

Director's Corner

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

This past academic year has been one of success and new challenges for the Department of Pathology. The successes of the Department took many forms. On the research side, our funding has never been higher (Total Extramural Direct and Indirect of \$27,077,172)



Dr. J. Brooks Jackson

with a 5% increase in funding from the year before. We are now ranked 3rd in the country among Pathology departments in terms of our NIH funded research which includes funding for 37 R01 grants. The number of principal investigators also increased to 30. This diversity of independent investigators strengthens the breadth of our research while decreasing the dependence of our research success on a few individuals. Given these resources and talent, it is to our credit that our faculty, trainees and staff published over 180 first authored articles in peer reviewed journals this past year fulfilling one of our top academic missions: the creation and dissemination of new knowledge to improve the health of mankind.

This was also a banner year for our teaching programs. Our residency program increased in size to 32 funded positions which

Continued on page 2

Inside...

- Lab Week 2002 - Pg 2
- 4th Annual Young Investigators' Day - Pg 3
- New House Staff - Pg 4
- Faculty Changes - Pg 5
- Funding our Future - Pg 6
- John Kingsbury Frost - Pg 7
- New Graduate Students - Pg 8
- New Grants and Contract Awards - Pg 9
- Awards / Recognition - Pg 10
- On the Web - Pg 11
- Pathology Calendar - Pg 12

Division in Highlight: Cytopathology Expands in All Directions

True to the Hopkins tradition, the John K. Frost Cytopathology Laboratory experienced growth in all three areas: education, service, and research.

The highlight of the year was the third annual "Mastering the Challenges of Cytopathology" course, the successor to the renowned "Institute." Ed Cibas, M.D., Associate Professor of Pathology, Harvard Medical School, presented the John K. Frost lecture, "New Directions in Quality Control." Despite what could be a dry topic, his talk was anything but dull and boring. In addition to being entertaining, it also was full of valuable techniques for effective quality assurance.

Breaking tradition, Ed forewent the after dinner talk, and replaced it with a display of his superb pianistic talents. He was bravely and capably joined for one piece by Hopkins faculty, Doug Clark, M.D., in a duet from Ravel's

Mother Goose Suite. The new Marriott Waterfront provided an elegant venue for the course and banquet. All agreed it was a highly successful "Master Class."

The most recent issue of *Acta Cytologica* describes the innovative computer course developed in the division for teaching second year medical students the art and science of Cytopathology (*Acta Cytol* 2002;46:481-489). Two years ago, our small faculty realized their inability to introduce the cytologic method to all the second year medical students. Why not use high tech? With a grant from the Dean's Office, Syed Ali, M.D. and then fellow, David Steinberg, M.D., selected ten topics from the pathophysiology course to augment with cytopathology. The modules are case based, and lead the student through a series of questions relative to each case, explaining why their answer is either right or wrong. We have

already had requests from major academic institutions to utilize this program in their own curriculum. Visit our web site at [<http://pathology2.jhu.edu/cytopath/index.html>] for a demonstration and to gain full access to this superb teaching tool.



Cutting edge translational research is a driving force in many of our departmental divisional laboratories, and Cytopathology is among the leaders. With strong departmental

Continued on page 3

Director's Corner

Continued from page 1

entailed the successful recruitment of 11 new excellent residents. This is the largest number ever to be taken in one year in the department (7 successfully through the Match, 4 outside the Match). The increase in the total number of residents will allow us to handle the continuing increase in patient cases and testing, and yet allow time for residents to study and learn the foundations of pathology. The Pathobiology graduate student program took 6 new students this year completing the enrollment of all four classes. These new students were all clearly among the top half of applicants and will only enhance the quality of our program and be a pleasure to teach and work with. The Pathology course for the second year medical students was again rated highly by the students and resulted in 27 medical students choosing to take pathology electives this past year. In addition, over 350 participants attended Pathology CME courses.

The pathology services saw continued growth in test menu and volumes. New tests include FLT-3, ITD Mutational Analysis; HPV High Risk Genotyping; Epstein-Barr - EA, EBNA, VCA; 1P LDH Glioma Typing; and Lyme-Western Blot just to name a few. The total number of clinical laboratory tests performed increased from 3.5% to 3,997,267 at Johns Hopkins Hospital. The number of specimens

sent to Hopkins Pathology for expert consultation increased 9.8% and reflects just how excellent our pathologists are. These are all time volume highs and are obviously keeping us very busy.

The success of our research, teaching, and patient care activities has in large part helped the department and hospital financially as well. Our end of year actual hospital expenses showed a volume adjusted positive variance of \$763,000 which will help us meet our 2% improvement plan and provide for equity adjustments for this coming year if we can continue to operate at this level of efficiency. On the University side our departmental margin increased by allowing us to invest in new research infrastructure and projects, increase salaries and part C bonuses, and increase our reserve.

Despite this success, the challenges are many. For one, the hospital operating budget will be tight in order to save enough money to fund the new Acute Care Tower and a Women's and Children's hospital. Likewise, a greater percentage of donations will need to be obligated toward funding of new research buildings. Space, of course, will continue to be a major constraint for the next year until the Broadway Research Building is completed in the Fall of 2003. Once this research space becomes available, the challenge will be to fill it with promising new research programs and expansion of existing productive programs. Until the new

hospitals are built, lack of clinical laboratory space will also become a greater challenge due to increased centralization of testing at Johns Hopkins and larger patient test volumes.

Perhaps, the most onerous challenge for faculty will be the increasing number of complex regulations and requirements with which faculty are expected to be in compliance. As I mentioned at the Retreat in June, individual faculty members are already subject to a daunting number of regulations, requirements and policies (Table 1). Not only are the numbers large, but the requirements are changing continually, making it extremely difficult to keep up. In addition, new ACGME mandates will significantly alter the way we train residents, and the HIPAA regulations, which become effective next April, will dramatically change the way we traditionally conduct our patient care and research activities. The School of Medicine and Department are committed to educating our faculty, staff, and trainees about these changes. We also will be putting infrastructure and mechanisms in place to alleviate this burden and ensure that we are in compliance.

Despite these challenges, it is important to note that by almost any measure Johns Hopkins Pathology is doing very well thanks in large part to all the people who work in our department. Given the talent and desire to be the best, I have no doubt that we will be successful in meeting these challenges as well.

