



Penn Surgery Society NEWS

Winter/Spring 2012

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.



Jeffrey Drebin

Message from the Chairman

This issue of the *Penn Surgery Society News* highlights several “translational research” initiatives at Penn. The term translational research refers to the movement of science from the pre-clinical to the clinical setting. The National Institutes of Health (NIH) has identified expanding translational research in a range of disciplines as a priority and surgeons, with their immediate access to patients and patient care issues have the opportunity to be at the forefront of these types of investigations.

Dr. Brian Czerniecki’s work (page 4-5) has represented the culmination of a long-term effort to achieve more effective immunotherapy for patients with breast cancer. Brian has approached this issue with surgical precision, optimizing a dendritic cell based vaccine technique to stimulate the immune response, and using a protein immunogen (derived from the product of the HER2/neu oncogene) that is critical to the neoplastic growth of the breast cancer cell. His exciting results are described in the article, and it is hoped that his laboratory will not only continue to advance this therapy for breast cancer, but will be able to extend this work to other tumor types in which particular oncogenes have been demonstrated to be critical to the process of neoplastic transformation.

The efforts leading to the first hand transplant at Penn are described on pages 6 and 7. This “composite tissue transplant” is the result of successful collaboration of surgeons across divisions and departments, being led by Orthopedics Chair (and Professor of Surgery) Dr. L. Scott Levin, with critical contributions from the Plastic Surgery and Transplant Surgery Divisions of the Department of Surgery, and with important support from the Department of Anesthesia. This procedure was a technical “tour de force” involving four parallel surgical teams working with incredible synchronization to achieve a spectacular result.

Advancing research in basic, translational and clinical arenas remains a priority for faculty in the Department of Surgery, despite increasing challenges, including a falling NIH payline and increasing clinical demands on faculty effort. Indeed, our faculty continue to receive competitive awards from the NIH and other sources, accounting for Penn Surgery’s consistent ranking among the top Departments of Surgery in NIH funding. Furthermore, the Department is particularly proud of the substantial number of junior faculty who have submitted their first grant proposals this past year. A number have received formal awards on their first submissions and others received excellent scores that should lead to funding on resubmission. These faculty will be the next generation of successful academic surgeons at Penn and you will no doubt read about them in this newsletter and in other sources in years to come.

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From the Editor
Clyde F. Barker, M.D.

This issue contains Jeff Drebin's obituary of Ernie Rosato. After Ernie's metastatic pancreatic cancer was discovered we had 14 months to get used to the inevitable outcome that came on January 6, 2012. But there is never enough time. We can take some comfort that after his diagnosis Ernie had more quality months than were expected. There was time to spend with Gerry and their children, even time for a golf trip with his sons and time to spend with his patients and colleagues in the office, at conferences and remarkably for much of the year even time in the operating room. Throughout it all Ernie handled himself with courage and grace. He was well enough to attend the second Annual Rosato Lecture given in November by his good friend, Stan Dudrick. It was also fortunate that he was able to know that there will be an Ernest Rosato Professorship. We are most thankful for the contributions Penn Surgery Society members continue to make for endowing this chair.

Ernie often told us how grateful he was for the opportunity to "smell the

flowers" before it was too late. The Department's party for him on February 12, 2011 at the Museum of Natural History was in some ways the best opportunity for this. He was especially pleased that so many of you returned for this tribute. It is still fun to look at the pictures of this remarkable evening in the Winter 2011 newsletter and on our website.

Ernie's funeral was attended by an even larger group of his patients, friends and family. Touchingly appropriate eulogies were given by Ernie's children and by Jon Morris representing our department. At the February meeting of the Philadelphia Academy of Surgery Jeff Drebin delivered a memoir of Ernie.

It is fortunate that this issue also contains happier topics. The Chairman's realistically optimistic column is reassuring. We can all be very proud of the work at HUP by Brian Czerniecki in vaccines (page 4) and by Ben Chang in hand transplantation (page 6). Also spectacular is the remarkable multi-organ transplant recently performed in Boston by Penn Surgery Society Member Heung Bae Kim (page 8).

We continue to urge you to send us news about yourselves. We were especially pleased with a note from Bob Darrow which in addition to information about himself identified in the 1948-1949 Department photo (Fall issue of the newsletter) himself and several other members we had failed to recognize, Mike Newton and Dottie Bender Maxwell.

The passing of John Murphy (page 11) brings forth the sobering realization that now only Peter Randall remains of the small cadre of Dr. Ravdin's trainees that he hired to form the department's first faculty practice plan -- Ravdin, Rhoads, Johnson, Royster, Kirby, Schwegman, Fitts, Blakemore, Roberts, Bob Ravdin, Mackie, Murphy, and Randall. Peter Randall told me that he and John Murphy shared a tiny "closet sized" office on the ground floor of the Maloney Building prior to the Department's move to the new Ravdin Building in 1963.

