,000 |
| Carroll, Karen | Contract | Cepheid | 8/15/05-8/15/06 | 19,383 |
| Carroll, Karen | Contract | Geneohm Sciences | 12/1/05-3/31/06 | 110,831 |
| Carroll, Karen | Contract | Geneohm Sciences | 5/1/06-8/1/06 | 46,476 |
| Carroll, Karen | Contract | Becton Dickinson | 10/20/06-9/30/07 | 22,126 |
| Carroll, Karen | Subcontract | Social & Scientific Systems | 10/1/06-5/31/13 | 742,704 |
| Caturegli, Patrizio | R01 Grant | NIH/NIDDK | 9/1/05-8/31/08 | 845,196 |
| Chan, Daniel | Fellowship | Roche Diagnostics | 7/1/06-6/30/07 | 50,000 |
| Clarke, William | Contract | Streck, Inc. | 5/1/05-4/30/06 | 7,500 |
| Clarke, William | Contract | Metrika, Inc. | 8/10/05-8/9/06 | 12,500 |
| Clarke, William | Contract | Thermo/Spark Holland | 2/1/06-1/31/07 | 68,409 |
| Clarke, William | Contract | Microgenics | 5/30/06-5/29/07 | 14,650 |
| DeMarzo, Angelo | Grant | Dept of Defense - US Army | 12/1/05-11/30/08 | 683,137 |
| DeMarzo, Angelo | Subcontract | Adme Tech Corp. | 8/8/06-8/7/07 | 50,090 |
| Eberhart, Charles | Subcontract | Kennedy Krieger | 4/1/06-3/31/10 | 413,318 |
| Epstein, Jonathan | Contract | Sanofi-Aventis | 9/1/05-9/30/07 | 175,000 |
| Eshleman, James | Contract | Cepheid | 8/1/05-12/31/05 | 10,000 |
| Eshleman, Susan | U01 Grant | NIH/NIAID | 6/1/06-5/31/13 | 19,707,699 |
| Eshleman, Susan | Subcontract | Social & Scientific Systems | 3/1/06-6/30/07 | 64,842 |
| Eshleman, Susan | Subcontract | Social & Scientific Systems | 10/1/06-5/31/13 | 908,196 |
| Farah, Mohammed | Grant | Alzheimer's Association | 8/1/05-7/31/07 | 70,000 |
| Fijalkowska, Iwona | Subcontract | University of Indiana | 7/1/06-6/30/09 | 26,352 |
| Goggins, Michael | R01 Grant | NIH/NCI | 7/1/06-5/31/11 | 1,450,932 |
| Guay, Laura | Subcontract | Family Health International | 9/1/05-11/30/06 | 91,572 |
| Guay, Laura | Subcontract | Family Health International | 9/1/05-11/30/06 | 56,919 |
| Guay, Laura | Subcontract | Family Health International | 9/1/05-11/30/06 | 107,532 |
| Guay, Laura | Subcontract | Family Health International | 9/1/05-11/30/06 | 49,999 |
| Gustafson, Karen | R03 Grant | NIH/NCI | 7/1/06-6/30/08 | 163,750 |
| Hamad, Abdel | Grant | Juvenile Diabetes Fdn. | 8/1/06-7/31/09 | 494,334 |
| Hruban, Ralph | Subcontract | Center for Molecular Medicine | 9/9/05-6/30/09 | 143,292 |
| Hung, Chien-Fu | Grant | FAMRI | 7/1/06-6/30/08 | 217,000 |
| Jackson, Brooks | Grant | Doris Duke Foundation | 1/1/06-12/31/06 | 25,000 |
| Jackson, Brooks | U01 Grant | NIH/NIAID | 6/29/06-5/31/13 | 137,017,377 |
| Jackson, Brooks | Grant | Rockefeller Foundation | 9/1/06-12/31/08 | 150,000 |
| Kickler, Thomas | Contract | Dade Behring | 8/15/06-8/14/07 | 20,513 |

