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 clyde.barker@pennmedicine.upenn.edu.

Message from the Chair, Ron DeMatteo

Precision

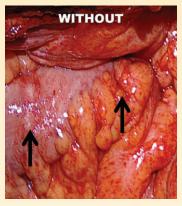
A few weeks ago, the FDA approved the agent CytaluxTM (pafolacianine) for use in visualizing ovarian cancer during surgical tumor debulking. The drug is administered intravenously and binds to the folate receptor, which is highly expressed in ovarian adenocarcinoma. Tumors that have taken up the compound fluoresce when exposed to a specific wavelength of light. The pivotal, multi-institutional, Phase III trial in ovarian cancer was led by Janos Tanyi MD PhD, Associate Professor of Obstetrics and Gynecology. Approximately one-third of the 134 patients in the study had at least one additional tumor detected during their surgery. Much of the preclinical work on pafolacianine was performed in the laboratory of Dr. Sunil Singhal, Chief of the Division of Thoracic Surgery and Director of the Center for Precision Surgery. The folate receptor is also expressed in lung adenocarcinoma. Dr. Singhal has used another agent called indocyanine green (Tumor GlowTM) to identify primary lung cancer or lung metastases during surgery. Advances in imaging agents and intraoperative detectors should reveal additional tumors and improve resection margins in multiple other cancers.

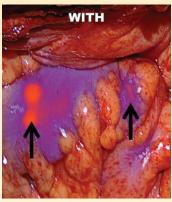
"Precision" is now used loosely to describe current medical care. Precision Medicine (aka Personalized Medicine) has emerged from the advent of "targeted molecular therapy," particularly in cancer. For instance, EGFR inhibitors are used in EGFR-mutant lung cancer. Meanwhile, certain tumor DNA mutations in gastrointestinal stromal tumor confer resistance to the KIT tyrosine kinase inhibitor imatinib. Oncotype DxTM guides chemotherapy in certain breast cancer patients. It is a PCR analysis of 21 genes within the tumor. Nevertheless, many types of cancer are still treated with conventional cytotoxic

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Intraoperative Molecular Imaging





chemotherapy agents, which often interfere with cell division and are arguably less precise resulting in more side effects.

Ironically, Webster's Dictionary defines Precision as "the degree of refinement with which an operation is performed." Of course, there are other examples of intraoperative precision besides imaging. Darren Schneider, Chief of Vascular, has an FDA investigational device exemption (IDE) trial to test tailored stents in thoracoabdominal aortic aneurysms involving the mesenteric/renal vessels. Robotics and other forms of minimally invasive surgery provide magnified views of anatomy. Surgeons are also well positioned to contribute to precision outside of the operating room. At the recent Departmental Research Conference, Dr. Shaked presented the derivation of a polygenic risk score to predict rejection in solid organ transplantation based on the presence of single nucleotide polymorphisms (SNPs) in the donor organ and the recipient. SNPs are single changes in a nucleotide sequence that occur between or within coding regions of genes. Our new colorectal liver surgeon Lily Maguire previously identified SNPs associated with diverticular disease (PMID 30177863), while Scott Damrauer discovered SNPs that correlate with peripheral arterial disease (PMID 31285632).

Remarkable advances are occurring in detection and diagnosis too. Methylation patterns in blood can now be used to detect cancer. This may improve upon assaying for circulating tumor cells or even mutant tumor DNA that has been shed into the

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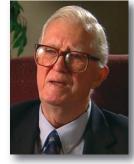


For a department of surgery, nothing is more important than the training of its residents. Success of this responsibility can only be assessed years later by examining the careers and accomplishments of the trainees. In 1991 Penn's Department of Surgery began naming annually a distinguished graduate of the HUP residency. The awardees are invited to come for several days as Visiting Professor and lecturer. Their photographs are installed outside the department's library. They have not been chosen from the department's current faculty, although a few were former faculty members. Their prominence has usually been attained elsewhere and HUP residents have never had a chance to interact with them. Thus the program has been valuable in giving Penn residents, students and faculty an opportunity to develop a relationship with these important members of the Penn surgical family.