Dear Mary, Have been enjoying Penn Surgery Society and its coverage of the past. The fall issue photo of 1948-1949 is a real blockbuster. So many compatriots, friends, soldiers. Think I can help with 3 unknown soldiers. At age 70 I laid down the scalpel and picked up a chainsaw. Founding member of Vermont Woodland Association which has grown from 8 to over 1000 members, served 3 governors - 2 Democrats and one Republican on the current Use Advisory Board. These 2 programs - one voluntary, the other state government have saved thousands of acres of Vermont farms and forests from development and practically eliminated slash and cash logging.
 Best Regards,
 Bob

Ernest F. Rosato (1936-2012)

Dr. Rosato was raised in Philadelphia, attended St. Josephs Preparatory School and did his undergraduate work at St. Joseph's University. In 1958 he entered the University of Pennsylvania School of Medicine, graduating in 1962 with election to the Alpha Omega Alpha National Honor Society. Dr. Rosato subsequently took his general surgical residency at the Hospital of the University of Pennsylvania where he remained for his entire professional career. As such, Dr. Rosato spent over 50 years at Penn. Dr. Rosato was promoted to Full Professor of Surgery in 1975 and subsequently held the position of Chief of the Division of Gastrointestinal Surgery from 1988 through 2004. Recognized as the premier general surgeon at HUP for decades, Dr. Rosato's academic career was remarkably productive with authorship on 152 scientific publications and election to membership in all the major surgical societies, including the American College of Surgeons, the Society of University Surgeons, the Halsted Society, and the American Surgical Association.

For his clinical expertise Dr. Rosato received significant recognition outside of the Hospital of the University of Pennsylvania, with multiple listings in the Top Doctors edition in Philadelphia Magazine and a remarkable 17 year consecutive run in the "Best Doctors in America" listing. In recognition of the thousands of cancer patients who benefited from his care, in 2007 he was the recipient of the "Humanitarian Award" from the Philadelphia Chapter of the American Cancer Society. Dr. Rosato was the recipient of the 2008 I.S. Ravdin Master Clinician award, which is perhaps the most prestigious clinical award that Penn Medicine can bestow upon one of its faculty members, given to a clinician who is a skillful, compassionate practitioner with a long and consistent record of contributions to the University of Pennsylvania School of Medicine and health system. Dr. Rosato received this award 40 years after he was I.S. Ravdin's last senior resident.

Dr. Rosato always placed great emphasis on medical education, integrating medical students and housestaff seamlessly into the care of his surgical patients. His superb abilities as a teacher resulted in an unprecedented array of teaching awards during his years at Penn. He received the Mary F. and Christian R. Lindback Award for distinguished teaching, the Medical Student

Government Faculty Honor Roll, the medical student's award for excellence in teaching on two occasions, the Penn Pearls Award from the medical students for excellence in clinical teaching on two occasions. In 1980, the Penn Med Yearbook "Scope" was dedicated to Dr. Rosato in which the students succinctly and accurately noted that "his clinical and technical expertise are well known...over and above these skills stands his strength of purpose...he is willing to face those difficult patients whose problems require both innovation and persistence to attain successful results".

In a surgical career that spanned over four decades, Dr. Rosato literally trained more than a generation of academic surgeons. The William Inouye Award for Teaching is given by the surgical chief residents each year to the faculty member "whose leadership, caring attitude and surgical judgment have been an exemplary model to the surgeon in training, with whom a bond of mutual respect and friendship has been established." Dr. Rosato received this award 18 times since 1985 and since 1999, an incredible 13 consecutive graduating chief resident classes honored him in this way.

In 2009 he spoke to the entering class of medical students at the University of Pennsylvania during the "white coat ceremony" that marked their entrance into medical education. His comments, focusing on tradition at the University of Pennsylvania School of Medicine, revealed his deep respect for this institution and its history. Excerpts from his speech were published in the 2009/2010 Fall/Winter edition of "Penn Medicine", which may be read at: http://www.uphs.upenn.edu/news/publications/PENNMedicine/files/Penn%20Medicine_2010_01-38-Penn-Med-tradition.pdf

While Dr. Rosato accomplished great things professionally and personally, without question his greatest pride came from his family. Dr. Rosato and his wife, Gerry, raised nine beautiful children. Dr. Rosato's career would not have been the same had it not been for the loving support and encouragement he received over the years from Gerry and his family. Thus it was fitting that, at the end, Dr. Rosato died in his home, surrounded by his wife and children, along with several close friends and colleagues from the Penn Medicine community. To paraphrase his conclusion from his "white coat ceremony" speech, he was a physician, a surgeon, and something more. He will be deeply missed.

Jeffrey A. Drebin



Cancer Vaccine

Brian Czerniecki, M.D., Ph.D.

It is especially timely for us to profile Brian Czerniecki in this issue since the promising results of his research on cancer vaccines have recently attracted wide attention. Brian is the Rhoads-Harrington Associate Professor of Surgery. After college at the University of Maine, he obtained his M.D. from the University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School and his PhD from Rutgers University (UMDNJ/RWJMS) both in 1988. He completed internship and residency in General Surgery at Ohio State and a two year fellowship in Surgical Oncology at the National Cancer Institutes before joining the Penn faculty in 1995. Since then he has been a mainstay of Doug Fraker's Division of Surgical Oncology. In 2007 he was appointed Co-Director of the Penn Health System's Rena Rowan Breast Cancer Center and the Surgical Director of Immunology of HUP's Abramson Cancer Center. He is also director of HUP's very successful interdisciplinary Breast Fellowship Program.