New Grants and Contracts Awarded to Pathology Faculty, 2006

| | | | | |
|-----------------------|-------------|--------------------------------|-------------------|-----------|
| King, Karen | Contract | Gambro BCT, Inc | 11/1/05-10/31/06 | 50,715 |
| Kuhajda, Francis | Contract | FASGEN, LLC | 1/1/06-12/31/06 | 375,000 |
| Kuhajda, Francis | Grant | Dept of Defense - US Army | 4/10/06-4/9/09 | 490,662 |
| Lai, Shenghan | R21 Grant | NIH/NIDA | 9/30/05-7/31/07 | 353,074 |
| Lee, Michael | R01 Grant | NIH/NINDS | 4/1/06-3/31/10 | 1,476,554 |
| Li, Tong | Grant | Ellison Medical Foundation | 7/1/06-6/30/10 | 200,000 |
| Maitra, Anirban | Subcontract | SUNY/Buffalo | 9/29/05-8/31/10 | 1,414,387 |
| Maitra, Anirban | Subcontract | Stanford | 4/19/06-3/31/11 | 291,825 |
| Meeker, Alan | Grant | Dept of Defense - US Army | 12/1/05-11/30/07 | 365,396 |
| Meeker, Alan | Grant | Prostate Cancer Foundation | 2/1/06-1/31/07 | 75,000 |
| Netto, Georges | Grant | Prostate Cancer Foundation | 2/1/06-1/31/07 | 75,000 |
| Parrish, Nicole | Contract | MIDI, Inc. | 7/1/05-12/31/05 | 32,000 |
| Roden, Richard | JHU Grant | Fund for Med. Discovery | 2/1/06-1/31/08 | 110,596 |
| Roden, Richard | R01 Grant | NIH/NCI | 9/20/06-7/31/11 | 1,535,895 |
| Rose, Noel | R01 Grant | NIH/NHLBI | 4/1/06-3/31/10 | 1,637,188 |
| Sadegh-Nasseri, Sch. | Grant | JHSPH Malaria Program | 03/01/06-02/28/08 | 199,466 |
| Sadegh-Nasseri, Sch. | R01 Grant | NIH/NIAID | 5/1/06-4/30/11 | 1,843,501 |
| Shan, Hua | Subcontract | Westat, Inc | 2/14/06-12/31/09 | 3,019,438 |
| Shih, Ie-Ming | JHU Grant | Fund for Med. Discovery | 2/1/06-1/31/08 | 100,256 |
| Shih, Ie-Ming | Grant | JHU Weizmann Cooperative | 10/1/06-9/30/08 | 235,000 |
| Shih, Ie-Ming | Grant | DCB - Taiwan | 12/28/05-12/27/06 | 150,000 |
| Sokoll, Lori | Contract | Gen-Probe | 9/21/05-9/14/06 | 24,251 |
| Steenbergen, Charles | R01 Grant | NIH/NHLBI | 7/1/06-6/30/07 | 319,316 |
| Torbenson, Michael | Contract | Labcorp | 9/1/05-8/31/06 | 10,300 |
| Troncoso, Juan | Subcontract | University of Oregon | 7/1/05-6/30/09 | 49,025 |
| Tuder, Rubin | Grant | Cardiovascular Med & Rsch Fdn. | 4/1/06-3/31/11 | 1,061,827 |
| Tuder, Rubin | Subcontract | University of Indiana | 7/1/06-6/30/07 | 66,306 |
| Valsamakis, Alexandra | Contract | Becton Dickinson | 1/18/06-1/17/07 | 42,415 |
| Webb, Tonta | Grant | HERA Foundation | 3/1/06-2/28/07 | 20,979 |
| Wu, TC | U01 Grant | NIH/NIAID | 9/1/06-8/31/10 | 1,443,832 |
| Zhang, Zhen | Subcontract | MD Anderson | 9/29/05-8/31/06 | 18,844 |

Total

\$187,127,888

ACCEL Program Implemented in the Labs

In July of 2006, the Department of Pathology implemented the ACCEL program, a career ladder for its clinical laboratory scientists, formerly known as medical technologists and medical laboratory technicians. Hopkins Pathology has joined other academic medical centers, hospitals, private laboratories, and clinics throughout North America which now use the term, clinical laboratory scientist. Over the past decade the profession changed its name from medical technology to clinical laboratory science to better define its role in cutting-edge health care and the term “clinical laboratory scientist” reflects this change.

The ACCEL pay structure is designed to be competitive in the marketplace and support the goals and objectives of the Department of Pathology and The Johns Hopkins Hospital. Clinical laboratory scientists in our labs fall into several new categories: CLS I, II, III, or IV, depending upon educa-

tional level, national certification, years of laboratory experience, job skills and competency. The ACCEL program allows for advancement and pay increases as the clinical laboratory scientist completes certification and increases his or her level of education, skills and competency. To advance, a clinical laboratory scientist must be certified by an accrediting agency such as the American Society of Clinical Pathologists (ASCP), the National Registry of Certified Chemists (NRCC), the American Society of Microbiology (ASM), or the National Certification Agency (NCA).

A committee composed of Jim Creech, Al Valentine, Mike Huppenthal, Bea Filburn, and Gladys Edmonds of Pathology, together with Alfreda Hanna of Human Resources, worked on this project for many months prior to implementation. If you have questions regarding the new ACCEL program, please contact Al Valentine, avalenti@jhmi.edu, or 410-955-2660.

The Goldman Family Endowment



The Goldman Family has endowed The Sol Goldman Pancreatic Cancer Research Center at Johns Hopkins. Income from the center and additional gifts from the Goldman Family have supported fourteen \$50,000 pancreatic cancer research grants in the past two years.

Positively Pathology, Now and in the Future

The Department of Pathology is entering its third year of an innovative partnership with the New Paul Lawrence Dunbar High School, an inner-city high school within walking distance of the hospital. This partnership is part of the broader Dunbar-Hopkins Health Partnership which began in 1997. With the vision of “growing our own future,” pathology staff, faculty, and residents participate in three major programs with the Dunbar students to expose them to careers in the field of pathology.

