The Penn Surgery Society News is published quarterly for its members, colleagues and friends of the Department of Surgery. For submissions, inquiries or comments, please contact Mary.Hamburg@uphs.upenn.edu.

Penn Surgery Botswana Program

This spring the Department of Surgery plans to pilot in Botswana an overseas educational experience for surgical residents. Botswana is a land locked country in Southern Africa with

just under two million inhabitants. It received its independence in 1966 and has been a model for stable democratic rule. There exist vast areas faced with problems characteristic of low income African countries. Health care remains a major priority in development but as with much of Africa, AIDS has been the focus. Basic surgical services are available in many district hospitals, but the bulk of surgery is performed in the main hospitals at the respective major urban centers, including The Princess Marina Hospital in the capital city of

Gaborone. It is in the Princess Marina Hospital where the PENN Medicine global health collaborative initiatives are currently underway.

In order to provide the necessary supervision for operations performed by our residents, we will collaborate with Dr. Georges Azzie. Dr. Azzie's primary appointment is at the University of Toronto and he will have an adjunct appointment at Penn. Dr. Azzie, a Canadian citizen, has enjoyed a lengthy career including

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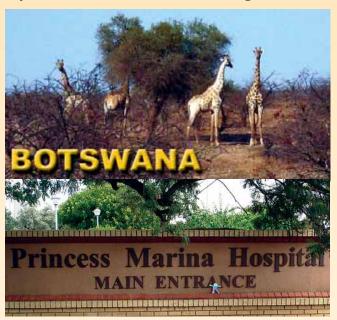
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service around the His clinical globe. training includes a General Surgery residency at the University of Toronto and a **Pediatric** Surgery Fellowship at the University of Montreal. Following completion of his residency, Dr. Azzie remained on the medical staff at the University of Toronto for six months and thereafter, spent six years as a consultant surgeon oversees with time spent at the University of

Orange Free State in South Africa and Windhoek Central Hospital and Katutura Hospital in Nambia as well as the King Fahad Hospital in Riyadh, Saudia Arabia. Since 2005, Dr. Azzie has been spending three months per year in Botswana, coordinating ongoing projects with the University of Toronto. The goals of his collaborative projects have been to develop surgical services in Botswana including, but not limited to, minimal access surgery and telesimulation between Toronto and Gaborone.

Our vision is to establish the first

truly reciprocal and university accepted international surgical elective program. We believe this will be an exceptionally valuable educational experience for our residents while providing much needed care for underserved patients in Botswana. Stakeholders include the Ministry of Health in Botswana, the School of Medicine at the University of Botswana, the Medical Council of Botswana and the Superintendent and Chief of Surgery at Princess Marina Hospital, all of whom strongly approve of the proposed elective. The ideal situation in the future would be for Penn faculty surgeons to provide on site supervision of the HUP residents in Botswana. The interest in the Department of Surgery in this regard is high. A recent survey identified 16 faculty members, who, under the appropriate circumstances, would be interested in providing clinical care and education in Botswana. The hope is to develop the infrastructure and interest to allow this pilot to grow into a more extensive long term collaboration with the University of Botswana and for it to become the premier international surgical elective program in the country.





From the Editor

This edition contains the first of two new sections we plan to continue as a series in future newsletters. One will portray a young member of the Penn Surgery Society whose substantial early accomplishments predict future leadership in American Surgery. This time we have selected a member of the HUP faculty, Joe Woo.

The other section will highlight the career of an important senior member of the Society, this one a beloved past member, for whom several of the Department's valued annual prizes are named, Bill Inouye.

Space constraints of the newsletter will preclude more than a brief synopsis of the professional accomplishments of these rising stars or their older counterparts, let alone much of an attempt to capture their personal qualities or idiosyncrasies. However, we plan to publish on the Society's website more complete essays or CV's of these important members of the Penn Surgery Society. We hope you will enjoy these sections in the newsletter and welcome your suggestions for future selections.