National Medical Laboratory Week April 14-20, 2002

"Laboratory Professionals - Quality Care Through Quality Testing" Caring For America



Months of hard work and planning made this year's National Medical Laboratory Week a tremendous success. This was the first time in recent years that the Department of Pathology sought to promote lab week to the entire Johns Hopkins community.

On the state and local levels, both Governor Parris N. Glendening & Mayor Martin O'Malley made official proclamations of this important event. These are the first proclamations ever made in the State of Maryland regarding National Medical Laboratory Week.

Informational displays and banners were created by many divisions and were available to the community in both the Broadway Corridor and the Outpatient Center. Divisional activities included lab coat fashion shows, bake-offs, scavenger hunts, luncheons, pizza parties, ice cream sundaes, The Omelet Man, and many games. (It's been said that "Pin the Mustache on Mike" Huppenthal was a "HOOT.")

For pictures and information from this event, please view the web site at <http://pathology.jhu.edu/labweek/>

Table 1. Regulatory Compliance Expectations of Faculty Members

1. Human Subjects research requirements (OHRP, FDA, ICH, JCCI)
2. Profec Billing compliance regulations (Medicare/Medicaid)
3. NIH financial regulations for grants and contracts
4. Animal protection regulations
5. JCASHO/CLIA regulations
6. IATA shipping regulations of biohazardous material
7. OIG Model Laboratory Compliance program
8. Conflict of interest regulations
9. Conflict of commitment regulations
10. EEOC regulations
11. State Medical Board regulations
12. State reporting requirements of medical diseases
13. Hospital credentialing regulations
 - a. Risk management regulations
 - b. Chemical hazardous materials training
 - c. Bloodborne pathogen training
 - d. TB screen
 - e. CME documentation
14. JHU Research and Misconduct policies
15. JHU Gold book policies
16. Foreign regulations

Congratulations to 4th Annual Pathology Young Investigators' Day Awardees

For Excellence in Basic Research

Marina G. Afanasyeva, M.D.	Fellow, Immunology
Jonathan Brody, B.A.	Graduate Student, Pathobiology Program
Chih-Ling Chou, M.S.	Graduate Student, Molecular & Biophysics Program
David Elliott, B.A.	Graduate Student, Cellular & Molecular Medicine Program
Noriyoshi Fukushima, M.D.	Fellow, GI Pathology
Mehmet Guler, M.D., Ph.D.	Housestaff
Christine Iacobuzio-Donahue, M.D., Ph.D.-	Housestaff
Sunil Karhadkar, M.B.B.S.	Fellow, Urologic Pathology
Tae Woo Kim, Ph.D.	Fellow, Gyn Pathology
Tong Li, Ph.D.	Fellow, Neuropathology
Jun Luo, Ph.D.	Fellow, Urology
Alan K. Meeker, Ph.D.	Fellow, Urology
Mathias Oelke, Ph.D.	Fellow, Immunology
Antony Parker, Ph.D.	Fellow, GI Pathology
Shiwen Peng, M.D., Ph.D.	Fellow, Immunology
Norihiro Sato, M.D.	Fellow, GI Pathology
Rongcun Yang, M.D., Ph.D.	Fellow, Gyn Pathology

For Excellence in Clinical Research

Robert W. Allan, M.D.	Housestaff
M. Ali Ansari-Lari, M.D., Ph.D.	Housestaff
Sally A. Campbell-Lee, M.D.	Fellow, Transfusion Medicine
Alexander Haese, M.D.	Fellow, Urology
Gregory Hosler, M.D., Ph.D.	Housestaff
George M. Kunz, M.D.	Housestaff
Angelique Wolf Levi, M.D.	Fellow, Cytopathology
Cristina Magi-Galluzzi, M.D., Ph.D.	Fellow, Urologic Pathology
Denis M. McCarthy, M.D.	Housestaff
Anil Parwani, M.D., Ph.D.	Housestaff
Robert Pu, M.D.	Fellow, Molecular Pathology
Monica Srodon, M.D.	Housestaff
Tjarda Van Heek, Ph.D.	Fellow, GI Pathology
Naghme Yusefzadeh, M.D.	Fellow, Renal Pathology

Cytopathology Expands in All Directions

Continued from page 1

support, Doug Clark, M.D., has converted his basic science research lab into a vehicle for diagnostic molecular cytopathology. This year's fellows, Bin Yang, M.D., Ph.D., and Robert Pu, M.D., Ph.D., have joined Doug to explore new molecular assays for defining disease processes utilizing fine needle aspirates and traditional cytologic specimens. At Bayview, Patti Alli, M.D., is studying telomerase activity of urothelial lesions; Theresa Nicol, M.D., has focused on the distinguishing immunochemical and molecular characteristics of renal masses. Patti's work is in collaboration with Tim O'Leary, M.D., director of the Division of Cellular Pathology at the AFIP, an extension of her AFIP fellowship of several years ago.

Last year's Hopkins-AFIP fellow, Angelique Levi, M.D., described our experience with reflex HPV testing on ASCUS Pap tests at the USCAP meeting in Chicago. After fourteen months, we have decided to utilize the probabilistic model

of HPV result reporting rather than altering ASCUS diagnoses based on HPV test results. Watch for the published version in the near future.

Which brings us to service. Our clinical responsibilities continued to grow as we increase the numbers of our fine needle aspirates, and process more Pap tests by the liquid based method (now 54% of our cervical cytology samples). In collaboration with TriPath Imaging, Inc., we will participate in the FDA clinical trial of the Location Guided Screening Project using the Focal Point System™. This computerized imaging system is based upon the Neopath Autopap™ instrument. The goal is to increase the speed of screening as well as to improve accuracy by decreasing false negatives.

In addition to *qvelling** over the junior faculty, the senior members of the division are pedaling hard, and occasionally making some progress. Yener Erozan, M.D. continues to provide constancy to the sign-out room, mentoring every resident and fellow as if they were special treasures. He also can be found in cities around the globe, responding to numerous invitations to participate in CME programs. I'm gradually

recovering from the presidency of the American Society of Cytopathology, and enjoying my new responsibilities at Bayview Medical Center as Chief of Pathology.