The programs are year-round and include mentoring the high school's science fair participants in the fall for their winter science fair, visiting classrooms to enhance the curriculum by making science “real,” and participating in a six-week summer program to teach students didactics and labs in anatomic and clinical pathology.

Early in 2006 the Department of Radiology joined Pathology in this partnership. The vision has broadened to promote health care professions in general, as well as the common component of these two departments, diag-

nostic medicine. Through the partnership, the Dunbar High School students drawn to its college prep and healthcare career mission have the opportunity to explore academic and professional careers in medicine, including allied health and biotechnology. They are encouraged and mentored in the right steps to pursue these fulfilling careers which are expected to be in great demand over the next several decades.

In addition to the year-round programs, the Departments of Pathology and Radiology donate equipment and supplies — from refrigerators to protective gloves — to Dunbar's Science Department.

The leaders of the Dunbar-Hopkins Pathology and Radiology partnership are Mamie Green, Chair of the Science Department at Dunbar High School, Christine Hostetter, a Pathology educational coordinator, and Charrise Lomax, a manager in the Department of Radiology.

To learn more about the Dunbar programs, contact Christine Hostetter, chostet2@jhmi.edu or 410-502-1132.



Photo caption: Leandra Soto, Core Lab clinical laboratory scientist (left), and Dante Trusty, Dunbar alumni and Anatomic Pathology tissue bank coordinator (right), review pathology didactics with Dunbar student, Teara Boon (center) during the summer program.

FUNDING OUR FUTURE

Private philanthropy continues to grow in importance as funding from the NIH continues to decline. 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 one of these important activities.



Joseph C. Eggleston



William Welch



Mabel Smith



Gerald S. Spear

William Welch Award

The William Welch Award was established to acknowledge outstanding achievement in pathology by a second year medical student. The award is announced each year at the Residents Award Dinner.

The Joseph Eggleston Fund in Surgical Pathology

This year the Joseph Eggleston Fund supported research conducted by two of our residents, Danielle Wehle and Steve Chueng. The manuscript generated by last year's recipient, Janis Taube, was recently accepted for publication in the American Journal of Surgical 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. Jason Daniels is the Yardley Fellow for 2006-2007.

The Yener S. Erozan Fellowship in Cytopathology

As reported in the story on the Annual American Society of Cytopathology Meeting in this issue of Pathways, Dr. Yener Erozan plans to retire at the end of this academic year. 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 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 Gerald S. Spear JHU-UCI Medical Student Pathology Fellowship

This program was established last year 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

Mabel is as busy as ever handling the increasing number of grant applications and providing words of wisdom to those who drop by her office for a chat. The Mabel Smith Fund is used to support special courses, research projects, travel and other needs of our residents.

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

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

Mabel Smith
Department of Pathology
The Johns Hopkins Hospital
600 North Wolfe Street
Carnegie 489
Baltimore, MD 21287-6417

A Good Fit in the New CRB II



Primary Faculty Changes 2005 - 2006

New Faculty

| | | |
|--------------------|---------------------|-----------------------|
| Charles Steenberg | Professor | Cardiac Pathology |
| Qing Kay Li | Assistant Professor | Bayview Pathology |
| Hui Zhang | Assistant Professor | Clinical Chemistry |
| Noel Brownlee | Assistant | Surgical Pathology |
| Jon Davison | Assistant | GI/Liver Pathology |
| Hubert Fenton | Assistant | Surgical Pathology |
| Kara Judson | Assistant | Gyn Pathology |
| Diana Molavi | Assistant | Breast Pathology |
| Cuong Nguyen | Assistant | Diagnostic Immunology |
| Natasha Rekhtman | Assistant | Surgical Pathology |
| Todd Sheridan | Assistant | Surgical Pathology |
| Patricia Bright | Research Associate | HIV Research |
| Daniela Cihakova | Research Associate | Immunology |
| Xing Fan | Research Associate | Neuropathology |
| Mohamed Farah | Research Associate | Neuropathology |
| Iwona Fijalkowska | Research Associate | Pulmonary Pathology |
| Baojin Fu | Research Associate | GI/Liver Pathology |
| Wenjing Tong | Research Associate | Informatics |
| Ergun Velidedeoglu | Research Associate | Immunology |

Departures

| | | |
|--------------------------|---------------------|---|
| Theresa Nicol | Assistant Professor | Private Practice, Baltimore, MD |
| Hongxiu Ji | Assistant Professor | Seattle, WA |
| Sally Campbell-Lee | Assistant Professor | University of Illinois, Chicago, IL |
| Fred Racke | Assistant Professor | Ohio State University, Columbus, OH |
| Deborah Douglas | Assistant Professor | Carillon Medical Systems, Roanoke, VA |
| Kimberley Studeman | Instructor | Mercy Hospital, Baltimore, MD |
| Jennifer Broussard | Assistant | Franklin Square Hospital, Baltimore, MD |
| Maryam Farinola | Assistant | St. Joseph Mercy Oakland, Pontiac, MI |
| Sharon Swierczynski | Assistant | Reading Hospital, Reading, PA |
| Saeid Movahedi-Lankarani | Assistant | Hospital Pathology Associates, St. Paul, MN |