Brian is a skilled clinical surgeon whose large clinical practice compliments his particular scientific interests in melanoma and breast cancer. In the treatment of these tumors he is nationally recognized especially for pioneering sentinel node biopsy, a procedure which he introduced to Penn. He is a favorite teacher of medical students, residents and fellows. He has been especially successful as a mentor of post doctoral research fellows. His laboratory program can boast of many successful graduates including Isabelle Bedrosian (now a faculty member at M.D. Anderson) and Mark Faries, now a faculty member and Director of Melanoma Research at the John Wayne Cancer Center.

Brian is a member of the American College of Surgeons, the Society of University Surgeons, the Society of Surgical Oncology, the American Association of Immunologists, the American Society of Breast Surgeons and the International Society of Biologic Therapy. Among his many awards and honors are an ACS Clinical Career Development Award, a Susan Komen Foundation Award and many listings as Best Doctors in America and Top Surgeons in America. He is on the Editorial Board of *Open Vaccine Journal*.

He has chaired the Leukemia and Immunobiology Study Section of the American Cancer Society. Brian's research has been productive of more than 69 peer-reviewed publications in top tier surgical and basic science journals as well as many reviews,

editorials and chapters. In addition to generous institutional and industrial grants his research has been supported by NIH/NCI RO1 grants for the last 10 years.

Since 1997, Brian's major research interest has been the study of dendritic cells. A special aspect of his work now generating widespread scientific and clinical interest is the

use of dendritic cell vaccines for treatment of breast cancer. His recent studies are in fact the first to establish that breast cancer is susceptible to immunotherapy. Until now it was thought that this tumor was entirely resistant to this approach.

Special attention to this important breakthrough with cancer vaccines has resulted from publications of Brian's recent clinical trials (*Cancer*, January 17, 2012 and *Journal of Immunotherapy*, January 2012). These studies showed that in HER2/neu positive patients with early breast cancer vaccination caused complete tumor eradication in nearly 20 percent. In addition, more than 85 percent of them were shown by in vitro tests to have an immune response against their tumors that was sustained as long as 2 years, hopefully continuing to reduce their risk of developing a more invasive cancer.

In the production of their vaccines Brian and his associates use dendritic cells extracted from the cancer victim's own blood. These cells are primed with small pieces of HER2/neu peptides and then exposed to interferon gamma and a lipopolysaccharide. This novel procedure yields activated dendritic cells that secrete high levels of interleukin 12 – a cytokine that induces a strong anti-tumor reaction by the patient's T-cells that can react with the tumor cell antigens.

(continued on next page)



Brian Czerniecki (continued from previous page)

The dendritic cell vaccine is injected directly into the lymph nodes of the patients once a week for 4 weeks. Two weeks later any remaining tumor is removed surgically.

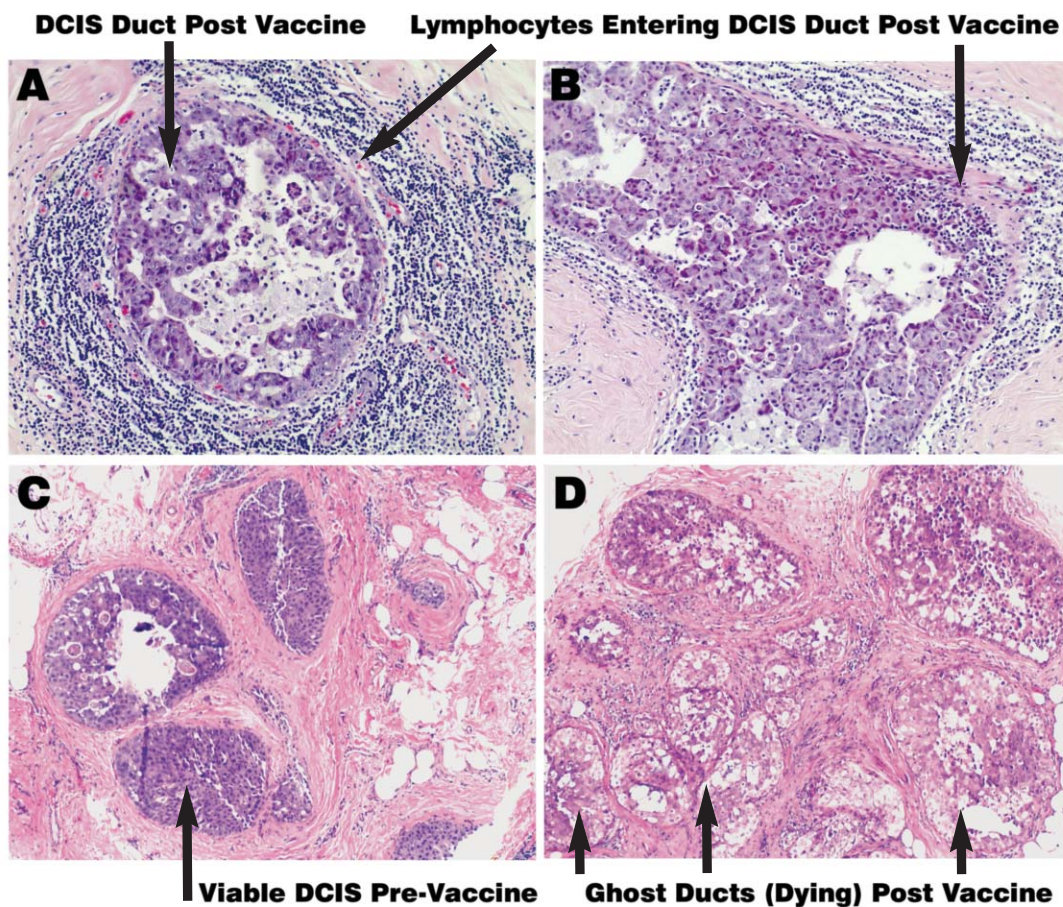
In Phase I clinical trials, Czerniecki vaccinated 27 HER-2/neu positive women who had one of two forms of early breast cancer—ductal carcinoma in situ (DCIS) or DCIS with microinvasion. The results were extremely encouraging. HER-2 expression was markedly reduced in half of the test subjects. A reduction in tumor size on x-ray was also seen in half the patients and in five patients no clinically detectable signs of the tumor remained. In the control group HER-2 expression and tumor size were unaffected. Excised breast tumors in vaccinated patients exhibited lymphocytic infiltration and damage of the tumor (see illustration on right).