In 1999 the program was interrupted. When it was restarted in 2007, it was named for Julius Mackie, a recently deceased and beloved HUP faculty surgeon. From 1970 to 1980, Dr. Mackie was the department's education officer and director of the residency program. In 1987, the Penn medical students voted him their most valuable teacher. He was also an exceptionally gifted technical surgeon who devoted much of his time to backing up Jonathan Rhoads. Without him, Dr. Rhoads could never have conducted an active surgical practice while devoting so much of his time to the national and international administrative responsibilities that made him famous. Dr. Mackie's wife Joan has generously sponsored the distinguished graduate program.

In researching the history of the department, I recently reviewed the careers of the HUP residents we have thus far designated as our graduate of the year. Listed below are the twenty chosen between 1991 and 2021. They were quite a group! Four were presidents of the American College of Surgeons and three were presidents of the American Surgical Association. One was U.S. Surgeon General, one a university president, thirteen were chairs of surgery at university medical schools, and seven headed equally important academic specialty centers or programs.

1991 – **James D. Hardy** (Chief Resident 1948 - 1949) He performed the world's first human lung and first heart transplants in 1963. Chairman at the University of Mississippi for 32 years.



1992 – James C. Thompson (Chief Resident 1958 - 1959)

Chairman of Surgery at the University of Texas Medical Branch for 25 years.

Highly productive basic researcher in G.I. physiology.

President of both the American Surgical Association and the American College of Surgeons.

Member of the National Academy of Medicine and the American Philosophical Society.

1994 – **Edward M. Copeland III** (*Chief Resident 1968 - 1969*) Chairman of Surgery at the University of Florida for 20 years. President of the American College of Surgeons.



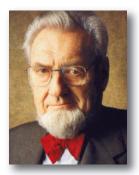
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1995 – R. Scott Jones (Chief Resident 1966 - 1967)

Chairman of Surgery at the University of Virginia for 20 years.

President of both the American Surgical Association and the American College of Surgeons.

1996 – Stanley J. Dudrick (Chief Resident (1966 - 1967) Landmark research with Jonathan Rhoads resulted in the success of TPN. Inaugural Chairman of Surgery at the University of Texas, Houston.



1997 – **C. Everett Koop** (Chief Resident (1944 - 1945)
First Chief of Surgery at CHOP for 34 years.
Appointed in 1986 by President Reagan as U.S. Surgeon General.



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1998 – Moritz M. Ziegler (Chief Resident 1973 - 1974)
Chief of Pediatric Surgery at Cincinnati Children's Hospital, Boston Children's Hospital and Children's Hospital of the University of Colorado. Winner of the Ladd prize, pediatric surgery's highest award.



2007 – Ronald DeMatteo (Chief Resident 1996 - 1997)

In 2017 became John Rhea Barton Professor and Chairman of the Department of Surgery at the University of Pennsylvania. Distinguished basic investigator in treatment of GI stromal tumors. Member of the National Academy of Medicine, American Society for Clinical Investigation and Association of American Physicians



2009 – **Stephen T. Bartlett** (*Chief Resident 1984 - 1985*) Chairman of Surgery at the University of Maryland for 14 years. Distinguished research in transplantation on pancreas, islets and face.



2010 – Danny O. Jacobs (Chief Resident 1985 - 1986)

Chairman of Surgery at Creighton University and Duke University.

President, Provost and Dean of the University of Texas Medical Branch.

President of Oregon Health Services University.

Distinguished research at Harvard on the impact of critical illness on metabolism.



2011 – **W. Roy Smythe** (Chief Resident 1995 - 1996)

Chairman of Surgery at Texas A&M.

Research in gene therapy of mesothelioma.



2012 – **James D. Luketich** (*Chief Resident 1992 - 1993*)
Chairman of Department of Thoracic Surgery at the University of Pittsburgh world-renowned for minimally invasive surgery of the esophagus.



2013 – **Michael A. Choti** (*Chief Resident* 1989 - 1990)

Vice Chairman of Surgery at Johns Hopkins. Chairman of Surgery at Southwestern University.

Prominent in treatment and research of abdominal cancers.