Promotions

| | | |
|-----------------------------|---------------------|----------------------|
| Karen Carroll | Professor | Microbiology |
| Mary Glenn Fowler | Professor | Microbiology(HIV) |
| Shenghan Lai | Professor | Informatics |
| Philip Wong | Professor | Neuropathology |
| Charles Eberhart | Associate Professor | Neuropathology |
| Christine Iacobuzio-Donahue | Associate Professor | GI/Liver Pathology |
| Karen King | Associate Professor | Transfusion Medicine |
| Michael Lee | Associate Professor | Neuropathology |
| Anirban Maitra | Associate Professor | GI/Liver Pathology |
| Michael Torbenson | Associate Professor | GI/Liver Pathology |
| Alexandra Valsamakis | Associate Professor | Microbiology |
| Denise Batista | Assistant Professor | Molecular Pathology |
| Tong Li | Instructor | Neuropathology |

Welcome to the Graduate Training Program in Pathobiology 2006-2007 Incoming Students

Koh Meng Aw Yong

Koh Meng was born in Singapore and has a B.Sc. (Hons) in Microbiology from the National University of Singapore in 2003. Upon graduation, he worked as a research assistant for three years on the construction of non-viral episomal gene therapy vectors and he studied the interplay between DNA replication and transcription. His other research interests lie in immunology and tumor pathobiology, which he hopes to pursue in-depth during his graduate studies.



Tory Johnson

Tory comes from Bowling Green, Ohio and graduated from Towson University with an M.S. in Biology in January 2006. She is interested in Microbiology and Infectious Disease and is an adjunct faculty member at Towson University, teaching Medical Microbiology. She is currently working on an antiviral subcutaneous controlled release device and monitors the in vitro release kinetics of the antiviral from the implant, examines the effects of pH and temperature on the implants, and tests the effectiveness of the implants in vivo. Tory is interested in examining disease from the molecular and organismal level.



Cheryl Mei-Yi Koh

Cheryl was born in Singapore and graduated from the University of Wisconsin-Madison with a B.S. in Biology in May 2005. For her senior thesis, Cheryl studied the impact of superoxide radicals on the regulation of iron regulatory protein 1 (IRP1) and iron metabolism in mouse liver. After graduation, Cheryl spent a year studying the role of mitochondrial complex 1 in tumorigenesis. Cheryl is interested in stem cell biology, cancer and senescence, and seeks a research-oriented career that will incorporate basic science research with medical applications.



Sophie Lin

Sophie was born in Singapore and graduated from the Nanyang Technical University, Singapore, with an honors degree in Biological Sciences and a minor in Psychology. Her research experience at the university as well as at Singapore General Hospital (SGH) centered on Alzheimer's disease. She also worked briefly in the clinical trials unit at SGH. Sophie is interested in understanding the mechanisms behind the pathogenesis of diseases, with an emphasis in neurological disorders. Using her experience and knowledge gained at Johns Hopkins, Sophie hopes to establish a career in translational research and medicine.



Shaaretha Pelly

Shaaretha was born in Penang, Malaysia, but lived mostly in Singapore where she graduated from Nanyang Technological University in 2006 with a B.Sc. in Biological Sciences. Shaaretha has been conducting research in a Malaria lab since 2004 on a project aimed at functionally characterizing the stevor multigene family of the malaria parasite, *Plasmodium falciparum*. This gave her a good understanding of the field of parasitology and sparked her interest in the pathology of infectious disease. Her career objective is to be a research scientist in the field of microbiology or parasitology, focusing on the treatment of infectious disease from the perspective of immunology.



Allison Sharrow

Allison was born in Pittsburgh, Pennsylvania and graduated from the University of Pittsburgh with a B.S. in Molecular Biology, Biochemistry track, in April 2004. Allison recently worked as a research associate in the Blair Lab at the University of Pittsburgh studying regulation and differentiation of bone cells. Her interests are too broad to describe here, but she would like for her next project to involve stem cells. She hopes that her time at Johns Hopkins will enable her to establish a lab in an academic setting.



Welcome to the Graduate Training Program in Pathobiology 2006-2007 Incoming Students

Hsin-I Shin

Hsin-I Shih graduated from Chung Shan Medical University, Taiwan in 2000 with an M.D. degree. Her resident training was in internal medicine and her fellowship training was as an infectious disease specialist including clinical approach to patients, clinical microbiology, and hospital nosocomial infection control. During her fellowship, she reviewed the clinical characteristics of patients with *Serratia marcescens* bacteremia and, melioidosis - an endemic emerging disease in southern Taiwan.