All of these activities make for a very busy day, but relief has arrived! Soner Altioek, M.D., Ph.D., joined us July 1. He finished his pathology training at Massachusetts General Hospital this past academic year. The attraction of the Molecular Cytopathology Laboratory was too enticing for him to refuse, and we look forward to many fruitful projects with him. His participation on the service rotations will also enable our faculty to devote more time to Discovery.

We hope that you will join us personally whenever you're in Baltimore, but if Charm City is not on your itinerary soon, connect with us on the internet. The Pathology web site [<http://pathology2.jhu.edu>] will allow access to the Cytopathology section as well as the many other sites in the department. We look forward to hearing from you soon.

**qvell*: a Yiddish verb, meaning to regard loved ones with affection and pride. ■

*By Dorothy Rosenthal, M.D.
Director of Cytopathology*

Department of Pathology Incoming House Staff, 2002-2003

Melissa Brassell

Melissa is originally from Royal Oak, Michigan. She received a B.S. in Biology from Oakland University in Rochester, Michigan. She went on to receive a Masters in Anatomy and a M.D. from Wayne State University. She enjoys snowboarding and will be moving here with her husband Michael as well as a Norwegian elkhound and an extremely large shepherd/lab mix. Melissa is pursuing AP/CP training.



Jon Davison

Jon is originally from Pennsylvania. He attended the University of Notre Dame where he received his degree in Philosophy and subsequently studied theology at the Maryknoll School of Theology in Ossining, New York. He received his M.D. from the University of Chicago. His research interests include identifying new molecular markers for dysplastic nodules in hepatitis C. Jon and his wife Victoria have three children aged 4 months, 2 years, and 5 years. He also enjoys golfing, running, and soccer. Jon will be joining the department on the AP/CP track.



Hubert Fenton

Hubert is from Stamford, CT. He received his B.S. in Biology from Brown University and his M.D. from the University of Rochester School of Medicine. During this time he completed a Post-sophomore Fellowship in Pathology. In addition he was involved in a variety of research projects relating to Alzheimer's Disease. His hobbies



include cooking and rugby. Hubert will be training in AP/CP.

Kara Judson

Kara was born in Landstuhl, Germany and raised in Virginia. She received a B.A. in Anthropology from the University of Pennsylvania. She then received her medical degree from George Washington University. She is currently a postdoctoral research fellow working on the pathogenesis of HSV-1. Kara enjoys kayaking and hiking. She will be joining us for AP/CP training.



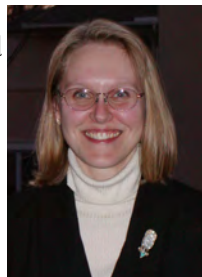
Irina Mikolaenko

Irina was born in the Ukraine. She received her medical degree from Chervitsy Medical School in the Ukraine and then immigrated to Canada where she worked as a research assistant in Toronto. She completed her AP/CP pathology residency at the University of Alabama School of Medicine. She will be joining the division of Neuropathology for fellowship training.



Diana Molavi

Diana originated from Nashville, TN. She attended Penn State where she received a B.S. in Biology and Vertebrate Physiology. Diana then attended Johns Hopkins University where she completed Ph.D. training in Neuroscience. She subsequently attended Washington University in St. Louis for her M.D. She has been living in Baltimore with her husband and daughter, working at The Johns Hopkins University Center for Talented Youth where she was an education coordinator. When not working, Diana enjoys photography, cooking and camping. Diana is interested in AP/CP training.



Hassan Nayer

Hassan was born in Iran. He received his M.D. at the Shahid Beheshti University of Medical Sciences in 1990 where he subsequently completed his training in Anatomic and Clinical Pathology. In Iran he was an instructor in pathology at the Baghiatollah University where he won a teaching award. He was also an attending in pathology at the Pars Hospital. He then moved to the U.S. in 1999 where he completed Anatomic Pathology training at Yale New-Haven Hospital with subspecialty training in Nephropathology. Outside of work he enjoys playing guitar. Hassan will be joining us for CP training and is interested in Hematopathology.



Christopher Owens

Christopher was born in Thomasville, Georgia and attended Presbyterian College in Clinton, SC where he received a B.S. in chemistry. After college he worked in the pharmaceutical industry developing new products for FDA approval. He received his medical degree from the Medical College of Georgia. During college, Christopher was on the varsity golf team. He also enjoys fishing, hiking and chess. Christopher is on the AP/CP track.



Emily Prough

Emily is originally from Hershey, Pennsylvania and was raised in Winston-Salem, North Carolina. She attended Wellesley College where she received a B.A. in Philosophy. She was involved in a variety of research projects including investigating the role of oxidative stress on aging. Emily subsequently went on to Vanderbilt University for her medical degree. Her hobbies include running, swim-



Incoming House Staff, 2002-2003

Continued from page 4

ming and weight training. She will be joining us for the AP/CP program.

Natasha Rekhtman

Natasha was born in Moscow, Russia and arrived in the U.S. in 1988. She obtained a B.S. in Neuroscience at New York University. She then went to Albert Einstein College of Medicine where she received her M.D. and Ph.D. in cellular and molecular biology. Her thesis was based on murine erythroleukemia. Her outside interests include yoga, hiking and gardening. She is on the AP/CP track with an interest in hematopathology.



Todd Sheridan

Todd was born in Camden, Arkansas. He received a B.S. in Biology at the University of Toledo. He subsequently attended the Medical College of Ohio where, in addition to earning his M.D., he completed a Post-sophomore Fellowship in Pathology. When he's not hard at work, Todd enjoys fishing, camping, art and music. Todd is interested in AP/CP training.



Chung Ho Shum

Chung was born in Durham, England. He received his B.A. in Molecular Cell Biology and Biochemistry from U.C. Berkley. He obtained his M.D. and Ph.D. (in Pathobiology) from the University of Southern California where he identified a number of Ewing's sarcoma fusion (EWS/Flt-1) target genes as part of his thesis work. He is fluent in Cantonese and Spanish and enjoys a variety of outside interests including recreational bicycling and origami. Chung will be pursuing AP/CP training.