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Young Leader

Y. Joseph Woo

As a prime example of the Department's young leaders we have selected Y. Joseph Woo. After graduation from MIT and Medical School at Penn, Joe trained in general and cardiothoracic surgery at HUP. During his residency, he spent two years in the laborato-

ry of Tim Gardner, Lee Sweeney and Judith Swain establishing basic models of cardiac gene therapy. At the time, this was completely original and novel. His work was some of the first to establish that adenoviral gene transfer to the fetal heart was possible. It was presented at prestigious national meetings including the Society of University Surgeons and the American Heart Association where Joe received the Vivien Thomas Young Investigator Award. During this early period Joe garnered virtually every available award: AOA, I. S. Ravdin Best Surgery Student, Penn Pearls and William Y. Inouye Teaching Awards, Surgical Scholar Award,



Leonard Perloff Chief Resident Award and research awards from the Pennsylvania Association of Thoracic Surgery and the American Heart Association.

Since his appointment to the faculty in 2001, recognition of Joe's promise has been unusually broad leading the Philadelphia Business Journal to designate him as one of 40 Under Forty, Philadelphia Magazine as one of 21 Up and Coming Leaders, and the Philadelphia Inquirer as one of 10 Medical Researchers to Watch. More importantly, Joe's academic accomplishments have led to his election to membership in the Society of Thoracic Surgeons, the Society of University Surgeons and the Cardiac Surgery Biology Club. His additional achievements include consistent support of his research by NIH and promotion in 2009 to Associate Professor of Surgery with tenure.

The substrate for these accolades can be found in Joe's 76 peer reviewed publications, the topics of which can be summarized only briefly in this space. In addition to building a large clinical practice, he has devoted a substantial portion of his energy to research, both basic and transitional. In his independent basic science laboratory he has focused on molecular and cellular approaches to treatment of ischemic heart failure. For support of this work he received an NIH K08 award for study of "Angiogenesis and Cardiac Growth as Heart Failure Therapy", two separate American Heart Association Beginning Grants-In Aid entitled "Endogenous Myocardial Revascularization and Repair via Endothelium Progenitor Cell Chemokinesis" and a third grant entitled "Targeted Endothelial Progenitor Cell Chemokinesis in Vasculogenic Therapy for Ischemic Cardiomyopathy." Most recently he was awarded a five year NIH RO1 grant to study the use of recombinant hepatocyte growth factors to induce angiogenesis and attenuate post-infarction ventricular remodeling and heart failure and to explore the use of adenoviral transfer growth

Alumni History William Y. Inouye

Each year the Department recognizes excellence in teaching by a surgical resident with the William Y. Inouye Award. Even winners of this award probably no longer understand why it was named for this beloved surgical faculty member who died in 1985.

Bill Inouye grew up in Sacramento, California. At the onset of World War II in 1941, the presumed threat to national security led to the imprisonment of Bill and his family with other Americans of Japanese descent at a camp at Tula Lake, California. In 1944, the Inouyes were allowed to move to Philadelphia where for the rest of the war they managed a hostel that served as a half-way house helping to relocate and aid more than 1000 Japanese Americans from other parts of the US. Twenty-five years after the war ended, Bill's mother was awarded the Order of the Sacred Treasurer by the Japanese Emperor for bettering relations between the U.S. and Japan.

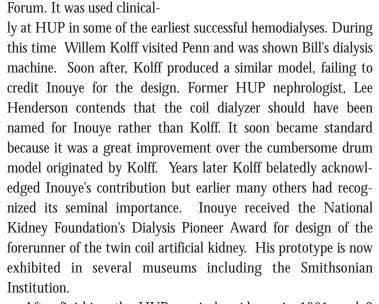
Relocation to Philadelphia allowed Bill to attend Swarthmore where he was Phi Beta Kappa graduating in 1944. His plans to attend medical school were delayed by the economic losses suffered by his family during their imprisonment. For the next 5 years Bill worked as a chemist in an asbestos factory. Then, having saved enough money, he entered Penn Medical School in 1949. He graduated AOA in 1953. While he was a medical student doing research in the Harrison Department of Surgical

Research and Bill Bluemle's lab, he devised the first coil hemodialysis machine. He made this from screening material and cellulose