Integrating her clinical experiences, Hsin-I will study the mechanisms of infectious diseases and become a physician-scientist at Johns Hopkins. Her current interests are the mechanism of HIV/HCV co-infection and tuberculosis.



Valerie Toodle

Valerie was born in Mobile, Alabama and graduated from Cameron University in Lawton, Oklahoma with a B.S. in Chemistry in May 2006. Valerie is interested in infectious diseases. Valerie would like to do post-doctoral study in a virology lab and will pursue a position in international public health when she completes her studies.



Shamayra Smail

Shamayra comes from Miami, Florida and graduated from Florida International University with an M.S. in Molecular Biology in August 2006. Shamayra is interested in uncovering the causative molecular agents which, when altered, are central to the development of diseased cellular states and eventual disruption of an organism's homeostasis, with cancer being a prime example. Her research in Dr. R. J. Herrera's lab at Florida International University helped identify the Uridine rich-small nuclear RNA (UsnRNA) variants from the silk moth, *Bombyx mori*. Shamayra aims to direct a biological research laboratory, with an emphasis on understanding underlying molecular mechanics.



Sarah Trembley

Sarah comes from Baltimore, Maryland and graduated from Michigan State University-College of Veterinary Medicine with a D.V.M. in May 2005. Sarah is interested in the pathogenesis of infectious disease. She is especially interested in the relationship between chronic infections and oncogenesis. Sarah's career goal is to become a biomedical researcher studying the molecular and cellular mechanisms underlying infectious diseases.



Kai Lee Yap

Kai Lee was born in Singapore. She graduated from the National University of Singapore in 2006 with an honors degree in Pharmacy. During the years as an undergraduate, she handled research projects that ranged from improving the biopharmaceutical profile and delivery of drugs, to studying the mechanistic pathways of a novel anti-tumor compound. Having gained a sound grounding in disease therapeutics from her Pharmacy course, Kai Lee will now strive to seek a deeper understanding of the pathological processes by delving into mechanistic studies of their development at Johns Hopkins. Her current interest lies in exploring targeted therapies for the treatment of cancer and other diseases.



Department of Pathology Incoming House Staff, 2006-2007

Justin Bishop

Justin was born in Lubbock, Texas and attended Texas Tech University for both his bachelors and M.D. studies. He was the highest ranked student on graduation from their College of Arts and Sciences and completed medical school with AOA honors and special recognition for excellence in Pathology and Medical Microbiology. Justin is an accomplished jazz trumpeter and describes himself as a devoted animal lover. He also enjoys preparing vegetarian meals, though it is unclear whether he enjoys eating them. Justin is pursuing AP/CP training.



Jonathan Cuda

Jonathan was born in Tarrytown, New York, but is a West Virginia man through-and-through. He grew up in the town of Elkins, West Virginia, and later went on to complete his B.S. in Biology Summa Cum Laude from West Virginia Wesleyan College and his M.D. at Marshall University School of Medicine. Jonathan and his twin brother were classmates in medical school, vying for their class's number one rank in a race too close to call when we signed him for 2006-2007. An outdoor enthusiast, he likes camping, fishing, and biking. Jonathan will no doubt soon become a familiar face following the dual AP/CP track.



Thomas Lee

Thomas was born in Sao Paulo, Brazil, and speaks fluent Portuguese, Spanish, and Korean. He joins our department from George Washington University School of Medicine. Before medical school, he received his B.S., M.S., and Ph.D. degrees from the University of Rochester. His doctoral thesis work there focused on the interplay between glutathione and organic anion transporter functions in hepatocytes. Thomas enjoys playing soccer with his young son as well as telling some of us what it's like to be from a "real soccer country." Thomas is an AP/CP resident.



Alex Chang

Alex was born right here in Baltimore, Maryland. He earned his medical doctorate from Emory University School of Medicine and received numerous scholarship awards during his tenure there. Before enrolling in medical school, he completed a B.S. in Biology Magna Cum Laude at Georgetown University, and spent two summers in college doing research in the Johns Hopkins Department of Urology. An editorial cartoonist for his collegiate newspaper, we look forward to Alex's interpretation of resident life. He is studying AP/CP.



Julie Katz

Julie was born in Suffern, New York. She earned her M.D. this spring from the University of Pennsylvania. Prior to this, she was awarded a Bachelor of Science with distinction from Cornell University having majored in Biology & Society. Julie developed a fascination for blood banking as a girl watching her parents make directed donations for a friend with hemophilia. As a medical student, Julie assisted in outcome analysis of patients undergoing LDL apheresis for hypercholesterolemia. Outside of work, her interests include swing dancing, Broadway, and baseball, in no particular order. Julie is pursuing AP/CP training.