Primary Faculty Changes - Since September 2001

New Faculty

Karen Carroll	Associate Professor & Director	Microbiology
Soner Altioek	Instructor	Cytopathology
S. Campbell-Lee	Instructor	Transfusion Medicine
William Clarke	Instructor	Chemistry
Omar Laterza	Instructor	Chemistry
Marina Afanasyeva	Research Associate	Immunology
Joanna Jankowski	Research Associate	Neuropathology
Carol H. Allan	Assistant	Surgical Pathology
Brian K. Carlile	Assistant	Surgical Pathology
George M. Kunz	Assistant	Surgical Pathology
Teresa M. Lee	Assistant	Immunology
Robert B. Oliai	Assistant	Surgical Pathology
A. Truskinovsky	Assistant	Gyn Pathology

Departures

Elizabeth Perlman	Associate Professor	Children's Memorial Hospital in Chicago
Susan Abraham	Assistant Professor	Mayo Clinic, Rochester, MN
Tarik Tihan	Assistant Professor	University of California, San Francisco
Robb Wilentz	Assistant Professor	University of Miami
A. Sinelnikov	Research Associate	University of Kentucky
Scott Kuzdzal	Research Associate	Celera, Rockville, MD
Suixiang Yang	Research Associate	Returned to China
Shrihari Kadkol	Assistant	University of Illinois in Chicago
Wendy Paul	Assistant	NIH
Ann Sehdev	Assistant	Cascade Pathology Services, Portland, OR
Virginia Vader	Assistant	St. Charles Medical Center, Bend, OR

Promotions

Francis P. Kuhajda	Professor	Molecular Pathology
James Eshleman	Associate Professor	GI/Liver
Jining Bai	Assistant Professor	Molecular Pathology
David M. Berman	Assistant Professor	GU Pathology
Charles Eberhart	Assistant Professor	Neuropathology
Kathleen Murphy	Assistant Professor	Molecular Pathology
Michael Torbenson	Instructor	GI/Liver
Yong-Qiang Wang	Instructor	Chemistry
Jinong Li	Instructor	Chemistry

FUNDING OUR FUTURE

With your wonderful and generous support, we have made significant progress in our campaigns to honor Drs. Yardley, Eggleston, Erozan, and Heptinstall through the creation of named funds and fellowships that support the careers of young pathologists. Please consider supporting one or more fellowships again this year.

Generous Support from the Family of Margaret Lee

A new program in biliary cancer research in the Department of Pathology has been established thanks to the generous support of the family of Margaret Lee. Margaret Lee is a grateful patient of Dr. John Cameron and her family has provided significant support to the Department of Pathology to help in the battle against biliary cancer.

The family of Margaret Lee, including her husband Al Njoo and her sister Thai Lee, have already provided more than \$850,000 in support to the Department of Pathology to initiate key studies on gallbladder and biliary cancer. They have:

- 1) Provided critical support to the endowment for the John Yardley Fellowship in GI/Liver Pathology. Last year's Yardley fellow, Dr. Anirban Maitra, has joined the faculty and has dedicated his career to gallbladder and biliary cancer research.
- 2) Established a project to xenograft hepatopancreaticobiliary cancers. These xenografts will form an invaluable resource for fundamental studies of the molecular-genetic alterations in these cancers.
- 3) Established a project to create tissue arrays of hepatopancreaticobiliary cancers. These tissue arrays will greatly speed hepatopancreaticobiliary research, allowing investigators to study up to one hundred cancers on a single slide.
- 4) Helped with the purchase of equipment including an Affymetrix node for gene chip analysis and a luminometer for functional assays.
- 5) Funded a comprehensive analysis of

gene expression in hepatopancreaticobiliary cancers. This study will include extrahepatic small cell carcinomas, providing unique insight into this rare tumor type.

6) Funded a study of novel tumor markers in gallbladder cancers. This study will potentially identify new targets of therapy.

The generous support provided by the family of Margaret Lee is a wonderful example of how private giving can not only honor a remarkable person, but can also have a significant long-term impact on the battle against a disease.

The Joseph C. Eggleston Fund in Surgical Pathology

The Joseph C. Eggleston Fund in Surgical Pathology honors Joseph C. Eggleston, M.D., '62, former Director of Surgical Pathology and Professor of Pathology. Dr. Eggleston touched many of our lives with his dedication to excellence in Surgical Pathology and his outstanding



Joseph C. Eggleston

teaching. The income from this endowed fund will be allocated each year to a surgical pathology resident or junior faculty member in the Division of Surgical Pathology for

projects that support their career development in surgical pathology. We are pleased to announce that Dr. Christine Iacobuzio-Donahue is the first recipient of an award from the Joseph C. Eggleston Fund. Dr. Iacobuzio-Donahue received the award for her work developing new markers of pancreatic cancer.

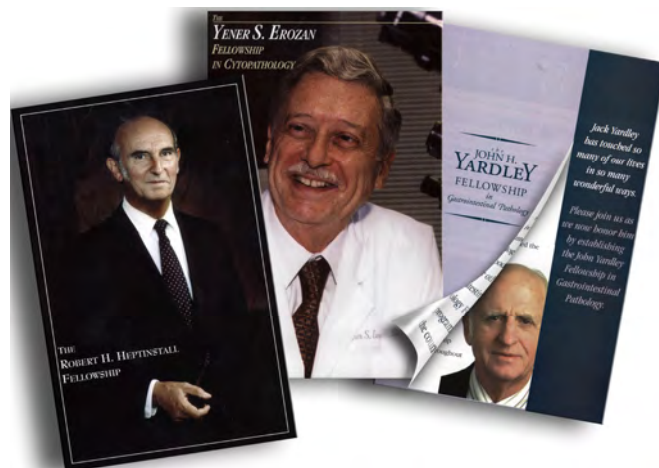
The Yener S. Erozan Fellowship in Cytopathology

The Yener S. Erozan Fellowship in Cytopathology honors Yener S. Erozan, M.D., Director Emeritus of the Cytopathology Institute and past President of the American Society of Cytopathology. Dr. Erozan is a much loved teacher and diagnostician who continues to have a wonderful influence on the Division of Cytopathology and on the Department. Income generated from this endowment will be allocated to a fellow in Cytopathology to support the development of their career.