(continued on page 4)

From the Editor (continued from page 3)



2014 – **Howard A. Reber** (*Chief Resident 1969 - 1970*) Chief of G.I. surgery at UCLA. One of the world's most prominent experts in research and treatment of diseases of the pancreas.

2015 – Omaida C. Velasquez (Chief Resident 1997 - 1998)
Chief of Vascular Surgery and Chair of the Department of Surgery at the University of Miami.
Respected research in microvascular endothelial cells.
Member of the American Society for Clinical Investigation.



2016 – James F. Markmann (Chief Resident 1995 - 1996) Chief of Transplantation at Harvard and Massachusetts General Hospital. Clinical and research expert in pancreatic islet transplantation and transplantation biology.

2017 – **Kenneth L. Brayman** (*Chief Resident 1988 - 1989*) Chief of Transplantation at the University of Virginia. Respected expert in transplantation of pancreatic islets.



2018 – **Steven J. Fishman** (*Chief Resident 1991 - 1992*) Chief of Surgery at Boston Children's Hospital. World's expert on treatment and research of vascular malformations and anomalies.



2019 – **Mark B. Faries** (Chief Resident 2001 - 2002) Surgical Director, Melanoma Program, Cedars-Sinai Medical Center, Los Angeles Research in melanoma.



2021 – **Joseph Woo** (*Chief Resident 1998-1999*) Chairman of the Norman Shumway Department of Cardiothoracic Surgery at Stanford. Highly accomplished in treatment and research of cardiac surgery.

In the three decades since the first distinguished graduate was named, only twenty surgeons have received this award. Many others would have qualified on the basis of their accomplishments. Four University Surgery chairman remain candidates. Others have been excluded since the guidelines of the award include a HUP residency and exclude current Penn faculty members. About

twenty division chiefs at other universities also deserve and remain eligible for the award. Examination of the credentials of this year's graduating HUP residents, described in this issue of the newsletter predict that there will be members of this group and other recent graduates who will occupy a place on this list.

Sunil Singhal Appointed Chief, Thoracic Surgery

Dr. Singhal is the William Maul Measey Professor of Surgical Research and the Vice Chair for Translational Research in the department. He completed his undergraduate studies at Dartmouth, medical school at Penn, General Surgery at Johns Hopkins, and Thoracic Surgery at Penn.

He became a Penn faculty member in 2008 and has built a practice in lung cancer, pleural mesothelioma, and congenital chest wall defects. He established the HUP robotic thoracic surgery program, which is now one of the most active thoracic robotic programs in the region. He received an MBA from Wharton in 2018 and was recently promoted to Professor in the Tenure Track.

Dr. Singhal's research interests include intraoperative molecular imaging for thoracic malignancies and neoadjuvant immunotherapy for advanced lung cancer. His clinical molecular imaging program is the largest in the United States and he has been the principal investigator of over \$14 million in federal funding, including multiple R01s, NCI Biomedical Research Partnership, Department of Defense, VA Merit, and State of Pennsylvania grants, along with 8 clinical trials. His work resulted in the first multi-institutional, randomized Phase 3 clinical trial of intraoperative molecular imaging in lung cancer. Dr. Singhal has published over 250 peer-reviewed articles, including papers in Science, Translational Medicine, Cancer Cell, PNAS, Clinical Cancer Research and The Journal of Clinical Investigation. Dr.

Singhal is a member of the American Society of Clinical Investigation, the Society of Clinical Surgery, and the American Surgical Association. He is a member of the editorial board of the Annals of Surgery.

We are immensely grateful to Dr. John C. Kucharczuk for his contributions as Division Chief over the past 10 years. Dr. Kucharczuk began his surgical training at Penn in 1992 and is a testament to the peerless surgical training and mentoring of surgical greats like Dr. Clyde Barker, Dr. Ernest Rosato, and Dr. Larry Kaiser. Dr.



Kucharczuk is a master surgeon in malignant esophageal, pulmonary, and mediastinal diseases and is responsible for positioning Penn Thoracic Surgery as the go-to referral center for expert thoracic surgical care both regionally and nationally. Among other divisional achievements, Dr. Kucharczuk's tenure has been marked by the establishment of the Thoracic Oncology Service Line, now a model for the health system's streamlined approach to accessible and comprehensive cancer care. He has expanded division activities from three to nine clinical locations and has tirelessly advocated for the well-being of staff and patients alike. We are pleased to announce that Dr. Kucharczuk is expanding his leadership role as Director of the Thoracic Oncology Network of the Abramson Cancer Center, while continuing to head the Thoracic Oncology Service Line.