Shiyama Mudali

Shiyama was born in Batticaloa, Sri Lanka. Before coming to Baltimore, Shiyama pursued an ambitious double major in Biochemistry and Latin at Rice University in Houston, but did find time to relax during her summers as a research intern at NASA. She completed her M.D. here at Johns Hopkins, where early on she discovered a love for pathology, taking particular interest in endocrinology and pancreatic cancer research. Outside of her academic pursuits, she plays piano, crafts clothing and jewelry, and enjoys traveling abroad. Shiyama will train in both AP and CP.



Department of Pathology Incoming House Staff, 2006-2007

John Schmieg

John was born in Port Arthur, Texas. He joins the intern class from New York University School of Medicine, where he earned both his M.D. and Ph.D. degrees. John was inducted into AOA in medical school, and received a scientific doctorate from the NYU Department of Parasitology for his research of a novel NK/T cell ligand. Before studying in New York, John earned his bachelor's degree in Molecular Biology and Anthropology at Vanderbilt, and helped excavate an ancient Roman city in France as part of a summer archaeological field class run by Tufts University. John now begins digging into the AP/CP curricula.



Andrea Subhawong

Andrea was born in Charlottesville, Virginia. She comes to us from Vanderbilt University, where she completed both her M.D. and undergraduate training. Andrea has had a long standing interest in biomedical research, having spent time in college and medical school working on projects as diverse as HLA type effects on immune response to pathogens and tools for genetic engineering. She has a soft spot in her heart for her research subjects, admitting in her application that she once smuggled out of lab four African clawed frogs expressing transgenic green fluorescent protein home to be pets. Andrea joins the department for AP/CP training.



Aaron Tobian

Aaron was born in Fort Wayne, Indiana. He recently completed his M.D. and Ph.D. studies at Case Western Reserve University. Prior to this he earned a bachelor's degree in Chemistry from Hanover College, where he received the intriguing Outstanding Independent Man Award in 1998. Aaron's pre-doctoral research stints included a several month-long study of the South African post-apartheid health care system and a year devoted to clinical work on lymphatic filariasis in Papua New Guinea. His Ph.D. thesis work investigated pathogen heat shock proteins and their roles in host immune system antigen presentation. Aaron joins Johns Hopkins for CP training.



Pathology Diversity Plan - Dr. Juan C. Troncoso

In an effort to promote the diversity among its faculty, the Department of Pathology has asked Dr. Juan C. Troncoso to lead a committee to identify ways to foster the recruitment and retention of minorities in the faculty of the Department. Dr. Troncoso obtained his medical degree from the Catholic University of Chile and came to Hopkins as a fellow in Neuropathology in 1978. Composed by individuals of diverse backgrounds, the committee is already operating. The committee sees as its responsibility to develop ideas and to propose initiatives that will fulfill the commitment of our Department to a diverse working environment within the Hopkins tradition of excellence in service, teaching, and research. The initial discussions of the committee have identified exposure to research during college as a critical factor in the development of a future career in medicine and pathology. The committee looks forward to presenting its findings and recommendations in future faculty meetings. In the meantime, the committee invites members of the Department to contribute ideas, suggestions, and comments to promote a more diverse academic community. Please send them to troncoso@jhmi.edu.

Background and Objective

The Johns Hopkins University Department of Pathology is committed to the recruitment, retention, and inclusion of a diverse range of faculty, trainees, and staff in its programs. With the increasing scope of Pathology's activities beyond the local level and United States, it is appropriate and desirable for the faculty, trainees, and staff to reflect the changing patient, student, and research populations we serve and the pool of talent available worldwide.

The term diversity is meant to refer to characteristics such as race,

religion, nationality, ethnicity, gender, and sexual orientation. Where there is under-representation of specific groups among the ranks of faculty, trainees, and staff with respect to the relevant populations, we will select and use effective and appropriate methods to monitor, identify, recruit, retain, include and value qualified individuals of such groups.

Strategic Plan

A University and a Hospital Pathology Diversity Committee (PDC) have been formed consisting of diverse individuals from the Department to strategically address the recruitment, retention, and inclusion of under-represented groups by using non-discriminatory practices that will assure that the Department sets, monitors, and reaches its goals.

These practices will include the following:

- Establishing a database to be used in decision-making regarding the diversity profile of the Department in comparison to other Pathology Departments and the relevant populations.
- Setting goals and measuring key variables of the Department with respect to hiring and retaining individuals of under-represented groups.
- Assisting and participating in the processes for identifying and recruiting underrepresented faculty, trainees, and staff.
- Reviewing Department Policies, Procedures and Practices that affect recruitment and retention.
- Providing information and education about the diversity of the department and diversity issues in general.
- Recommending ways to strengthen retention by ensuring that needs and concerns of under-represented faculty, trainees, and staff are understood and addressed.

The PDCs will report directly to the Director of Pathology and provide at least annual progress reports and an annual strategic plan for the following year.

Awards/Recognition

Maryland Science Center's Outstanding Young Scientist Award

Dr. Anirban Maitra, Associate Professor of Pathology and Oncology at The Sol Goldman Pancreatic Cancer Research Center was awarded the Maryland Science Center's 2006 Outstanding Young Scientist Award. Sponsored by the Maryland Academy of Sciences, the award includes the Allan C. Davis Medal. Dr. Maitra's laboratory is exploring the development of novel therapies for treating pancreatic cancer by identifying the genetic pathways that cause the disease.