The Robert H. Heptinstall Fellowship

The Robert H. Heptinstall Fellowship honors Robert H. Heptinstall, M.D., former Baxley Professor and Director of Pathology. Dr. Heptinstall is well known to all of us for his text book, his scientific accomplishments and for his wonderful personality – his impatience with pretension, his wit and humor, and his vivid storytelling. The Robert

Continued on page 7



FUNDING OUR FUTURE

Continued from page 6

H. Heptinstall Fellowship will promote research activities and clinical training of outstanding young pathologists pursuing careers in research.

The John H. Yardley Fellowship in Gastrointestinal Pathology

Thanks to your generous support, we are pleased to announce that over \$850,000 has already been raised for The John H. Yardley Fellowship in Gastrointestinal Pathology. This Fellowship will promote the research activities and/or clinical training of promising pathologists pursuing advanced training in the study of gastrointestinal liver disease in the Department.

The recipient of the John H. Yardley

Fellowship for the Academic Year 2002-2003 is Dr. Christine Iacobuzio-Donahue. Dr. Iacobuzio-Donahue completed her residency training here at Johns Hopkins and her research, under the mentorship of Drs. Scott Kern and Ralph Hruban, will focus on gene expression in pancreatic cancer. The John H. Yardley Fellowship is a wonderful example of how private giving can both honor our treasured faculty and, at the same time, support the careers of young pathologists.

We ask that you consider supporting these funds and fellowships annually. What a wonderful way to honor these great physicians. We are enclosing a self-addressed return envelope to facilitate your contribution this year. Please contact Dr. Ralph Hruban at 410-955-9132 or rhruban@jhmi.edu for additional information. If you would like to use a separate

envelope, you may send your tax-deductible contribution payable to The Johns Hopkins University to:

*Attn: Mabel P. Smith
Department of Pathology
Johns Hopkins Hospital
Carnegie 428
600 North Wolfe Street
Baltimore, MD 21287-6417*

Thanks to all of you that have made this support a reality for our young pathologists. ■

JOHN KINGSBURY FROST (1922-1990)

Dr. John K. Frost, founder of the Cytopathology Laboratory at Johns Hopkins came to Baltimore in 1956 from the University of California School of Medicine at San Francisco with joint faculty appointments in the medical schools of The Johns Hopkins University and the University of Maryland. At Hopkins, he was appointed Assistant Professor of Obstetrics and Gynecology, and at the University of Maryland, Associate Professor of Pathology and Head of the Division of Cytopathology. During this time, he started schools of cytotechnology at both the University of Maryland and Johns Hopkins. In 1959, he came to Hopkins full-time in the Department of Pathology as Associate Professor of Pathology and Head of the Division of Cytopathology. Along with a well-organized diagnostic cytopathology laboratory, and a cytotechnology school, he developed a comprehensive cytopathology course, "The Postgraduate Institute for Pathologists in Clinical Cytopathology," and later an "Evening Seminars in Cytopathology" course for residents. He directed both until his death in 1990.

Dr. Frost was a dedicated educator and excellent organizer. He loved teaching. He was inexhaustible when he was lecturing. The "Institute" exemplified his organizational skills

and his dedication to teaching. This unique, two-week course was designed to cover all aspects of cytopathology from the basics to advanced, up-to-date knowledge in the field with ample laboratory practice time and taught entirely by the Hopkins faculty with the exception of one guest lecturer. Dr. Frost gave almost all the lectures, some of which lasted several hours. The course started at 7:00 a.m. with a working breakfast (Laborekfast) in the laboratory and, after an hour break for dinner, continued until 9:30 p.m. (lunch was optional!). The "Institute" was attended by more than 1,700 pathologists from the United States and other countries throughout the World. The course was also given in Iran and Israel between 1965 and 1974. Dr. Frost's contributions as an educator also included numerous invited lectureships, workshops, and visiting professorships in the U.S. and abroad, and 347 publications in print and other media. He received the International Academy of Cytology's Goldblatt Award in 1980, which is given to "the most prominent educator and teacher of cytopathology in the U.S.," and the Distinguished Achievement Award for continuing medical education from the American Society of Clinical Pathologists.

One of Dr. Frost's research interests was early detection of lung cancer. From 1969 to 1985 he was the Principal Investigator on one of the largest screening projects for the early detection of lung cancer. The project involved screening high-risk populations for lung cancer (male, heavy smokers over 40 years of age) with chest x-ray and sputum cytology.



Dr. John Kingsbury Frost (1922-1990)

With the participation of the Mayo Clinic and Sloan-Kettering Memorial Hospital, 30,000 male smokers were screened. At Hopkins, under Dr. Frost's direction, the project involved nine departments in two schools (Medical and

Continued on page 10

Graduate Training Program in Pathobiology 2002-2003: Incoming Students

Chih-Long Chang, M.D.

Chih-Long is originally from Taiwan. He earned his M.D. from Taipei Medical University in 1990. He is presently an attending physician in Gynecologic Oncology at Mackay Memorial Hospital, Taiwan. Chih-Long has authored several publications in highly regarded scientific journals including *Am J Obs Gyn*, *BBRC* and *Gyn Onc*. Having been a physician in gynecologic Oncology for several years, Chih-Long wishes to pursue more advanced scientific knowledge. He is currently engaged in work on clonal evolution and morphological regression of endometrial cancer treated by progesterone and significance of clonal growth of exfoliated cervical epithelia in liquid-based precipitate. Chih-Long has chosen to continue his studies in the Pathobiology Program to achieve his mission to acquire advanced academic preparation and help in the commitment of teaching and research when he goes back to his medical

Kristi Helke, D.V.M.

Kristi is from La Crosse, Wisconsin. She received her D.V.M. from the University of Wisconsin in 2000. She has also completed a 4-week externship at the Armed Forces Institute of Pathology. When Kristi realized that it was possible to answer questions like "What causes transmissible spongiform encephalopathy?" and, "Where is the reservoir for Ebola virus?" She knew that a career in biomedical research would be both challenging and rewarding. Kristi has created a polyclonal antibody directed against IgGs of multiple species to serve as a universal reagent for procedures from immunohistochemistry to western blots. The results of this project were presented as a poster at the University of Wisconsin's Research Day. She would like to gain more in-depth knowledge of the molecular pathogenesis of infectious disease and enter an academic institution as a primary investigator after completing her Ph.D.