Dale Han (1976-2021)

Contributed by Giorgos Karakousis

Dale Han, MD, a surgical oncologist with specialty in melanoma, passed away unexpectedly on October 2, 2021. Dale completed his medical school at the State University of New York at Stony Brook and then entered his gen-



eral surgery residency at the Hospital of the University of Pennsylvania from 2003 to 2010. While at Penn, Dr. Han worked in the laboratory of Dr. Douglas Fraker studying isolated limb perfusion therapy for locally advanced melanoma in a rodent model. He then completed a surgical oncology fellowship at Moffitt Cancer Center in Tampa, Florida, after which he took a position on the faculty of Yale University hospital. From there,

he was recruited to Oregon Health and Science University's strong melanoma program. Dr. Han was very actively involved in melanoma research, specifically investigating prognostic factors related to sentinel lymph node metastasis in melanoma. His research work culminated in multiple research publications and book chapters which significantly contributed to the field. He was also very active in the Society of Surgical Oncology and in the Sentinel Lymph Node Working Group (where he served as chair of the Scientific Committee). Dr. Han was a kind, compassionate surgeon who was always generous with his time, particularly among trainees, highlighting his significant commitment to surgical teaching and mentorship. He epitomized the values of Penn Surgery and we will truly miss our colleague and friend. Our thoughts and prayers go out to his family, including his wife Stephanie and daughter Olivia

Charles Vollmer Appointed Chief, Gastrointestinal Surgery

Dr. Vollmer did his undergraduate studies at the University of North Carolina at Chapel Hill and then graduated from Jefferson Medical College. He was a General Surgery resident at Washington University of St. Louis and then completed a fellowship in Hepatobiliary and Solid Organ Transplantation Surgery at the University of Toronto. He was on the faculty at Beth Israel Deaconess Medical Center and Harvard Medical School for 8 years before moving to

Penn in 2011. He was promoted to Professor in 2015 and has served as the Director of Pancreatic Surgery and founder and Co-Director of the Penn Pancreatic Cyst Multidisciplinary Program. His primary research focus is pancreas surgery and he has made numerous contributions to clinical outcomes research, particularly regarding postoperative pancreas fistula. He has authored over 190 manuscripts, 40 book chapters, and 3 books. He has published 26 papers in the Annals of Surgery alone. His H-index is



one of the highest in the department. Dr. Vollmer is well known internationally and is currently a member of the editorial boards of the Annals of Surgery, British Journal of Surgery, Annals of Surgical Oncology, Surgery, HPB, Journal of Gastrointestinal Surgery, Langenbeck's Archives of Surgery, and Journal of Surgical Oncology. He was the President of the Americas Hepato-Pancreato-Biliary Association in 2018-19 and is currently a member of the

Executive Committee of the International Hepato-Pancreato-Biliary Association and the National Cancer Care Network Committee on Pancreatic Cancer. He is also a member of the American Surgical Association and the Society of Clinical Surgery.

Thanks are due to Dr. Dan Dempsey for his commendable leadership of the division over the last decade. The effort of Dr. Fraker and the other members of the search committee should also be recognized.

Department History - Richard Davis (1925-2021)

Dick Davis, Emeritus Associate Professor of Surgery and Neurosurgery at HUP, died on May 7, 2021 at age 95. After graduating from Princeton in 1947, he obtained his MD and MA in Anatomy at Northwestern University. His residency in neurosurgery at Northwestern was served under his father, Loyal Davis, a famous surgeon who was Chairman of the entire Department of Surgery. In 1958, Dick was recruited to the University of Pennsylvania by I. S. Ravdin. At that time, neurosurgery was a division of the Department of Surgery. Dick Davis was probably the most important teacher of neurosurgery to Penn medical students. He taught the principles of neurological surgery to generations of Penn medical students and HUP residents through a series of lectures and patient rounds as well as in the operating room. Despite his rigorous insistence on clinical precision, he also exemplified warmth and humility in his dealings with the students and residents. He was also very active in the Harrison Department of Surgical Research. Many of his 50 research publications were on the influence of the central nervous system on the control of gastric secretion and its impact on peptic ulcer disease. Often these studies were done in collaboration with Frank Brooks, the chief of the G.I. section of the Department of Medicine.