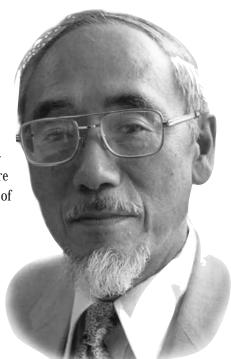
PRESIDENCE COMER AND AUGUST AND

Bill Inouye's machine, the first coil dialyzer as exhibited in several museums including the Smithsonian Institution

tubing purchased from a hardware store. The ingenious device was enclosed in a standard Presto Pressure Cooker for distribution of the dialyzing fluid and to provide a closed system that allowed for ultrafiltration by using negative pressure. Bill first described his dialyzer in the 1953 Surgical



After finishing the HUP surgical residency in 1961, and 2 years in the Army Bill was appointed to the Penn Faculty. He developed a large practice which he conducted mainly at Jeanes Hospital, which at that time, largely because of Bill, was a popular site of HUP resident rotations. Although outstanding in his early years as a scientist and later as a clinician it was as an educator that Bill Inouye particularly excelled. He was appointed Chief of the Penn Service at Philadelphia General Hospital and Chief of the Residents Ward Teaching Service at HUP. Since he worked at several hospitals he often traveled back and forth across



William Y. Inouye (continued from page 3)

town several times a day making sure that every teaching case was covered. He was considered the best teacher by the residents and also by the medical students who dedicated their yearbook to him.

In the fall of 1982, while he was at the peak of his powers as a surgeon and educator and shortly after his promotion to full professor Bill Inouye developed pleural effusion. This soon led to the diagnosis of mesothelioma which seems certainly to have stemmed from his exposure to asbestos during the time he was working to earn money for medical school. As his disease progressed his activities were more and more limited. His courage and dedication to teaching allowed him to continue some professional activity and fortunately he somewhat outlived predictions based on the usual natural history of his disease, perhaps because of a pleural resection by Alden Harken. Although in considerable pain he con-

tinued to make teaching rounds with the residents until a few months of his death. When his physical limitations precluded this activity he turned his attention to raising money for the residents' fund, pursuing this activity to within a few days of his death. He contacted every former HUP resident urging each of them to contribute. Many generously did so with the result that for years this fund provided most of the support of resident travel to meetings. Bill donated the stipend he received for his teaching activities plus a sizable personal contribution to support this fund. He also endowed annual teaching awards, one for a resident and another for a faculty member to be chosen by the residents. Until his death in 1985 the residents refused to designate anyone but Bill as the recipient of the faculty award.

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Y. Joseph Woo (continued from page 2)

hormone to preserve myocardial function and ventricular geometry in the setting of ischemic cardiomyopathy.

Joe is an active clinician with experience in the total realm of adult cardiac surgery including heart and lung transplantation, ventricular assist devices, complex mitral and aortic valve repairs and advanced aortic surgery including roots, arches and thoracoabdominal aneurysms. He has special expertise in the field of

minimally invasive cardiac surgery. Many procedures such as coronary bypass and valve repair and replacement are now being performed through small



thoracic incisions under videoscopic guidance. Robotic systems have also been applied to cardiac surgery. Joe Woo has been at the forefront of these innovative approaches. He performed the first robotic cardiac surgical procedure in the Philadelphia area as well as the world's first robotic aortic valve procedure. He was an investigator in the national clinical trial investigating totally endoscopic coronary artery bypass grafting with a robotic system. He has recently developed a novel minimally invasive mitral valve repair operation to remodel abnormally functioning leaflet tissue

instead of resecting, thereby preserving more of a patient's native mitral valve. He now performs the vast majority of

his valve repair operations via minimally invasive approaches. In addition to his multiple peer-reviewed publications and chapters on these topics he has been invited to lecture on them nationally and in Europe, South America, Australia, and throughout Asia.

Joe also has a strong record in translational research. He was the principal investigator of a randomized clinical trial studying a novel myocardial protection agent on which he had previously published the world's first animal studies. He was also the principal investigator of another translational clinical trial studying the effects of implantation of a tissue engineered fibroblast cell sheet onto diseased myocardium at the time of left ventricular assist device implantation. He has just initiated a single-center clinical trial to transplant autologous CD133+ angiogenic stem cells into the ischemic heart at the time of CABG, the first trial of this kind in the USA.