Additional *in vitro* tests determined that 85 percent of patients had HER2-reactive CD4 and CD8 T cells, suggesting that they had developed a robust anti-tumor immune response. Importantly, some patients maintained these immune responses as long as 52 months, which should allow continued protection from recurrence of the tumors. Importantly, the study also showed that the vaccine is safe with only minor side effects such as malaise, injection site soreness, chills, fever or headaches.

Brian's new approach has several critical advantages, over previous unsuccessful trials of vaccines in patients with more advanced disease. First, the activated immune cells have fewer tumor cells to kill. Second, the patients' immune systems are still responsive, unlike those of advanced cancer patients whose immune reactions have been suppressed by their disease or by chemotherapy. Third, the investigators are able to assess results promptly, by looking at serum and tumor biomarkers.

While the numbers of patients treated in the trial are relatively small, Brian continues to enroll patients in a larger study and is designing another study to test the approach in women with early invasive breast cancer. He is also quite confident that

this vaccination will be associated with diminished recurrence of invasive breast cancer as well as ductal carcinoma in situ. Phase II trials are also underway. Brian says, "I think this study proves that vaccination works in situations where the target is right". Previous vaccines targeted antigens that were expressed on the cancer cells, but were not necessary for tumor survival. Thus a vaccine response might cause the tumor to stop expressing the tumor antigen but the tumor itself would not be damaged. This vaccine targets HER2/neu, which is essential for survival of early breast cancers. If we knock it out with the immune response, we



**DCIS ducts under attack by lymphocytes Post Vaccination (A, B).
Pre Vaccine DCIS Ducts (C) Post Vaccine ghost ducts following vaccination (D).**

will cripple the tumor cells. "If we target several of the HER2 family members, we'll drive the tumor to a place where it has nowhere to go. Basically, we'll push it over a cliff because those pathways are critical for tumor survival."

Brian also predicts that what the team is learning by vaccine treatment of DCIS may be applicable to invasive breast cancer, and to other solid tumors that rely on the HER family of signaling proteins, including melanoma, ovarian, lung, brain, and colon cancers.

Double Hand Transplant

A First for Penn

In September, 2011 Penn Surgeons performed the Delaware Valley Region's first hand transplant. The patient was a young woman who had lost both hands and both legs from a severe post-surgical infection. The Department's Plastic Surgery Division member Ben Chang was an important participant as the hand surgeon and co-director of the large team that accomplished this complex procedure.

Hand transplantation is quite a new and unusual procedure. In 1998, the world's first hand transplant was performed in France by a team headed by Max Dubernard. Through 2011 about 70 hand transplants had been performed in the world. Only a small number of them were double hand transplants such as the recent one by the Penn team. These transplants are termed "composite allografts" since they contain several different tissues—skin, bone, muscle and nerve. It was initially predicted that in addition to technical complexity their rejection would be a problem difficult to control because experimental skin grafts in small animals are especially immunogenic. Fortunately, and somewhat surprisingly, rejection has not proved to be a severe problem in human hand transplants—perhaps because of modern immunosuppression or because they are immediately vascularized rather than being transplanted like skin grafts placed on the body surface and acquiring vascularization only gradually.

