Johns Hopkins at White Marsh

Construction is about to begin on the institution’s newest outreach program: Johns Hopkins at White Marsh. Modeled after the success of Johns Hopkins at Green Spring Station, White Marsh is another Johns Hopkins Medicine project intended to bring high quality Hopkins services throughout the Baltimore region.

Coordinated by Gil Wylie, Vice President of Planning, this Johns Hopkins Medicine project brings together the forces of Johns Hopkins Bayview Physicians (JHBP) and the Johns Hopkins Medical Service Corporation (JHMSC). Jointly, JHBP and JHMSC will offer primary care services to the Northeast region. JHBP and the Clinical Practice Association will operate a Specialty Clinic, which will include services such as orthopedics, cardiology, and dermatology.

The first floor of the 50,000 square-foot facility will house the comprehensive American Radiology Imaging Center. Other specialty services will include an endoscopy suite and Wilmer.

Just off of the lobby, an on-site 2,000 square-foot laboratory is currently under design. Included in this plan will be a waiting/registration area and a three-bay phlebotomy hub designed to accommodate 150 patient encounters per day. Currently, the laboratory plans to offer comprehensive Special Chemistry testing requires both manual and instrument analysis.

Continued on page 3

Keeping The Whole More Than The Sum Of Parts

Academic medicine, and academic pathology in particular, are facing unrelenting pressures that are causing the partition of clinical service, education, and research activities. The forces promoting this trend are numerous, and their impact has been dramatic in affecting the structure and function of academic medical centers.

The past decade has been a time when these forces have led to an enormous commitment of time and energy away from those activities.

Continued on page 2
which brought physicians and scientists into medicine. The language of academic medicine is devolving to the use of terms such as “market share”, “cost centers” and “competition” for our academic as well as clinical activities, and “return on investment”, “research portfolios”, “profit and loss statements” for individual and groups of faculty. The leaders of many medical schools and teaching hospitals are focusing their time and resources on mergers and acquisitions of other hospitals and private physician practices, and often competing against each other for control of the other entity. Some teaching hospitals are divesting themselves of medical school influence by taking over their physician practices, or setting up competing research institutes, or simply purchasing medical schools. Some medical schools are divesting of their teaching hospital influence by reciprocal strategies. The number of physicians taking M.B.A. and newly created “business of medicine” programs is increasing, while the diminishing number of physician scientists has reached an all time low. It is apparent that we are risking a return to the pre-Flexnerian model of academic medicine where medicine was taught as a trade rather than a profession based in scientific method.

Hopkins certainly has been subject to the same pressures as other academic centers. The past decade has seen pressures on our available financial resources, due to diminishing reimbursement for our physician services and our true institutional expenses for education and research; pressures on our administrative and faculty time and effort, to respond to the increasing regulation and management of almost all our activities by payers; and pressures on the relationships among our faculty, referring physicians, and hospital and outpatient practice sites, to meet the demands of managed care and changes in bundling and unbundling reimbursement.

Clearly, the major factors involved in these changes are the extent and manner of health care funding. However, the effect of these factors is determined at a local level by those who control the resources and set the priorities for their academic medicine environment. Hopkins has chosen to respond to these extraordinary forces in a manner quite distinct from other academic medical centers by trying to focus on the synergies rather than the distinctions of clinical service and academic scholarship. For example, Hopkins has strengthened rather than weakened the bonds and interactions between its medical school and hospital-health system, and reaffirmed rather than move away from its commitment to a single track for all faculty based on academic achievement in research, teaching, service, and program building. Hopkins also has attempted to develop good business practices to sustain each of these missions in the context of the other, rather than by developing each as a separate business. A key to the Hopkins response has been to sustain its balanced priorities for excellent clinical service, education and research, and to optimize all of them together rather than each one separately. These responses are certainly consistent with the uniquely Hopkins heritage of practicing and teaching medicine in an academic context. This characteristic of Hopkins was recognized at the beginning of this century by Flexner and proved to be the model for academic medicine in the U.S. subsequent to his landmark report.