In addition to his extensive clinical and research activities, Joe has continued to distinguish himself as a teacher. As the director of the teaching service for medical students he has been highly praised. He has already mentored 22 medical students and residents who have spent one to two years in his lab where they have been successful collaborating on multiple publications, presentations, and abstracts, as well as winning NIH research service awards.

Joe Woo is one of the Department's young surgeons of whom Drs. Acker and Drebin are most justly proud. He is a rare member of an almost extinct species, a true triple threat academic surgeon.

Previous Winners of the Inouye Award for Teaching by a Resident

- ◆ David H. Stitelman, M.D. 2009
- ♦ Emily Carter Paulson, M.D. 2008
- Paige M. Porrett, M.D. 2007
- ♦ Giorgos C. Karakousis, M.D. 2006
- ♦ Pavan Atluri, M.D. 2005
- ◆ Lee J. Goldstein, M.D. 2004
- Robert J. Canter, M.D. 2003
- ◆ Leonard T. Su. M.D. 2003
- ♦ Shane Parmer, M.D. 2002
- ◆ Samantha K. Hendren, M.D. 2001

- ◆ Samantha K. Hendren, M.D. 2000
- ◆ Ross Milner, M.D. 1999
- ♦ Howard K. Song, M.D. 1998
- ◆ Y. Joseph Woo, M.D. -1997
- ♦ John C. Kucharczuk, M.D. 1996
- ♦ William T. Adamson, M.D. 1995
- ♦ Mark Levy, M.D. 1994
- W. Roy Smythe, M.D. 1993
- ♦ Mark P. Mantell, M.D. 1993
- ♦ Wendy L. Frankel, M.D. 1992

- ◆ David L. Bartlett, M.D. 1991
- ♦ Joseph B. Shrager, M.D. 1991
- Steven J. Fishman, M.D. 1990
- ◆ Stephen W. Downing, M.D. 1990
- ♦ Charles R. Bridges, M.D., Sc.D. 1989
- ◆ Steven R. Buchman, M.D. 1988
- ◆ Satoshi Furukawa, M.D. 1987
- ◆ Scott A. Kripke, M.D. 1986
- Russell F. Stahl, M.D. 1985

(continued from page 4)

Bill's forced semiretirement had one beneficial effect. Bill was grateful for these last months which allowed him to devote significant time to his family with whom he traveled extensively, including a long postponed trip to Japan.

Rather than expressing bitterness over the ironic cause of his illness, Bill dwelt on the satisfaction he had found as a teacher. Shortly after he died we received a note from Bill, obviously written in anticipation of his impending death. In it he said:

...by the time you receive this note I will have passed on to wherever one goes on the great adventure. Life foreshortened by asbestos problems has denied some of the anticipated joys and luxuries of an extended post retirement phase ... However, I feel it has been my privilege to pursue the active life of a teaching surgeon, working with residents who seemed to grow younger each year, to watch them develop and share with them the ever expanding knowledge of our profession...

With my best wishes to you, William Y. Inouye

Giving Campaign

Penn's Department of Surgery has several exciting initiatives underway for which we could use your support. One is the Clinical Surgical Skills Simulation Center, recently built in 1400 square feet at Penn Medicine at Rittenhouse (the old Graduate Hospital). Renovations allowing this program to be launched were provided by a \$1,000,000 grant from the Measey Foundation. Support for the ongoing function of this important educational resource will require continued fund raising. Another initiative is the Transplant House which will bear Dr. Barker's name. It will be



constructed at 3940 Spruce Street. Patterned after the Ronald McDonald Houses, it will provide housing for needy patients and families during the often prolonged period before and after transplantation. The architect, Rafael Vinoly and the Philadelphia Trade Unions, and L.F. Driscoll Company are donating their time and effort. From the Board of Women Visitors, Antique Show, Nearly New Shop, United Way, UPHS golf outing, and transplant patients and their families, \$1,800,000 has already been donated. An additional \$200,000 needs to be raised to achieve the preconstruction goal.

We would be grateful for contributions you might wish to make for the support of any or all of these initiatives. Contributions would be tax deductible if made out to the Trustees of the University of Pennsylvania.