Penn's Hand Transplant Program has been organized and led by Scott Levin, Chairman of the Department of Orthopedic Surgery, who is both an orthopedic and plastic surgeon. There were many collaborators. Especially important have been Ben Chang, co-director of the hand transplant program, and Avi Shaked, Chief of our Department's Division of Transplantation. Preparations started 18 months prior to the actual surgery. Using the patient's measurements and x-rays, the team planned a detailed step-by-step transplant procedure specifically

tailored to the patient's needs. Chang said, "Pilots review checklists before flights and the surgical team decided to follow their example. We created and printed out a checklist of each step and taped it on the OR wall. This ensured that we didn't miss anything and also guided us in following the right order." Chang said that they divided the surgery into multiple parts. One team procured the donor limbs, while two other teams opened and prepared the patient's stumps to receive them. Two teams then prepared the donor arms and, finally, two teams attached the donor limbs to the patient's stumps. Chang led one team while Levin, led the other team as well as the procurement team. The team had several rehearsals and, after each one, they'd debrief and further tweak the procedure to improve it.



In contrast to the requirements for identifying a solid organ donor, selecting a donor for hand transplants involves additional matching criteria such as gender, ethnicity, race, skin color and tone, and size. These procedures raise difficult and novel ethical challenges. Respect for donors and their families and careful selection of recipients along with commitment to informed consent are essential. In this regard, the important collaboration of Howard Nathan and Rick Haaz of the Greater Delaware Valley's Gift of Life Organ and Tissue Donor Program have been crucial. Their program has consistently been recognized as the nation's best with regard to the number of donors as well as in their management and consideration for their families. Once preparations of the recipient and the transplant team were completed an appropriate donor was identified within a few weeks.

A team of 30 members participated in the transplant operation itself: 12 surgeons, 3 anesthesiologists and 15 nurses. Included were experts in solid organ transplantation, orthopedic surgery, plastic surgery, reconstructive microsurgery, and anesthesia.

Double hand transplantation such as Penn's recent one is an especially complex technical procedure. During the surgery, the radius and ulna are first connected with steel plates and screws. Next, the arteries and veins are attached by microvascular techniques. Once blood flow is established, muscles, tendons and nerves are attached individually. The Penn transplant went smoothly, but still took 11 ½ hours to complete.

Post operatively the HUP patient has done very well. One minor rejection episode was readily controlled with treatment similar to that utilized for treatment of solid organ rejection. Hand transplant patients in addition to expert management of immunosuppressive therapy have the special requirement for months or even years of rigorous physical therapy to regain function. This crucial process is being directed by HUP's expert rehabilitation team headed by occupational therapists and certified hand therapists, Laura Walsh and Gayle Severance. They have created customized protective splints to protect the transplanted hands as the patient learns to use them for basic tasks, such as eating and using a computer. While the patient was still in the hospital, she was placed in a vigorous workout schedule of 4 to 6 hours a day, to strengthen her shoulder and arm muscles and began moving the new hands. Once the patient is able to feel hot and cold (protective sensation) on her new hands, sensory re-education will begin for recovery of the brain-hand sensory connection. As Walsh explained, "When sensation initially returns, the brain gets only "vague signals. For example, the brain can process that the hand is holding a round object but cannot distinguish a baseball from an orange."

At this time, the HUP patient is making good progress in early return of function of her new hands. Ben Chang reports that already she can oppose her thumb and fingers to the extent that she can pick up a cup. But Levin said, "She has many months of rehabilitation ahead of her. It will be at least a year before the nerves grow far enough into her arms to allow independent motion of her fingers and possibly longer to regain feeling in her fingers. "It could be up to 18 months before we know what her eventual function may be."

Other patients are actively being evaluated for further transplants. For now, the Penn Hand Transplant Program plans to perform only bilateral transplants, especially for treatment of quadramembral amputees. "Individuals who have lost both arms and legs are totally dependent," said Dr. Levin. "The most basic functions of life are virtually impossible to perform such as locomotion, eating, personal grooming and hygiene. It's the goal of our multi-disciplinary team to work seamlessly together in the field of vascularized composite tissue allografts to treat these victims of infection, trauma or war - and give them their lives back."

Abraham Shaked, MD, PhD, Eliason Professor of Surgery and Director of Penn's Transplant Institute commented that "Reconstructive vascularized composite tissue transplantation is the new frontier of surgical transplantation."

The Department is especially proud of Ben Chang who played such an important role in this landmark procedure. Ben is a graduate of Harvard College and Harvard Medical School. His residency in General Surgery, Plastic Surgery and fellowship in Hand Surgery was obtained at NYU before he joined the Penn Faculty in 1995 as Assistant Professor of Surgery, Division of Plastic and Reconstructive Surgery. Ben was recruited by then Division Chief Linton Whitaker to establish a formal hand service. He has done this superbly well, building a large clinical and teaching hand program. Medical Students and residents in both plastic and orthopedic surgery have high praise for Ben as a teacher of this important service. In 2005, he was promoted to Associate Professor of Surgery. Since 2008 he has been Associate Chief of the Division of Plastic and Reconstructive Surgery and since 2010 the Division's Residency Program Director. He is a member of the American College of Surgeons, the American Society of Plastic Surgeons and the American Association of Hand Surgery. He is an examiner for the American Board of Plastic Surgery Oral certification examination.