I sometimes had lunch with Dick in the doctor's dining 6 room. It was hard to avoid learning of his interest in the history of warfare as it related to surgery. He wrote extensively on this subject. His favorite topic was the neurosurgical treatment of Field Marshal Erwin Rommel's near fatal head injury during the Normandy campaign and its impact on the outcome of World War II.



In 1999, Dick published a novel about a WWII paratrooper who is easily recognized as Dick's friend, Henry Keep, who was also our surgery department's business manager. Keep was a member of Philadelphia's historic Biddle family. After graduating from Princeton in 1941, he volunteered for the paratroops. One of many jumps he made with his 82nd Airborne Unit was in a campaign called Market Garden. He and 35,000 other paratroopers jumped into Holland, landing 60 miles behind enemy lines. It was the largest and most daring airborne assault in history. Their objective was to shorten WWII by capturing a series of bridges to open a narrow passageway for knocking out Germany's manufacturing center, the Ruhr. To reach the last bridge Keep's battalion had to take the one before intact. To do this they needed to cross the 400-yard-wide Waal river. Because timing was crucial, they

CHOP Surgeon-in-Chief N. Scott Adzick: Strittmatter Award for Contributions to Field of Fetal Surgery

The Philadelphia County Medical Society (PCMS) has awarded N. Scott Adzick, MD, Surgeon-in-Chief at Children's Hospital of Philadelphia (CHOP), the 2021 Strittmatter Award, its most prestigious scientific honor. The award recognizes a PCMS physician who has demonstrated the most valuable contributions to the practice of healing, whether surgical or medical.

Dr. Adzick is a pioneer in the field of fetal surgery, having founded the Richard D. Wood Jr. Center for Fetal Diagnosis and Treatment (CFDT) at CHOP in 1995. The CFDT is now the largest and most comprehensive fetal program in the world, treating expectant mothers and their unborn babies from all 50 states and more than 70 countries. Adzick and his colleagues in the CFDT have performed more than 2,000 fetal surgeries and cared for more than 25,000 expectant mothers, making the procedure a widespread and life-changing option for babies and families.

Since the inception of the CFDT, Dr. Adzick has continued to



study and refine the practice of fetal surgery. He was a lead investigator for the landmark National Institutes of Health (NIH) Management of Myelomeningocele Study (MOMS), which was published in the New England Journal of Medicine in 2011. It demonstrated that fetal surgery could significantly improve outcomes for children with spina bifida. Follow-up studies show that these benefits endure up to ten years, leading to better mobility and quality of life for children who had

fetal surgery.

Adzick said, "At CHOP, we hope that continued research in the field of fetal surgery will bring better treatments to even more patients, both here in Philadelphia and around the world."

The Strittmatter Award is named after Isidore P. Strittmatter, MD, the sixty-third president of PCMS, who established the award in 1923. The award commends the recipient's contribution to one of the fundamental sciences of medicine, having a beneficial impact on either surgery or medicine.

could not wait for nightfall and had to do it in daylight against withering enemy fire. As the battalion's operation's officer Keep designed and wrote the plan for what he acknowledged to be a suicide mission. They had only defenseless frail canvas boats to carry them, and too few paddles, so they used their rifle butts to row. If you saw the movie, A Bridge Too Far, you know what happened. Keep was in one lead boat and Major Julian Cook, was in another, his part was played by Robert Redford. More than half of their men were killed in crossing the river. Only 11 of their 26 boats reached the opposite bank. At the predictably frightful price, Keeps plan succeeded. They took the bridge. Keep's contribution was recognized with a bronze star and silver stars. But because of subsequent delays in follow-up, the whole campaign failed. In Dick Davis' novel, the fictionalized version of Keep's experience is virtually the same as what really happened.