The Maryland Outstanding Young Scientist award program was established in 1959 to recognize the extraordinary contributions of young scientists in the state of Maryland. Many former recipients have gone on to distinguished careers in science.



PanCAN Medical Visionary Award

Dr. Ralph H. Hruban, Director of The Sol Goldman Pancreatic Cancer Research Center at the Johns Hopkins University School of Medicine, was awarded the 2006 Medical Visionary Award from PanCAN, the national pancreatic cancer advocacy group. The Medical Visionary Award honors a prominent individual in the medical or scientific community whose outstanding achievements advance the cause of pancreatic cancer research. Dr. Hruban received this award at PanCAN's annual "Evening with the Stars" gala in Hollywood, California on November 4, 2006.



The Goldblatt Cytology Award

Dr. Yener Erozan, Professor of Cytopathology, was awarded The Goldblatt Cytology Award at the 16th International Congress of Cytology in Vancouver, Canada in May 2007. The Maurice Goldblatt Cytology Award was inaugurated in 1960 by the late Maurice Goldblatt, the founder and honorary chairman of the Cancer Research Foundation. This high honor recognizes one individual for their life-long dedication to the cause of cytology. Congratulations Yener!

Baker-King Award

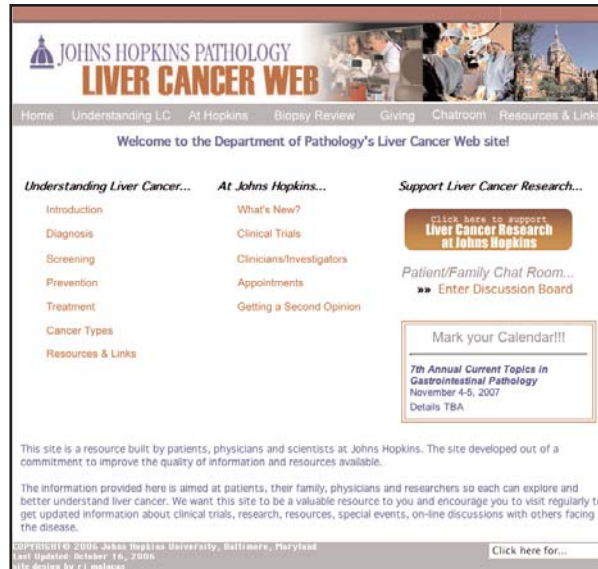
The Baker-King Award was created in 1962 by Dr. and Mrs. Theodore King, who recognized the significant contributions of all Hospital employees. The Baker-King Foundation established a fund to recognize employees in any non-exempt, non-supervisory position within JHHSC/JHH. The awards are presented to employees who have been truly outstanding in the performance of their job duties, and who thus set an example for all.

2006 Award Recipient

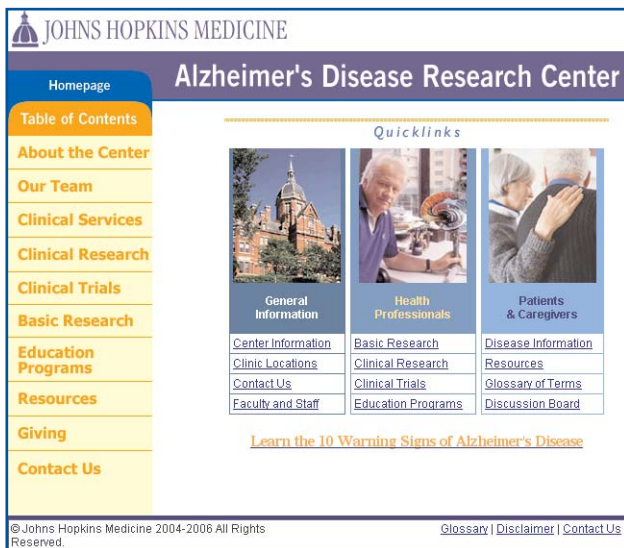
Sherrie Hicks-Rose is a Lab Technician II in the Core Lab. She was nominated by Lois Tissue, her supervisor, who states, "Sherrie has demonstrated the gold standard with outstanding performance in the Department of Pathology in our inpatient and outpatient collection areas. She provides excellent patient care and support to physicians and nurses while obtaining blood samples for testing, interfacing with clinicians throughout the JHOC clinics, and training new employees. Sherrie excels in the performance of her job and exudes a team spirit. She leads by example, motivating not only herself but her coworkers, new employees and students to approach their jobs with a high degree of professionalism and pride. Sherrie truly epitomizes the highest values of patient care for The Johns Hopkins Hospital." Sherrie was a key player in the set-up and operation of a new phlebotomy outreach station which opened in September 2005 in the 550 Building on the East Baltimore campus. She continues to be directly responsible for optimal patient workflow there. Her expert phlebotomy skills, warm and friendly smile, compassionate nature, and consummate professionalism have won her exemplary scores in patient satisfaction surveys. On several occasions when patients became ill while at the clinic, Sherrie transported their specimens across multiple buildings to expedite delivery of the urgently needed testing to the Core Lab. Last year Sherrie volunteered to drive to a patient's home so he would not have to return to the Hospital for blood work after a problem with his earlier specimen. She has come in early and stayed overnight during many Hospital snow emergencies and is known to always be willing to help her coworkers and to stay past her shift to provide patient services.