Benjamin Chang, M.D.

Co-Director
Penn Hand Transplant Program
Associate Professor of Clinical Surgery



L. Scott Levin, M.D., FACS

Director Penn Hand Transplant Program
Chairman,
Department of Orthopaedic Surgery



Abraham Shaked, M.D., Ph.D.

Director Penn Transplant Institute
Eldridge L. Eliason Professor of Surgery

Six Organ Cluster Transplant

Heung Bae Kim (HUP Chief Resident in 2000) was recently in the news as the lead surgeon for a unique transplantation procedure. In October 2011 HB and his team at Boston Children's Hospital performed a multi-organ "cluster" organ transplant for a 9 year old girl whose intraabdominal sarcoma (inflammatory myofibroblastic tumor) was so extensive that it had been impossible to remove in several previous attempts. Despite chemotherapy and surgery the tumor continued to grow causing severe pain making eating impossible and threatening imminent death. HB succeeded in removing the tumor only by resecting along with it the stomach, liver, spleen, small bowel, pancreas and part of the esophagus. Kim said this was the hard part of the operation and that it caused considerable blood loss. He then carried out a composite allograft comprised of all the organs that had been removed.

Successful "cluster" transplants were first reported by Tom Starzl in 1989. They are still extremely unusual. HB's procedure was in fact unique since his "cluster" unlike all others included part of the esophagus. Miraculously after several months in the hospital to resolve post operative infectious complications the patient is now home and "well enough to scamper around her house in Maine, go sledding, make a snowman and give her grandmother a little good humored sass".

As a general surgery resident at HUP, HB was a star, winning the Penn Pearls Teaching Award from medical students and the 2000 Keith Reemtsma Award as the HUP Resident of the year. During 2 years of research with Alan Flake at CHOP he studied in mice microchimerism and transplant tolerance induced by *in utero* bone marrow transplantation.

After his HUP Chief Residency he took his fellowship in Pediatric Surgery at Boston Children's Hospital. He then spent 2 years as a fellow in liver transplantation at the Lahey Clinic while also working as a research fellow in transplantation biology at Massachusetts General Hospital. There he worked with David Sachs in developing a large animal model of *in utero* bone



marrow transplantation that successfully induced tolerance to kidney allografts.

In 2005 HB returned to Boston Children's Hospital as a faculty member. There he has had a very successful career. In 2003, he originated the serial transverse enteroplasty (STEP) procedure for patients with short bowel syndrome. In this operation the bowel is stapled into v-shapes on alternating sides decreasing its width and increasing its length. HB's procedure has been widely adopted. It is now in use worldwide as the predominant intestine lengthening operation for patients where standard surgery to correct short bowel syndrome is not feasible.

In addition to performing many STEP procedures himself, HB has developed an international registry to determine the long-term outcome of the procedure. Over 100 patients have been registered from 37 different centers including 19 states and 9 foreign countries. Data from the registry has shown that approximately 50% of patients undergoing STEP are able to be weaned from intravenous nutrition and avoid the need for intestinal transplantation.

Within three years of completing his transplant fellowship, HB was appointed surgical director of the Boston Children's Hospital's liver and kidney transplant programs. He also started the first successful intestine transplant program in New England. In 2004, he performed the first successful multivisceral transplant in New England. His program is the only intestine and multivisceral transplantation program in New England and one of only a small number in the entire country.

In 2006, he formed a Pediatric Transplant Center at Boston Children's. Since 2008 he has been Director of the Center with responsibility for the overall administration and management of all transplant related issues.

HB is also prominently involved on a national level as a member of several committees that are responsible for the maintenance of the national organ allocation system managed by the United Network for Organ Sharing (UNOS).

Penn Simulation Center News

Perelman School of Medicine student Dan Hashimoto recently claimed the top spot in the “Top Gun Laparoscopic Skills Challenge” at the 2011 Clinical Congress of the American College of Surgeons (ACS). In the finals Hashimoto defeated a chief resident and a third year surgical resident from other institutions to become the first medical student to place first in the competition since its inception at ACS in 1996!

Dan Hashimoto is pictured with Dr. James Rosser, Professor of Surgery, Morehouse School of Medicine, founder of the Top Gun Laparoscopic Skills Challenge

The American College of Surgeons conducts the Top Gun Laparoscopic Skills Challenge during the first three days of the conference. The Penn student advanced to the finals, beating out 30 other medical students, residents, fellows, and attending surgeons.



**Dan Hashimoto with Dr. James Rosser,
founder of the Top Gun Laparoscopic Skills Challenge**

Hashimoto credits his success to guidance he received from HUP faculty surgeons Noel Williams, MD, Kristoffel Dumon, MD, Kenric Murayama, MD, and residents and fellows in the Department of Surgery as well as to his training at the Measey Surgical Skills Center at the Penn Clinical Simulation Center.