Henry Keep was a particularly good friend of our Chairman Bill Fitts, and also of us younger members of the department. He died at HUP in 1983 during an operation on his heart. When his ashes were interred at Andalusia, the historic Biddle estate on the Delaware, a bus full of our department members made the trip to be there.

Dick's book also parodies a family in some ways similar to his own: the complex relationship of a strong-willed famous neuro-surgeon and his son. In reflecting on the career of Dick Davis, it is hard to overlook the influence of his famous family connections. Dick's father, Loyal Davis, was one of the nation's most important

surgeons. He was Chairman of Surgery at Northwestern for 30 years, and for 40 years was the editor of SG&O (now Journal of the American College of Surgeons). He also became President of the American College of Surgeons and the American Surgical Association, as well as a founder of the American Board of Surgery. During a year in Boston as Harvey Cushing's assistant he learned from the master meticulous technique and also to terrify interns and residents. That Loyal Davis was a strict disciplinarian and an imperious martinet is putting it too mildly.

Loyal Davis was the stepfather of Nancy Reagan and thus the father-in-law of President Ronald Reagan with whom he developed a very close relationship. Some thought him to be influential in the conversion of Ronald Reagan from a liberal Democrat to a conservative Republican. Nancy Reagan, Dick's sister, often hosted the Davis family at the White House. Dick Davis's long-term friendship with President Reagan was one of mutual trust and affection.

Not surprisingly, Dick Davis's personality was greatly influenced by growing up with and then being professionally trained by his father. Only occasionally did one detect in Dick the Cushing/Loyal Davis style. I saw it a few times when Dick was confronted by an unsuspecting intern or resident. But for the most part, Dick Davis in his interpersonal actions was the exact opposite of his father. He was polite, compassionate and supportive of his trainees. The Department of Surgery remembers him as a teacher and friend.

Alumni News

Faculty, Residents, Alumni of Penn Surgery email your news to Clyde Barker clyde.barker@pennmedicine.upenn.edu

◆ Alexander "Sasha" Krupnick, MD (HUP Chief

Resident 2004) has been awarded the Peter Angelos Distinguished Professorship in Surgery at the University of Maryland. Dr. Krupnick is a general thoracic surgeon who specializes in the treatment of lung cancer,



esophageal cancer, lung transplantation as well as benign thoracic disorders. His lung transplantation training and experience under Joel Cooper and Alec Patterson, who are credited with first successful human lung transplant, put him at the forefront of the field. He has performed hundreds of lung transplants. He was recruited in 2020 to be the surgical director of the University of Maryland lung transplant program. In addition he has advanced the field of minimally invasive oncologic surgery and is an expert at minimally invasive pulmonary and esophageal resections.

 At the recent meeting of the Society of Clinical Surgery
 Todd Bauer (HUP Chief Resident 2002) presided as President and Pavan Atlluri



(HUP Chief Resident 2008) was one of six candidates elected to membership. **Rachel Kelz** is president-elect.

◆ James F. Markmann, MD, PhD (HUP Chief Resident 1996) is President of International Pancreas and Islet Transplant Association (IPITA). His presidential address: Beta Cell Replacement: Past, Present and Future was presented at the recent IPITA Annual Meeting.



Oluwadamilola Fayanju, MD, MA, MPHS has been

appointed The Helen O. Dickens Presidential Associate Professor Chief of Breast Surgery Surgical Director, Rena Rowan Breast Center Innovation Faculty and Penn Center For Cancer Care Innovation. She delivered the



Rhoads 2021 Oration at the Philadelphia Academy of Surgery.

At the recent meeting of the Halsted Society
 Scott Levin was elected to membership.



New Faculty

◆ Trinity Bivalacqua, MD, PhD was appointed Director of Urologic Oncology and Co-Director of the Genitourinary Cancer Service Line in the Abramson Cancer Center. MD, PhD - Tulane University; General



Surgery and Urology Residency - Johns Hopkins Hospital; Fellowship - American Urological Association Foundation Post-Doctoral Fellowship.

 Leisha Elmore, MD was appointed Assistant Professor of Surgery at PPMC in the Division of Endocrine and Oncologic Surgery.