Pathology, as the discipline that bridges the basic biomedical sciences and clinical services, is at the highest risk as pressures on academic medicine are leading to the separation of its components. While some academic pathology departments are becoming mostly clinical in activity, others are now becoming exclusively basic science, as practices in pathology and laboratory medicine are limited to the environment of an affiliated hospital. In other departments, the clinical and basic research activity of faculty are becoming isolated from each other.

At Hopkins, the trends in Pathology over the past 5 years have been quite different. The integration of our clinical services and research activities has been strengthened, not weakened, yielding an environment with key features: one that values and supports those interested in doing various combinations of research, service, and education; one that promotes the teaching of diagnostic pathology to residents and fellows in the context of disease mechanisms, and pathobiology research to graduate students and post-docs in the context of clinical relevance; one that facilitates translational research engaging both basic and clinical pathology faculty and their trainees and that supports physician-scientist pathologists wishing to perform basic research while practice a related diagnostic specialty.

This environment and its effects are not just a fortunate accident, but rather the direct result of consensus planning around explicit hypotheses discussed in the department over 5 years ago. I think it is now safe to say that by consistently focusing on each of our missions in the context of the others, we have indeed been successful in making the whole greater than the sum of the parts. The trick will be to sustain this productive and facilitating environment as external forces continue working against it.
Division in Highlight: Clinical Chemistry
Continued from page 1

Ladenson, Director of Endocrinology, has joined the Pathology Department as part-time Pathology Faculty, to oversee this aspect of testing. Other part-time faculty include Dr. Michael Levine, Director of Pediatric Endocrinology, Department of Pediatrics, and Dr. Terence Risby, Department of Environmental Health Services.

Clinical outcome is an indicator of laboratory test effectiveness. Dr. James Nichols, Associate Director, is involved in improving the clinical utility of drug analysis and point-of-care testing. By requiring proper documentation of dosage information with antibiotic levels, the Clinical Chemistry Laboratory, in collaboration with clinical staff supervised by Mary Jo Bill, is ensuring the most appropriate interpretation for clinical action. Point-of-care testing is a rapidly growing area of diagnostics. The need for rapid turnaround time of testing at the patient’s bedside must balance the cost of performing and supervising the testing process outside of the Core Laboratory. The Point-of-Care Testing Office is currently working with hospital staff to meet regulatory and quality assurance guidelines and to achieve realistic benefits from testing at the point-of-care.

Technology employed throughout Clinical Chemistry ranges from labor-intensive manual analysis for esoteric analytes to sophisticated multichannel analyzers that provide rapid, multiple parameter, basic and comprehensive test panels. Clinical Chemistry was instrumental in the selection and subsequent installation and implementation of the Hitachi 917 throughout the JHHS so that all clinical affiliates provide accurate and precise test data using the same analyzers. Dr. Martin Kroll, Associate Director, and Gregory Gerhardt, Supervisor, coordinated the installation, evaluation, and validation of the Hitachi 917 analyzers.

In addition to the service aspects of a clinical laboratory, Clinical Chemistry also supports the hospital mission of education and research. The Department of Pathology offers a one or two-year postdoctoral fellowship approved by the Commission on Accreditation in Clinical Chemistry to M.D. pathologists and Ph.D. scientists. The program includes analytical, clinical, research, and management experience and is designed to provide individualized training based on previous experience and education. During postdoctoral training the fellows participate in the daily operation of the laboratory as well as the development of research projects which may include but are not limited to method development, test validation, diagnostic utility and cost effectiveness of testing. Clinical Chemistry also supports medical student education as well as Medical Technology internship programs. Currently there are three fellows in this program: Drs. Dave Li, Jeffrey Chance, and Scott Kudzdal.