If you choose to make a contribution it should be sent to:

Hospital of the University of Pennsylvania Department of Surgery Division of Surgery Education 3400 Spruce Street, 4 Maloney Philadelphia, PA 19104

Grand Opening Endovascular OR

Virtually five years from the day HUP first opened a dedicated state-of-the-art endovascular angio-suite in the operating room, construction has been completed on a second state-of-the-art OR-based vascular angio-suite. This operating room uniquely combines the resources of a standard OR with the technology of an interventional radiology suite. The planning and design of the room encompassed a multi-disciplinary team from nursing, surgery, peri-op, radiography, anesthesia and support services.

The new technology of this space allows more exact interventions, and includes a 3D image guidance system. Intravascular ultrasound and a flat panel C-arm detector improve the imaging capabilities. A novel image archive system allows more facile collaborative care. With this new technology, patients who previously went to 3 or 4 rooms can now receive the same kind of service here in one OR room, thus creating the future of endovascular suites.

Additionally, the creation of a new control room, with lead lined walls, windows, and doors allows for additional observation space and teaching opportunities. The room will have full audio and video capabilities to broadcast to the Flyers/76ers Surgery Theatre and the Coslov SurgiCentre conference rooms.

The suite, completed ahead of schedule, was christened on January 22nd and the first procedure performed on January 25th, 2010. The project was intended to support the unprecedented exponential growth of endovascular volume within the Division of Vascular Surgery and Endovascular Therapy. The division has been at the forefront of every endovascular thoracic and abdominal aortic device trial, and has participated in every carotid stent trial since 1997.





Alumni News

- ◆ Stephen T. Bartlett, M.D., Chairman of the Department of Surgery at the University of Maryland Medical Center will be awarded the Peter Angelos Distinguished Professorship in Surgery from the University of Maryland School of Medicine on March 3rd, 2010. Dr. Bartlett was the 2009 recipient of the Julius A. Mackie Distinguished Graduate Award. Dr. Bartlett completed his general surgery residency training at Penn in 1985.
- ◆ Jeffrey A. Drebin, M.D., Ph.D., Chairman of the Department of Surgery and John Rhea Barton Professor of Surgery, was awarded the Louis Duhring Outstanding Clinical Specialist Award, a Penn Medicine Award of Excellence on November 2nd, 2009. This award recognizes physicians who blend biomedical science with recent advances in clinical research and who apply clinical knowledge innovatively and creatively.
- Bernard Fisher, MD, HUP resident and research fellow 1950-52 received the 2009 Jacobson Innovation Award of the American College of Surgeons. This award recognizes important innovations in any field of surgery. Of the 15 winners in the history of the award 4 are members of the Penn Surgery Society; Stanley Dudrick, William Pierce, Joel Cooper and Bernard Fisher. In well controlled clinical trials (perhaps the earliest such trials in any field) Dr. Fisher showed that breast conservation surgery was as effective as radical mastectomy, overturning the Halstedian paradigm. In other trials he demonstrated the value of adjuvant chemotherapy and of tamoxifen for breast cancer. The Jacobson Award citation credits Dr. Fisher with changing the treatment, rate of survival, and quality of life for countless women with breast cancer. Dr. Fisher, a former Lasker Awardee, also won the 2009 John Scott Award of the Philadelphia City Trusts. He is now a Distinguished Service Professor at the University of Pittsburgh. David Bartlett (HUP Chief Resident 1993) is presently the Bernard Fisher Professor of Surgery at Pittsburgh.
- Heidi L. Frankel, M.D. was been named Chief of the Division of Trauma and Critical Care and Acute Care Surgery at Penn State Milton S. Hershey Medical Center. Dr. Frankel was as Assistant Professor in Penn's Division of Traumatology from July 1995 through September 2000.

Faculty, Residents, Alumni of Penn Surgery email your news to Mary Hamburg mary.hamburg@uphs.upenn.edu

◆ Linton Whitaker, M.D., Professor of Plastic Surgery was awarded the Paul Tessier Medal by the International Society of Craniofacial Surgery. The award was given in recognition of his major contributions and long-term commitment to craniofacial care over many years. Noted were his substantial contributions in surgical technique, research and particularly education. This prestigious award has been given only once before in the 22 years of the society's history.