MD - Washington University, St. Louis; General Surgery Residency - Washington University - Barnes-Jewish Hospital; Fellowship - University of Texas - MD Anderson Cancer Center.

◆ Lillias "Lily" Holmes Maguire, MD was appointed Assistant Professor of Surgery, Division of Colon and Rectal Surgery. Dr. Maguire will be the inaugural recipient of the Measey Surgical Faculty Career Develop-



ment Endowed Professorship and serve as will serve as Director of Research for the Division of Colon and Rectal Surgery.

MD - University of Pennsylvania School of Medicine; General Surgery Residency - Massachusetts General Hospital; Colon and Rectal Surgery Fellowship - University of Minnesota Hospitals.

 Shaun Mendenhall, MD was appointed Assistant Professor of Surgery, Division of Plastic Surgery.



MD - University of Utah School of Medicine; Plastic and Reconstructive Surgery Integrated Resident, Southern Illinois University Scho

ed Resident, Southern Illinois University School of Medicine; Orthopaedic Hand & Microvascular Fellowship, at Penn.

 Phillip Pierorazio, MD was appointed Professor of Surgery, Division of Urology, Chief of Urology at Penn Presbyterian Medical Center.



MD - Columbia University; Resident in Urology, Johns Hopkins Hospital.

Alumni News (continued from page 8)

 Catherine Sharoky, MD was appointed Assistant Professor of Surgery, Division of Traumatology, Surgical Critical Care and Emergency Surgery



MD - University of Maryland School of Medicine; General Surgery Residency, Hospital of the University of Pennsylvania, MSCE - Penn; Fellowship - Surgical Critical Care, R. Adams Cowley Shock Trauma Center.

- Jason Wink, MD was appointed Assistant Professor of Surgery, Division of Plastic Surgery.
 - MD Perelman School of Medicine at the University of Pennsylvania; Plastic Surgery Residency, Hospital of the University of Pennsylvania; Hand and Microvascular Surgery Fellowship, MedStar Union Memorial Hospital.
- ◆ Jennifer Zhang, MD was appointed Assistant Professor of Surgery at HUP in the Division of Endocrine and Oncologic Surgery. MD - Johns Hopkins School of Medicine; General Surgery Resident, Beth Israel



Deaconess Medical Center; Breast Surgical Oncology Fellowship, Memorial Sloan Kettering Cancer Center.

Departure

◆ Ian Soriano, MD was appointed Associate Professor of Clinical Surgery at University of California, San Francisco. He will be departmental Surgeon Champion for the ACS NSQIP Program and Lead Surgeon for the General Surgery Advanced Practice Provider



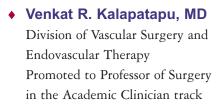
General Surgery Advanced Practice Provider Service.

Promotions

◆ Joshua Fosnot, MD

Division of Plastic Surgery

Promoted to Associate Professor of Surgery
in the Academic Clinician track



- Major Kenneth Lee, IV, MD, PhD
 Division of Gastrointestinal Surgery

 Promoted to Associate Professor of Surgery
 in the Academic Clinician track
- Peter Mattei, MD
 Division of Pediatric Surgery
 Promoted to Professor of Surgery
 in the Clinician Educator track
- ◆ Julie S. Modenhauer, MD Division of Pediatric Surgery Promoted to Professor of Surgery in the Academic Clinician track
- ◆ Jose L. Pascual, MD

 Division of Traumatology, Surgical Critical
 Care and Emergency Surgery
 Promoted to Professor of Surgery
 in the Clinician Educator track
- Adam M. Shiroff, MD
 Division of Traumatology, Surgical Critical
 Care and Emergency Surgery
 Promoted to Professor of Surgery
 in the Academic Clinician track















From the Chair (cont. from page 1)

blood. Currently, in a patient with a small pancreas mass a "liquid biopsy" can diagnose pancreas cancer if the blood contains a K-ras mutation, which drives most pancreas cancers. Radiologic technology continues to improve with thin (1 mm!) CT scans and metabolic imaging. There is substantial promise in nuclear medicine. ^{18F}FDG-PET scans have been revolutionary for some cancers, while ⁶⁸Gallium-DOTATATE PET scans targeting somatostatin receptors can now localize small neuroendocrine tumors.