The VR simulators at the Measey Surgical Skills Suite provided Hashimoto his introduction to laparoscopy. Penn’s simulators employ built-in metrics that give a performance score. The score factors in the number of movements made with instruments, how efficient the movements are, and how quickly the participant completes assigned tasks. The Measey Surgical Skills Suite’s low-fidelity box trainers gave Hashimoto an opportunity to use real-world instruments which deliver haptic (i.e. touch) feedback during tasks.

Upcoming Events

- ◆ The **Julius A. Mackie Distinguished Graduate Lecture** will be given on Thursday, May 17th, at 7:15am in the Flyers/76ers Surgery Theatre at the Hospital of the University of Pennsylvania. This year’s recipient, James D. Luketich, M.D. will present the topic “Evolution of Minimally Invasive Esophagectomy”. All alumni are invited.
- ◆ The **Division of Traumatology, Surgical Critical Care and Emergency Care** will host the 2012 Trauma Fellowship Reunion – “Milestones in Trauma; 25 years of Care” – May 3rd through the 5th. Highlighted events include a welcome cocktail reception on Thursday, a day-long academic program on Friday, and a gala celebration honoring Dr. C. William Schwab on Friday evening. For more information contact Lizette Alicea at aliceal@uphs.upenn.edu or by phone at (215) 662-7323.
- ◆ **Penn Surgery Society members are encouraged to attend these events and the receptions following them.**
- ◆ **PENN Vascular Surgery Alumni** are invited to the 3rd Annual Penn Vascular Alumni reception to be held on Thursday, June 7th during the Society for Vascular Surgery meeting in National Harbor in Washington, D.C. Join us in the Chesapeake G room at the Gaylord National Resort at 6:30pm!
- ◆ The Department of Surgery will be presenting a scientific symposium on Saturday, September 22nd to honor **Dr. Clyde Barker’s 80th birthday**. Details and schedule will soon be posted on the Penn Surgery Society website.
- ◆ It’s never too early to mark your calendar for the annual Penn Surgery Society reception to be held during the **American College of Surgeons**. The date is Tuesday, October 2nd. Details coming to the PSS website!

Alumni News

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

- ◆ **Ken Chavin, M.D., Ph.D.**, Professor of Surgery at the University of South Carolina Medical Center, was elected to membership in the Southern Surgical Association. Dr. Chavin was a transplant research fellow in the Harrison Department of Surgical Research from 1989-1990.



- ◆ **John M. Daly, M.D.** was named Second Vice-President-Elect of the American College of Surgeons at the Clinical Congress of the ACS in October 2011. Dr. Daly, was formerly Jonathan E. Rhoads Professor of Surgery, and Chief of Surgical Oncology at HUP (1985-1993), the Lewis Atterbury Stimson Professor and Chair of the Department of Surgery at the Weill Medical College of Cornell University and New York Presbyterian Hospital's surgeon-in-chief 1993-2003. After serving for 8 1/2 years as Dean at Temple University School of Medicine, he is now Interim Chair of the Department of Surgery at Temple.



- ◆ **Mark Faries, M.D.**, HUP Chief Resident 2002, was appointed the Director of the Melanoma Research Program and Director of Therapeutic Immunology at the John Wayne Cancer Institute at Saint John's Health Center in September of 2011. Dr. Faries will also serve as the Co-Director of the JWCI Fellowship Program. Mark is a graduate of the JWCI fellowship program in surgery oncology. After completing his fellowship, he took a position as the Director of Translational Tumor Immunology at JWCI, where he worked on research relating to cancer in the lymphatic system and on immunotherapy for melanoma. In 2010, Dr. Faries left JWCI to become an Associate Professor of Surgery and Dermatology at Yale University School of Medicine where he initiated a Multicenter Selective Lymphadenectomy Trial. He returned to JWCI last fall.



- ◆ **Thomas G. Frazier, M.D.**, senior attending surgeon and Medical Director of the Comprehensive Breast Center at the Bryn Mawr Hospital, and Clinical Professor of Surgery at Thomas Jefferson University in



Philadelphia, delivered the Jonathan E. Rhoads Annual Oration at the Philadelphia Academy of Surgery in December. Dr. Frazier presented a historical perspective of the treatment of breast cancer. In October, Dr. Frazier received the Pink ribbon Award from the Pennsylvania Breast Cancer Coalition for his contribution to women's health in Pennsylvania through the treatment of breast cancer. Dr. Frazier was a HUP chief resident in 1975.

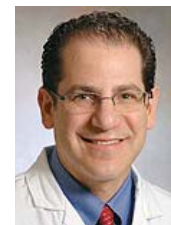
- ◆ **Kenneth M. Liechty, M.D.** has been appointed the Chairman of the Department of Surgery at the Nemours's Children's Hospital in Orlando, Florida. Since 2009 Ken has been a faculty member of the University of Mississippi Medical Center's Department of Surgery where he was Vice Chair for Research. He also served as the Director of The University Center for Fetal Medicine and The Director of the MD/PhD program. Ken was a HUP chief resident in 2002. Following his general surgery training he completed a pediatric surgery fellowship at Children's Hospital of Philadelphia. After fellowship, Liechty joined the faculty in the Department of Pediatric General, Thoracic and Fetal Surgery at CHOP and was an assistant professor of surgery at the University of Pennsylvania School of Medicine.