Research is an important aspect of the Clinical Chemistry Division. The use of tumor markers in diagnosis and treatment of various malignancies has been promoted by the research performed by Dr. Daniel Chan, Director, and his staff of research analysts. The laboratory applies chemical and immunological techniques to the study of human disease, focusing on prostate and breast cancers as well as other malignancies. In the Spring of 1999, the laboratory will expand with the opening of a new research laboratory under the direction of Drs. Daniel Chan and Dave Li at the National University of Singapore. This lab, one of five initial research programs developed as part of the Johns Hopkins Singapore venture, will study and develop tumor markers for cancers prevalent in Southeast Asia.

An additional component of the Clinical Chemistry research laboratory is the Clinical Chemistry Reference Laboratory which performs specialized tumor marker testing for the Johns Hopkins Health System. Dr. Lori Sokoll serves as the Assistant Director of the Reference Laboratory.

By supporting the hospital mission of patient care, education and research, the Clinical Chemistry Laboratory is constantly evolving and changing to meet the dynamic needs of the medical environment.

The Hitachi 917 provides rapid multiparameter analysis

Toxicology lab screening detects drugs of abuse
Pathology Photography

Path Photo is installing wall-mounted Kodak photo drop boxes around the east campus to facilitate processing of 35mm film. Film may be dropped off after business hours in boxes located by the Path Photo Lab in the Pathology Building or near the main elevators on the ground floor of the Ross Building. Future drop boxes will be installed in the main Hospital Lobby near the Gift Shop and near the Corridor Café in the Carnegie Building.

The new photo minilab in CMSC has been installed with a digital interface and can now provide true photographic images of digital files up to 12 by 18 inches. The equipment allows a larger and higher quality format than dye sub at a fraction of the cost. Look for samples in the main lab to judge for yourself.

Path Photo is extending the “Wednesday Special” until the end of the year. With a Path Photo coupon (available at any of the Path Photo locations), one receives a $3 discount off the cost of processing a roll of 36 exposure print film (c-41) or a $2 discount off the cost of processing a roll of 24 exposure print film (c-41).

Path Photo will also help with personalized greeting cards for the holidays. Bring in a favorite photo, add a holiday design, and a message to create personalized greeting cards. The cards will be processed in the CMSC minilab, and your order will receive an automatic 15% discount on Kodak’s standard price.

Computer Graphics has gained a new Graphic Artist, Kellie Holoski. Kellie spent this Summer as a Medical Illustration Intern in Path Photo and was offered the position to fill the vacancy left by Rick Tracey who is now in the Outpatient Graphics Lab. Kellie will handle poster sessions and graphic art and looks forward to working with the faculty and staff of Pathology.

Departmental News

Congratulations to Zuhair Kareem as recipient of the Clifford L. Freehe Education Award from the Pacific Northwest Chapter of the BioCommunications Association on October 24th in Seattle. The award recognizes his “major contributions in the multidisciplinary field of biological and scientific photography” and “his efforts toward the education and advancement of colleagues.”

Congratulations to Joseph Kemp for obtaining his RBP certification at this year’s national meeting in Portland, Maine. The certification program for Registered Biological Photographers is the credentialing body for medical and biological imagers. Joseph is a native of Baltimore and has worked in the field of medical pathography for six years. He obtained his B.A degree from Coker College. He has received various awards for his work in biomedical photography, most recently an Award of Excellence in Natural Science at the 1998 BioCommunications Association chapter meeting.

Congratulations to Rick Tracey for creating a poster recommended to represent the American Orthopaedic Foot and Ankle Society at the COMMS “Best of” Poster display. The poster, Transpedal Multiplanar Wedge Osteotomies/Fusion for Complex Midfoot and Hindfoot deformities, which was designed and printed by Rick for Dr. Schoen at Union Memorial Hospital, will be on display throughout the ACOs Annual Meeting in Anaheim from February 4-8, 1999.

Congratulations to newlyweds Tracey Walczak and Mark DiBerardino, married on November 7. Tracey and Mark honeymooned on Turks and Caicos, near the Bahamas.