Jay Jung-whan Kim, D.V.M.

Jay graduated from Konkuk University, Korea, first in his class in 2000. He received his D.V.M. and passed the Vet National Board Examination first out of 715 examinees. After graduating from the school of veterinary medicine, he entered gynecological cancer gene therapy lab in the Samsung Biomedical Research Institute, Korea. While working at the institute, he participated in several research projects including interferon signaling to telomerase and signal transduction of thymosin beta-10 and TGF-beta. From October 2000 to May 2002, he has been working at the University of Pennsylvania, School of Medicine as a post-doctoral researcher. His projects were intravital microscopy of pulmonary vasculature, metastatic potential and apoptosis in melanoma, MMP-9 in early pulmonary metastasis of prostate cancer and lymph node metastasis of prostate cancer. He authored several publications in highly regarded scientific journals including *Int. Journal of Cancer*, *Oncogene* and *Cancer Research*. He is interested in molecular mechanism of metastasis and preventing metastasis. His reason for continuing his studies in the Pathobiology Program is to prevent metastasis and help cancer patients fight against their disease.

Victoria A. Laast, D.V.M.

Victoria is originally from Ghana. She received her M.S. degree in Anatomic Pathology from Purdue University School of Veterinary Medicine. Victoria earned a D.V.M. from Moscow State Academy of Veterinary Medicine and Biotechnology in 1997. She was selected as a postdoctoral fellow at the Johns Hopkins medical Institutions in the Division of Comparative Medicine, undertaking a research project in the Retrovirus Biology Laboratory. Victoria is currently studying the role of the blood-brain barrier in the pathogenesis of SIV encephalitis/dementia as a model for HIV-associated dementia. At this point she is especially interested in the role of the cell adhesion molecules VCAM-1 and ICAM-1 in the trafficking of leukocytes across the blood-barrier.

As a student in the Pathobiology Program, Victoria's ultimate goal is to have a professional career as a biomedical researcher, providing diagnostic and therapeutic solutions to disease.

Annaka M. Lorincz

Annaka is originally from Virginia. Graduating Summa Cum Laude, she received her B.S. with Honors in Biology from the College of William and Mary in December 2001. As an undergraduate, she published a paper in the American Journal of Physiology as first author. Currently, she has two additional manuscripts in progress. Annaka's research as an undergraduate focused on brain function, using approaches from organismal to molecular biology. Her goal is to continue this approach with the study of human diseases, taking advantage of integrated biological techniques. Annaka would like to direct a biomedical research laboratory in an academic setting, investigating cancer in humans and emerging infectious diseases.

Kimberly M. Walter

Kimberly is originally from Yorktown, Virginia. She received her B.A. from the University of Virginia in 1999, and her M.S. from Johns Hopkins University in 2002. Kimberly has worked on several projects to identify genes involved in the development of pancreatic cancer. She has collaborated with fellow researchers on a study of the mechanism of epigenetic silencing of the promoter of the TSLC1 (tumor-suppressor in lung cancer-1) gene in pancreatic adenocarcinoma. This study is currently being reviewed for publication by the *Journal of Cancer Biology and Therapy*. She is also writing a chapter on xenografting for publication in a Pancreatic Cancer edition of the Humana Press series Methods in Molecular Medicine. Kimberly's career goal is to answer scientific questions in a laboratory setting, which could ultimately lead to improved quality of life for patients. She is working toward bridging the gap between laboratory research and clinical application and to understand and treat human disease.