- ◆ **James D. Luketich, M.D.**, the Henry T. Bahnon Professor of Cardiothoracic Surgery, Chairman of the Department of Thoracic and Foregut Surgery at the University of Pittsburgh School of Medicine and Director of the Heart, Lung and Esophageal Surgery Institute at the University of Pittsburgh Medical Center has been named the 2012 Julius A. Mackie Distinguished Graduate of the Department. Dr. Luketich was HUP chief resident in 1993.



- ◆ **Ross Milner, M.D.** has joined the Vascular Surgery Division of the University of Chicago as an Associate Professor of Surgery. At UC, Ross is the Co-Director of the Center for Aortic Diseases and Associate Director of the Vascular Surgery Fellowship program. Ross was formerly Division Chief of Vascular Surgery at Loyola University. He completed his chief residency at HUP in 2001 and Vascular Fellowship at HUP in 2002.



Alumni News (continued from previous page)

- ◆ For his tremendous commitment to medical student education, the Special Dean's Award will be presented postmortem to **Ernest F. Rosato, M.D.** during the Perelman School of Medicine Graduation on Sunday, May 13th. The Special Dean's Awards are given by the Senior Vice Dean for Education in consultation with the Teaching Awards Selection Committee to honor special achievements by Penn faculty members, particularly in the development of new and innovative educational programs.

- ◆ **Michael F. Rotundo, M.D.**, Professor & Chairman of the Department of Surgery of the Brody School of Medicine at East Carolina University has been named Secretary-Treasurer of the Halsted Society. From 1989-1990 Dr. Rotundo was a fellow in HUP's Traumatology and Surgical Critical Care program. He was a faculty member of the Division of Trauma and Surgical Care at HUP from 1990-1999. Dr. Rotundo joined the Department of Surgery at East Carolina in 1999.



- ◆ **Edward Savage, M.D.**, has been named Chairman of the Department of Cardiothoracic Surgery at the Cleveland Clinic Florida in Weston, Florida. Dr. Savage was HUP chief resident in 1992.



- ◆ **C. William Schwab, M.D.**, Professor Surgery, founder and former Chief of the Department's Division of Traumatology & Surgical Critical Care was elected to membership in the Southern Surgical Association at the annual meeting in December. This is an unusual honor for a non-southern surgeon. In May, Dr. Schwab will receive yet another unusual honor during Ithaca College's commencement program. The College Board announced that the school's faculty has decided to award Dr. Schwab an honorary doctorate. Dr. Schwab has been a trustee of the college since 1990. In the history of the college, this distinction has never been awarded to one of Ithaca's trustees.



- ◆ The American Society of Craniofacial Surgery has announced that the **Linton A. Whitaker Lecture**, will be presented annually at the ASCFS meeting. Dr. Whitaker was Chief of the Division of Plastic Surgery, University of Pennsylvania (1984-2004). The Lecture recognizes Dr. Whitaker's years of service to the specialty of craniofacial surgery and his mentorship and education of a generation of plastic surgeons. The inaugural lecture will be delivered by Dr. Whitaker on Friday, April 20th to kick-off the 2012 ASCFS Annual Meeting.



John J. Murphy, M.D., age 91, Professor of Urology Emeritus and former Chief of Urology at the Hospital of the University of Pennsylvania (1960-1979), died February 6, 2012. Dr. Murphy received his M.D. (AOA) from the University of Pennsylvania in 1945. After training in General Surgery under I.S. Ravdin, he was sent by Ravdin to the University of Michigan for a residency in urology. In 1953 he returned to Penn where he established HUP's first modern urology service and training program. Alan Wein, long time Chief of HUP Urology and one of Murphy's early trainees, praised Murphy for his clinical judgment, his technical excellence and for establishing academic urology at Penn. Alan Wein recalls that Murphy brought from Michigan the first equipment for transurethral prostatectomy and that he was the first to perform and report the procedure of partial nephrectomy. He also established urodynamic studies in children. Murphy's NIH funded Training Grant allowed him to initiate a research program. This became an important component of a residency that produced many of the country's next

generation of academic urologists including Alan Wein, Joseph Corriere and Harry Schoenberg. Murphy was also an important participant in HUP's early renal transplant program.

Dr. Murphy was elected to all of the major academic urology societies. He was president of the Mid Atlantic Section of the American Urological Association. His other memberships included the Philadelphia College of Physicians, the American College of Surgeons, The Halsted Society and the American Surgical Association. He was also well known internationally. He served as visiting professor at the Royal College of Surgeons in Ireland. He and his wife were named honorary citizens of the town of Oughterard near Galway.

Dr. Murphy is survived by his wife of 67 years, Alicia.





Penn Surgery

Department of Surgery
Attn: Mary Hamburg
4 Silverstein/HUP
3400 Spruce Street
Philadelphia, PA 19104

PENN SURGERY SOCIETY

WINTER/SPRING 2012

Chicago, Illinois



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Mary Hamburg

Alumni Coordinator

Graphic Design:

Robin Noel

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