Pathology Holiday Festivities

It’s holiday time again! The Departmental Holiday Party was held on Wednesday, December 16, from 3:00 p.m. until 5:00 p.m. in Turner Concourse (the only place BIG enough to accommodate the ENTIRE DEPARTMENT!). The afternoon hours ensured that both the day and evening shifts would have a chance to mingle and enjoy the enticing food. We had old favorites such as chicken drummies and fried shrimp as well as the attractive sandwich wreath and stuffed brie as holiday specials. The festive pastries were simply marvelous and looked too good to eat! The music and festivities were enjoyed by everyone. Best wishes for the Holiday Season and the New Year.
Recent Grants Awarded to Faculty

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<th>FACULTY</th>
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<th>AGENCY</th>
<th>DATES</th>
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Faculty Activities

C. Lynne Burek, Ph.D. has been promoted to Associate Professor.

Peter Burger, M.D., has been appointed to the Editorial Board of Neuro-Oncology.


J. Stephen Dumler, M.D., was invited as guest lecturer to the First European Congress on Emerging Infections in Budapest, Hungary, in September and to the Infectious Diseases Society of America (as “Meet-the-Professor”) in Denver in November. Dr. Dumler has also been nominated to the editorial board of Molecular Diagnosis.

Ralph H. Hruban, M.D., has become Director of the Division of Gastrointestinal/Liver Pathology.

William G. Merz, Ph.D. has been promoted to professor.

Gary Pasternack, M.D., Ph.D., chaired the Pathobiology 4 Study Section for the U.S. Army’s breast cancer program and will serve on two National Cancer Institute study sections in November. One study section will review SBIR and STTR grants, and the other will review proposals for training and educational programs. He also chaired the plenary session, “Molecular Aspects of Breast Cancer” and was plenary speaker at the Interlab 1998 Conference on the Molecular Biology of Cancer held in Cairo, Egypt, in October. Dr. Pasternack was also awarded a grant by the Army Prostate Cancer Program for his proposal entitled, “Molecular changes in pp32 in Prostate Cancer.”

Donald Price, M.D., has been elected to the Institute of Medicine, which is a component of the National Academy of Sciences.

Noel Rose, M.D., Ph.D., was elected Fellow to the American Association for the Advancement of Science in honor of his “pioneering studies on the importance of autoimmunity as a cause of human disease.”

Dorothy Rosenthal, M.D., was a guest speaker at the AFIP on October 29 and presented the Callendar-Binford Lecture, “Can Automation Cure the Ailing Pap Smear?” She has also been elected vice-president of the American Society of Cytopathology.

Joel H. Saltz, M.D., Ph.D., has been promoted to professor.
Faculty Retreat Produces Proposals and Pilot Studies

The general topic for the faculty retreat held November 13 and 14 in the Mountcastle Auditorium (PCTB) was to prioritize the use of resources for development of basic, clinical, and technology research activities in the Department of Pathology. Areas explored included ways to strengthen existing programs, develop intra- and interdepartmental bridges in research areas, and identify new areas of research. Brainstorming sessions organized before the retreat related to the eight programmatic areas of research in the department. These sessions produced a variety of exciting individual proposals that formed the basis of three important activities explored in the faculty retreat, notably a specimen bank, genomic cores, and image databases for anatomical specimens and clinical tests.

Pathology Specimen Bank

Group leaders: Drs. Daniel W. Chan and William Westra

The purpose of a specimen bank would be to establish an integrated bank encompassing tissue, cells, pathogens, blood and other fluids. The group envisioned a central physical specimen bank networked to a series of physically separated satellite banks, creating a single unified virtual bank that would have a service center financial structure. The goals of the specimen bank are:

1. Foster novel interdisciplinary research by creating a centralized bank of specimens linked to patient data
2. Produce economies of scale
3. Provide a resource for intra- and interdepartmental collaborations
4. Assure regulatory compliance
5. Assure specimen security
6. Provide a resource for future patient care needs

The group decided to establish a Specimen Bank Committee and to appoint a Director to get the project underway. The committee would establish an informatics infrastructure and support, make an inventory of specimens already collected by the Pathology faculty, and establish policies and procedures for new collections.