New Grants and Contracts Awarded to Pathology Faculty Through June 30, 2002

FACULTY MEMBER	AWARD TYPE	AGENCY	DATES	TOTAL FUNDING
Borchelt, David	Grant	Huntington's Disease Society	10/01/01-09/30/02	89,835
Borchelt, David	Grant	JHU Center for ALS Research	04/01/01-03/31/03	208,570
Borchelt, David	R03 Grant	NIH/NIA	04/01/02-03/31/03	81,750
Campbell-Lee, Sally	K08 Grant	NIH/NHLBI	06/01/02-05/31/06	585,931
Chan, Daniel	Contract	Roche Diagnostics	01/02/01-01/01/02	90,000
Chan, Daniel	Contract	Roche Diagnostics	08/01/01-12/31/01	12,000
Chan, Daniel	Contract	Roche Diagnostics	01/02/01-01/02/02	12,000
Chan, Daniel	Contract	Tosoh Medics, Inc.	10/01/01-03/31/02	30,000
Chan, Daniel	Contract	Bayer Corporation	12/12/01-08/11/03	60,000
Chan, Daniel	Contract	Diagnostic Products Corp.	01/09/01-01/09/02	56,105
Clarke, William	Grant	Van Slyke Society	06/01/02-05/31/03	5,000
Dick, James	NIH subcontract	MIDI, Inc.	05/01/01-04/30/03	52,800
Dumler, Steve	NIH subcontract	PanBio, Inc.	07/01/01/12/31/01	33,220
Dumler, Steve	R01 Grant	NIH/NIAID	05/01/02-04/30/06	1,209,735
Eberhart, Charles	K08 Grant	NIH/NINDS	05/01/02-4/30/07	862,110
Epstein, Jonathan	Contract	Aventis Pharmaceuticals	03/01/02-09/30/02	35,535
Erozan, Yener	Contract	Inspire Pharmaceuticals	09/20/01-01/31/02	75,000
Eshleman, James	Inst. Grant	JHU/IRG	01/01/02-12/31/02	20,000
Eshleman, Susan	Grant	NIH/NICHD	07/01/02-06/30/06	1,030,052
Hatanpaa, Kimmo	Grant	American Brain Tumor Assoc.	07/01/02-06/30/04	70,000
Kuhajda, Frank	Grant	Dept. of Defense	04/01/02-03/31/05	490,262
Kurman, Robert	Contract	Watson Labs	08/22/01-10/22/01	5,000
Kurman, Robert	Contract	MDS Pharma Services	10/01/01-09/30/02	33,750
Lee, Michael	Grant	Dystonia Medical Research Fdtn.	01/01/02-12/31/03	135,000
Maitra, Anirban	Inst. Grant	JHU/IRG	01/01/02-12/31/02	20,000
Maitra, Anirban	Grant	Lustgarten Foundation	01/01/02-12/31/03	200,000
Maitra, Anirban	Grant	National Pancreas Foundation	07/01/02-06/30/03	20,000
Martin, Lee	Grant	Amyotrophic Lateral Sclerosis	08/01/02-07/31/05	194,400
Pasternack, Gary	Training Grant	NIH/NCI	07/01/01-06/30/06	1,558,685
Pizer, Ellen	Grant	Dept. of Defense	04/01/02-03/31/05	490,500
Roden, Richard	Grant	State of Maryland-DHR	07/01/01-06/30/03	150,000
Rodriguez, Rene	NIH subcontract	Yale University	09/20/01-08/31/05	501,682
Ronnett, Brigitte	Contract	MDS Pharma Services	10/01/01-09/30/02	6,075
Rose, Noel	R01 Grant	NIH/NHLBI	12/01/01-11/30/05	1,144,500
Rose, Noel	R01 Grant	NIH/NIAID	06/01/02-05/31/05	735,750
Rose, Noel	Grant	Maryland Arthritis Research Center	01/01/02-12/31/03	100,000
Rosenthal, Dorothy	Contract	Thermo Shandon	01/01/02-05/31/02	48,562
Schneck, Jonathan	Contract	Biotransplant, Inc.	07/01/01-06/30/02	164,900
Shih, Ie-Ming	Inst. Grant	JHU Clinicial Scientist Award	01/01/02-12/31/03	130,000
Shih, Ie-Ming	Inst. Grant	JHU/IRG	01/01/02-12/31/02	19,852
Shih, Ie-Ming	Grant	Stewart Trust	05/01/02-04/30/03	40,000
Sokoll, Lori	Contract	Lifescan	11/15/01-11/14/02	10,000
Sokoll, Lori	Contract	Dade Behring	05/16/02-09/15/02	17,048
Tuder, Rubin	Grant	American Heart Association	01/01/01-12/31/03	214,500
Tuder, Rubin	NIH subcontract	University of Colorado	09/17/01-07/31/05	1,174,608
Valsamakis, Alex	Contract	Bayer Diagnostics	08/01/01-07/31/02	89,110
Wilentz, Robb	Inst. Grant	JHU Clinicial Scientist Award	01/01/02-12/31/03	130,000
Wong, Phil	Grant	JHU Center for ALS Research	04/01/02-03/31/05	170,000
Wong, Phil	Grant	CART Fund	07/01/02-06/30/04	250,000
Total				\$12,863,827

FROST

Continued from page 7

Hygiene and Public Health) and was supported by over \$9,800,000 in contracts with NIH. Later, the research on lung cancer continued under Dr. Frost's leadership with grants (totaling more than \$7,000,000) from Rohm and Haas and The William Penn Foundation.

Dr. Frost had great interest in new technology, which included his research on image analysis, with Dr. Norman Pressman, and telepathology. Transmitting black and white images to television screens was used in the Division in the early 1960's. He presented color television microscopy at a meeting of the American Society of Cytology in 1967, and he was the first to publish the use of coaxial cable, the laser beam, and COMSAT satellite for cytopathology teaching.

Dr. Frost was actively engaged in educational, organizational and regulatory activities involving the field of cytopathology in all of the major pathology societies. He gave numerous

lectures and workshops, and participated on committees. He was President of the American Society of Cytology in 1964-1965, and he received the Society's Papanicolaou Award in 1972, the highest Award the Society gives.

I had the privilege of learning cytopathology from Dr. Frost and of working with him for almost 25 years. He was my mentor and friend. Professionally, he was a perfectionist. He believed in cytopathology as a diagnostic method, not a "guessing game" as he put it, and that a cytopathologic cancer diagnosis should be as reliable as a histopathologic diagnosis. We abandoned the Papanicolaou classification almost 40 years before The Bethesda System, and we used the same reporting format as surgical pathology for almost 20 years. In recognition of his having established and directed the laboratory for 34 years, shortly before his death The Johns Hopkins Board of Trustees voted to name the laboratory, the "John K. Frost Cytopathology Laboratory." Personally, he was loyal to his friends, his colleagues, and his staff. He was a devoted husband to Moira

and a devoted father to his seven children, three of whom are physicians including one pathologist. I fondly remember our long (and many times late) hours over the double-headed microscope discussing not only cytopathology but also many other things he cared about. He tried to avoid getting involved in the politics of the Department and in the societies he was active in. He never spoke unkindly about anybody. Quoting Dr. Leopold Koss in his Memoriam for Jack Frost, "...he loved people in general and was a person without any prejudices whatever. He was probably the most decent human being that I have ever had the privilege of knowing."

*Yener S. Erozan, M.D.
Professor of Pathology*

References:

Gupta PK: *John Kingsbury Frost: A Composite of Memories. Diagn Cytopathol 1991; 7:220.*
Howdon AK: *A Tribute to John Kingsbury Frost, M.D. Diagn Cytopathol 1991; 7:221.*
Koss LG: *Hommage to John Kingsbury Frost. Acta Cytol 1991; 35:138.*

Awards / Recognition

David R. Borchelt, Ph.D.

Recipient of the Graduate Student Teaching Award for the Department of Pathology.

Jonathan Brody

Chief Graduate Student in the Pathobiology Training program for 2002-2003.

Patrizio Caturegli, M.D.

Invited speaker for the 9th International Symposium on Molecular Thyrology. His presentation and work won 1st prize.

Yener Erozan, M.D.

Recipient of the 2002 ASCP Commission on Continuing Education Distinguished Service Award honoring George F. Stevenson, MD, FASCP.

Isamu Hartman

One of seven immunology students in the nation to be awarded the NSF Student Award. He will receive a stipend along with \$10,500/year for academic fees for three years.

Robert Heptinstall, M.D.

Recipient of the 2002 United States and Canadian Academy of Pathology (USCAP) Distinguished Pathologist Award.

Ralph H. Hruban, M.D.

- "Best Teacher in Pathology" by the JHU Medical School Class of 2004.
- Received the "Arthur Purdy Stout Prize for 2002" at the USCAP meeting.