New Faces

◆ Katherine J. Deans, M.D. joined the Pediatric Surgery Department at CHOP as a Clinical Assistant Professor on September 1st, 2009. Dr. Deans, a graduate of Dartmouth Medical School, completed her general



surgery residency at Massachusetts General Hospital in 2007. In 2009 she concluded a 2 year fellowship in pediatric surgery at CHOP.

◆ Sam S. Yoon, M.D. joined the Division of Endocrine and Oncologic Surgery on October 1st, 2009 as an Assistant Professor. A graduate of University of California, San Diego Medical School, Dr. Yoon completed his



general surgery residency at the Massachusetts General Hospital as well as a fellowship in Surgical Oncology at Memorial Sloan-Kettering Cancer Center. Dr. Yoon was an attending surgeon in the Division of Surgical Oncology at Massachusetts General Hospital (MGH) from 2003 to 2009.

Moving Forward

- ◆ John C. Kucharczuk, MD Thoracic -Promoted to Associate Professor in the Clinical Educator track
- ◆ Najjia N. Mahmoud, MD Colon/Rectal -Promoted to Associate Professor in the Clinical Educator track
- ◆ John P. Pryor, MD Trauma -Promoted to Associate Professor in the Clinical Educator track (awarded posthumously)
- Patrick M. Reilly, MD Trauma Promoted to Professor in the Clinical Educator-track
- ◆ Y. Joseph Woo, MD Cardiovascular -Promoted to Associate Professor with tenure

Upcoming Events

- ◆ The D. Hayes Agnew Surgical Society Annual Lecture will be held at 7:00 am on Thursday, March 25th, 2010 in the Flyers/76ers Surgery Theatre at the Hospital of the University of Pennsylvania. The guest lecturer will be Steven A. Rosenberg, M.D., Ph.D., Chief of Surgery Branch at the National Cancer Institute.
- ◆ The 12th Annual Jonathan E. Rhoads Prize and Commemorative Lecture will be held on Tuesday, May 11th at 5:00 PM at the BRB II/III auditorium. This lecture is co-sponsered by the Department of Surgery, the American Philosophical Society and the Philadelphia College of Physicians. Previous awardees have been Marie Kassebaum-Baker a senator, Francis D. Moore, MD, Judah Folkman, MD, Michael Debakey, MD, Joseph E. Murray, MD, Thomas E. Starzl, MD, PhD, MD, Scott Jones, MD, Elias Zerhouni, M.D., Clyde F. Barker, Lawrence Altman, MD, and Aaron T. Beck, MD. This year's honoree is John E. Niederhuber, M.D., Director of the National Cancer Institute, former Director of the Cancer Center of the University of Wisconsin and former Chairman of Surgery at Stanford. More details on the Alumni website.

Penn Surgery Society members are encouraged to attend these events and the receptions following them.

- ♦ Ronald Fairman, M.D., the Clyde F. Barker, M.D. William Maul Measey Professor of Surgery and Chief of the Division of Vascular Surgery at Penn will be hosting a reception on Thursday, June 10th at the Society for Vascular Surgery meeting in Boston for all former Penn vascular surgery fellows as well as HUP general surgery residents who went into vascular surgery. For more details and information please log on to the Penn Surgery Almni website.
- ◆ The 5th Annual Linton Whitaker Lectureship and Plastic Surgery Reunion will be held the weekend of June 11-12, 2010. More details on the Alumni website.
- ◆ The 2010 Julius A. Mackie Distinguished Graduate Award and Lecture honoring Dr. Danny O. Jacobs will be held on Thursday, May 20th at 7:00am in the Flyers/76ers Surgery Theatre, Ground Floor, White Building, Hospital of the University of Pennsylvania.
- ◆ Mark your calendars for Tuesday, October 5th, 2010 for the Annual Penn Surgery Society reception at the 96th Annual American College of Surgeons in Washington, D.C.

For further information on all these events, please go to the Penn Surgery Society website at http://surgery.site-ym.com



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