Genomics Core

Group leaders: Drs. Edward Gabrielson and David Borchelt

Genomics is a relatively new area of biomedical research which is based on defining genomic structures of humans, laboratory animals, and human pathogens. There are several significant opportunities for pathologists to use genomics data in the study of human disease, including the study of gene expression. During the retreat, faculty discussed resources needed to facilitate genomics research in the department. In addition, a working group of faculty interested in applying genomics to research will begin meeting to coordinate these activities.

Image Databases

Group leaders: Drs. Joel Saltz and Steven Bova

The overall goal of this group's discussions were to define ways to develop and support databases that would capture, store, query and manipulate multimedia data associated with the practice of pathology, including images obtained from light microscopy, electron microscopy, genomic data, electrophoresis (PEP, IFE), blood smears, cytogenetics and clinical laboratory results.

The group proposed a pilot project to develop or to adopt software that would capture multiple images per specimen for routine archiving and that also would maintain data integrity. The image database would be useful to compare current results with older findings and capture and disseminate data when a physical slide cannot be retained. It would also be useful to share findings with referring pathologists and to use for CME and telepathology applications. Clinical researchers, divisions and informatics would develop, acquire and support client software to provide customized views of data. Prostate and renal biopsy imaging and gram stain imaging were identified as good candidates for this pilot study. This project would require a PA/cytotech/resident, a programmer and an image processing expert, and transition to production would require a support staff and a PC cluster.

Although there was relatively little discussion about the specimen bank in the group's session, the result of the plenary sessions made it clear that a multimedia object relational database system will also be needed to support a JHH specimen bank, and in fact, it is possible that the specimen bank would be the major driving application that could lead to the development of this infrastructure.

Regarding image database applications for genomics, the group conceived of a center of expertise in statistical and datamining algorithms that would collaborate with the various genomics research efforts in the department. A fellow, staff or faculty with background in statistical analysis and datamining would be necessary. It was also noted that the ability to carry out statistical or datamining genomic algorithms would be leveraged by the ability of the database infrastructure to support ad-hoc queries involving clinical data, laboratory data, anatomic pathology data, and genomic data.
JCAHO 1998 and 1999
What was...

Carolann Liszewski, Director
CQI and Management Consultation Services

On October 7, 1998, the Department of Pathology was reviewed as a part of the Johns Hopkins Medical Institutions triennial Joint Commission and Healthcare Organizations (JCAHO) survey. A cursory review was conducted in the Microbiology, Core, and Transfusion Medicine Laboratories with the surveyor emphasizing clinical support provided by laboratories, strategic planning of laboratory testing with other departments within the institution, and training of all levels of staff. The Core Laboratory under Georgette Zoltani had prepared an excellent presentation on the process and problems of developing core laboratory services. Dr. Patricia Charache and SuzAnne Koneyak-Burkey collaborated efforts to design and present a joint Pathology-Psychiatry performance improvement initiative which was highlighted during the institution’s storyboard fair.

The Office of Continuous Quality Improvement (CQI) Programs conducted reviews of all laboratory testing performed within clinical areas throughout the Institution. The Point-of-Care Testing Office under Dr. James Nichols updated protocols for all testing units. Drs. Fred Sanfilippo and Patricia Charache, Ms. Arlene Prescott, Mr. Jim Creech, Ms. Natalie Wallace, and Ms. Carolann Liszewski represented the Department at various interviews conducted during the survey. In all, the Department was very much involved in JCAHO 1998. Thanks and congratulations are extended to all for a successful effort.