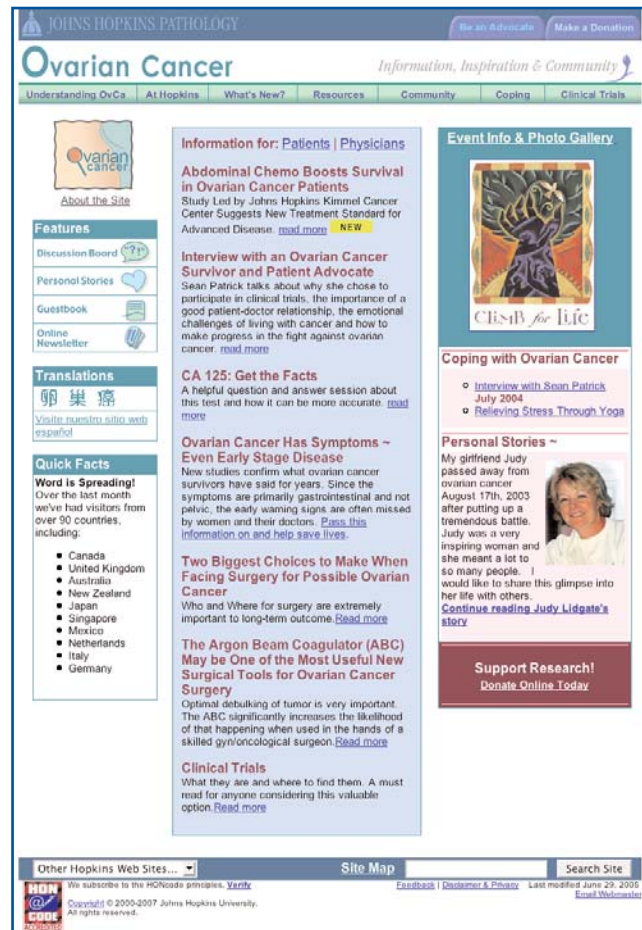
...On The Web



The Liver Cancer Web site is our newest Web site. It was established in early 2006 by Dr. Robert Anders.



An estimated 4.5 million Americans have Alzheimer's disease. The number of Americans with Alzheimer's has more than doubled since 1980. This comprehensive Web site covers the disease from basic science to patient care.



The Ovarian Cancer Web site regularly receives hits from over 90 different countries. The Web site has been translated into Spanish and Chinese.

Calendar

March 24-30, 2007

*United States and Canadian Academy of Pathology
95th Annual Meeting
Manchester Grand Hyatt and the
San Diego Convention Center;
San Diego, California*

March 26, 2007

*Johns Hopkins Pathology Alumni Reception
United States and Canadian Academy of Pathology
Manchester Grand Hyatt; San Diego, California*

April 5, 2007

*Pathology Young Investigators' Day 2007
The Johns Hopkins Medical Institutions Campus;
Baltimore, Maryland*

May 17-19, 2007

*8th Annual "Mastering the Challenges of
Cytopathology"
Tremont Plaza Hotel; Baltimore, Maryland*

November 3-4, 2007

*7th Annual Current Topics in Gastrointestinal
Pathology;
Albert H. Owens, Jr. Auditorium, CRB II
The Johns Hopkins Medical Institutions Campus;
Baltimore, Maryland*

Congratulations to the 8th Annual Pathology Young Investigators' Day Awardees March 9, 2006

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

For Excellence in Basic Research

Martina Bazzaro, Ph.D.
Jon M. Davison, M.D.
Ratish Gambhira, D.V.M.
Isamu Z. Hartman, B.S.
AeRyon Kim, B.A.
Victoria Laast, D.V.M., M.S.
Davinna Ligons, B.S.
Abdiaziz Mohamood, Ph.D.
Kedar Narayan, B.A.
Tonya J. Webb, Ph.D.

For Excellence in Clinical Research

Donna E. Hansel, M.D., Ph.D.
Alexandra C. Hristov, M.D.
Joshua A. Wisell, M.D.
Anna Yemelyanova, M.D.

For Excellence in Translational Research

Eli E. Bar, Ph.D.
Malarvizhi Durai, Ph.D.
Xing Fan, M.D., Ph.D.
Bruce Huang, B.A.
Haijme Orita, Ph.D.
Janis M. Taube, M.D.

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