Grover Hutchins, M.D.

Anatomic Pathology Residents Teaching Award for the Department of Pathology.

Christine Iacobuzio-Donahue, M.D.

- USCAP Award honorable mention from the GI Pathology Society for best presentation by someone in training.
- Inducted into Alpha Omega Alpha.

Anirban Maitra, M.D., Ph.D.

Received the Harry Neustein Award for best presentation for a new technology development for his presentation to the Society of Pediatric Pathology.

Kathleen Murphy, Ph.D.

Recipient of a Motorola Young Investigator Award from the Association for Molecular Pathologists.

Alex J. Rai, Ph.D.

Clinical Chemistry fellow, received a Paul E. Strandjord Young Investigator Award from the

Academy of Clinical Laboratory Physicians and Scientists.

Christophe Rosty, M.D.

USCAP Award from the GI Pathology Society for best presentation by someone in training.

Rosetta Sue Shirey, M.T. (ASCP) SBB

Recipient of the "Teaching Award" presented by The Department of Pathology Housestaff.

Tjarda van Heek, M.D.

Received the PSC Award from the Papanicolaou Society for the "outstanding scientific presentation in cytopathology by a pathologist in training" for her work on K-ras, p53, and Dpc4 in fine-needle aspirations of the pancreas.

Edward Weir, M.D.

Clinical Pathology Resident's Teaching Award for the Department of Pathology.

T.C. Wu, M.D., Ph.D.

Inducted into the ASCI Honorary Society on April 27, 2002.

On the Web... Bookmark it! The New Department Web Site

A streamlined departmental web site was launched in Spring 2002 to provide easier access to department information via the web. The redesign is an ongoing project and we welcome any suggestions to improve the web site.

Recent additions and updates:

Research & Training Programs Brochure, 2002-2003

http://pathology.jhu.edu/research_brochure

Laboratory & Consultation Services Directory

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

Online Calendar of Events

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

Includes Pathology Grand Rounds, popular national and international meetings, and public department events. E-mail us to request additions to the calendar.

Recent Events & Announcements

<http://pathology2.jhu.edu/department/announce.cfm>

As the department grows in size and space, our web site will attempt to keep faculty, staff, students and alumni connected. The recent events page has photos and summaries of recent departmental events. E-mail us to request additions to the events page.



<http://pathology.jhu.edu>

Disease-Specific Web Sites

Our disease-specific web sites continue to educate patients and family members while publicizing the outstanding research being conducted in our department. The online publicity has elicited hundreds of thousands of dollars in private donations through online giving, memorial donations and fundraising events.

A sample of upcoming events:

The Joseph C. Monastra Race to make a difference for Pancreatic Cancer, Hudson, OH, September 21, 2002.

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

Ovarian Cancer Fundraiser, to benefit ovarian cancer research in the department: Salt Lake City, UT, September 19-22, 2002

<http://ovariancancer.jhmi.edu/climb>

Hosted by: Sean Patrick, HERA Foundation

Roy L. Jeannotte Memorial Golf Classic, to benefit esophagus cancer research in the department: September 30, 2002

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

New Site

Bladder Cancer

http://pathology2.jhu.edu/bladder_cancer

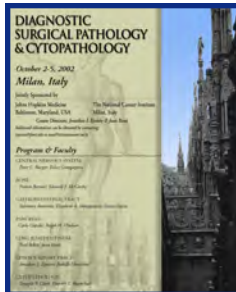
Contributing Faculty: Theresa Chan, M.D.



Department members interested in developing new departmental web sites are invited to attend the Web Development Group open meetings held on alternating Mondays at 10:00am (Carnegie 489A). Please contact Coreen Byam at 410-614-3589 if you are interested in attending a meeting.

Calendar

- October 2-5, 2002 Diagnostic Surgical Pathology and Cytopathology Course, Milan, Italy
- October 6, 2002 New Faculty, Housestaff, Fellows and Students Welcome Reception Evergreen House
- November 8-9, 2002 5th Annual Gynecologic Pathology CME Course: Approaches to Common Problems with Emphasis on New Entities and Techniques, Baltimore, MD
- November 10-11, 2002 2nd Annual Current Topics in Gastrointestinal Pathology CME Course, Baltimore, MD
- March 22-28, 2003 United States Canadian Academy of Pathology 92nd Annual Meeting
Marriott Wardman Park, Washington, DC
- May 1-3, 2003 Johns Hopkins Medical and Surgical Association Biennial Meetings, Preclinical Teaching Building, Johns Hopkins University School of Medicine
- May 28-29, 2003 Critical Issues in Laboratory Medicine, Renaissance Hotel
- May 30-31, 2003 Critical Issues in Surgical Pathology, Renaissance Hotel



Diagnostic Surgical Pathology and Cytopathology Course,
Milan, Italy
October 2-5, 2002

For more information, please contact jepstein@jhmi.edu
<http://pathology2.jhu.edu/conferences/milan.htm>

The Baltimore Zoo... from a different point of view



A sunny day... a cool breeze... delicious food... animal exhibits...
What more could you ask?

The 2002 Pathology Employee Appreciation Day was held on Sunday, May 19, 2002 at The Baltimore Zoo. In addition to the Baltimore Zoo exhibits, there were face painters and a moon bounce for the children to enjoy. We had a total of 1,332 people in attendance (882 adults and 450 children) – making this our largest event ever.

In honor of our employees, this day was organized to recognize the hard work and dedication demonstrated throughout the year. Each employee plays an important role in the success of our department. Pathology Administration would like to say “Thank You” to everyone who attended the event and to those who helped make this day such a huge success.

Pictures from the event can be viewed at
<http://pathology2.jhu.edu/department/zoo.cfm>

Department of Pathology
Johns Hopkins Medical Institutions
600 North Wolfe Street, Carnegie 417
Baltimore, MD 21287-6417
(410) 955-9790

J. Brooks Jackson, M.D., M.B.A.
Baxley Professor and Director

Editor:
Ralph Hruban, M.D.

Managing Editors:
Mabel Smith and Jennifer Galford

Technical Advisor:
Mitch Heinz

Photographer:
Pathology Photography Staff

Department of Pathology Web Site:
www.pathology.jhu.edu