The JCAHO survey team recommended full accreditation for three years. There were two type 1 recommendations: one referring to securing meds and the second, on the lack of a physician order for seclusion. Suplemental recommendations were given in the areas of advance directives, reassessment of patients, sedation use, patient family education, weekend admissions, overdue competency assessments, unsigned/undated verbal orders, soiled equipment and the environment of care. Environmental issues included cigarette butts found, doors not properly latching, unsecured needles, syringes, and personal property, lack of documented fire drills in some ambulatory sites, need for additional exit signs, and lack of staff knowledge regarding emergency shut-off valves.

Critical Issues in Lab Med Offered in First CME Course

James Nichols, Ph.D.

The first clinical pathology CME course was presented Friday and Saturday October 2-3, 1998 in Baltimore. Titled, “Critical Issues in Laboratory Medicine,” the course was organized by Drs. Michael Borowitz and Patricia Charache. The first day focused on laboratory and clinical consultation with presentations by Drs. Thomas Kickler, Michael Borowitz, Karen King, James Dick, C. Lynne Burek, J. Brooks Jackson, Patricia Charache, Lori Sokoll, James Nichols, and Robert Miller with a special regulatory update on Medicare compliance by Dennis Weissman, President and Publisher of the Washington G2 Reports. The second day was organized as a mini-symposium on “Cancer Diagnosis Today and Tomorrow” with morning presentations by Drs. Constance Griffin, Gloria Petersen, Daniel Chan and Jeffrey Trent (from the NIH National Human Genome Research Institute). The afternoon session highlighted “New Directions in Laboratory Medicine” with Drs. J. Stephen Dumler, Paul Bray and Paul Ness giving presentations. Overall, the program was an excellent educational opportunity and drew nearly 40 attendees from Switzerland, California, Washington, Maine, Alabama, Tennessee, Ohio and Michigan.

CME Course Offered in GYN Pathology

Robert Kurman, M.D., Division Director

The Gynecologic Pathology CME course, “Approaches to Common Problems with Emphasis on New Entities and Techniques,” was presented Friday and Saturday, October 30-31, 1998 in Baltimore. Course Director Dr. Robert J. Kurman presented lectures on endometrial biopsies, serous borderline ovarian tumors, and gestational trophoblastic disease. Additional Hopkins faculty included Drs. Mark E. Sherman, Brigitte M. Ronnett, and Ellen Pizer who presented lectures and case presentations on endometrial carcinoma, mucinous ovarian tumors, and squamous cell carcinoma of the cervix. Guest faculty featured Dr. Robert E. Scully from the Harvard Medical School and Massachusetts General Hospital and Dr. Jeffrey Seidman from the Washington Hospital Center. The 2-day seminar drew over 120 registrants and will be offered again next year in Baltimore.
Calendar

1999
March 20-26 U.S. and Canadian Academy of Pathology Conference, San Francisco
March 22 Alumni reception, Hilton Hotel, San Francisco
Union Square Rooms 23-24, 5:30 - 7:30 p.m.
April 6 Research Day for House Staff and Fellows
Turner Concourse
May 5-8 CME course in Laboratory Medicine and Surgical Pathology, Renaissance Harborplace Hotel, Baltimore
May 14 Awards Dinner for House Staff and Fellows,
The Belvedere, Baltimore

Grand Rounds

December 3 Ellen Pizer, M.D., Ph.D., Assistant Professor;
Hopkins Molecular Pathology and
Bayview Medical Center
December 10 Dr. Richard Lynch, Distinguished Visiting Professor;
University of Iowa
December 17 Robert B. Stein, M.D., Ph.D., DuPont Pharma-
ceutical Company
December 24 No Rounds
December 31 No Rounds

1999
January 7 Tarik Tihan, M.D., Ph.D., Instructor;
Hopkins Neuropathology and Bayview
Medical Center
January 14 Dr. Morton Schwartz, Distinguished Visiting
Professor, Memorial Sloan-Kettering Cancer Center
January 21 Alexandra Valsamakis, M.D., Ph.D., Instructor;
Hopkins Medical Microbiology
January 28 Frederick K. Racke, M.D., Ph.D., Instructor;
Hopkins Hematologic Pathology

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