There is much left to be done and Penn Surgery is well positioned to make major contributions. Haptic feedback would improve robotic surgery. 3-D printing has barely entered into surgery. While Brainlab software is widely used by neurosurgeons for intraoperative guidance, registration of preoperative imaging with intraoperative anatomy is underdeveloped in other locations. Augmented Reality (AR) and Artificial Intelligence (AI) should have numerous applications in surgery. It will be interesting to see if our current surgical techniques are still considered precise 20 years from now. Certainly, the methods from 20 years ago are not.

Jo Buyske Honored as Rosato Lecturer

On the evening of October 20 at the Philadelphia Country Club we honored Dr. Jo Buyske as the 2021 Ernest F. Rosato William Maul Measey Endowed Lecturer in Surgical Education.

Jo Buyske is President & Chief Executive Officer of the American Board of Surgery, Director of Evaluations, Director of the American Board of Medical Specialties, and is a member of the Executive Committee of the board of SCORE, the Surgical Council on Resident Education.

Dr. Buyske's major focus, in addition to exam development,



(I to r) Dr. Ron DeMatteo and Mrs. Allyson DeMatteo, Dr. Dan Dempsey, Dr. Jo Buyske, Mrs. Gerry Rosato, Mr. Rafe Rostao, Dr. Matt Goldshore and Dr. Marco Carpenter

is on resident education, standards in training and beyond including flexible training pathways and re-entry, and international relationships in surgery.

Dr. Buyske was Chief of Surgery at Penn Presbyterian Medical Center for 10 years. She continues at Penn as an Adjunct Professor of Surgery, and has a clinical appointment as a staff surgeon at the Philadelphia Veteran's Administration, as well as at the Hospital of the University of Pennsylvania, where she volunteers on the emergency surgical service. In addition, Dr. Buyske volunteers as a surgeon several weeks a year in resource-limited countries, most recently in Haiti and Nepal.

She received her surgical training at the Massachusetts General Hospital in Boston, and received her MD degree from Columbia's College of Physicians and Surgeons. She majored in English Literature at Cornell University, where she received her undergraduate degree.

She is a member of many surgical societies, and is a past-president of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES). She has won numerous mentoring awards, has been named as a Top Doc in Philadelphia and nationally, and has been featured in a Lifetime documentary on women doctors. She has given well over 100 invited lectures.

Wall of Fame Contributed by Daniel Dempsey

HUP CHIEF SURGICAL RESIDENTS 2014

During academic year 2014, while six stellar HUP chief residents were completing their general surgery training on chairman Jeff Drebin's watch, there were some other things going on in the world: the US government shut down for 16 days; Assad used sarin gas on Syrian civilians; Diana Nyad swam from Havana to Key West without a "shark cage"; Obamacare started, somewhat clumsily; the Red Sox won the World Series; Auburn upset Alabama in the iron bowl (unbelievable ending); Seattle dominated Denver 43-8 in Super Bowl 48; Twelve Years a Slave won the Oscar for best picture; UConn (7 seed) defeated Kentucky (8 seed) in the NCAA Division 1 men's basketball finals; UConn also won the woman's title over Notre Dame; there was an outbreak of Ebola in West Africa; Russia annexed Crimea; two 20th century popes were canonized (John XXIII and John Paul II); and some well-known people died (inter alia Nelson Mandela, Peter 10 O'Toole, Tom Clancy, Jean Stapleton, Shirley Temple,

Mickey Rooney, Pete Seeger). Meanwhile the class of 2014 graduates of the HUP general surgery residency program were busy further distinguishing themselves as an outstanding cadre of young surgeons.

Myron Allukian III was born in Boston and attended Wesleyan



College where he lettered in 3 varsity sports: football (outside linebacker), wrestling (weight unknown), and track (as a thrower not a runner). He was a conference academic all-star in football for two years. Myron stayed at Wesleyan for a masters in chemistry and then entered the Dartmouth/Brown combined

program and received his MD in 2006, along with the Randall Prize in Surgery. That year he matched at HUP for general surgery, with outstanding letters of recommendation from Drs. Cioffi and Ianitti and others. Following his junior residency, Myron spent 3 productive years in the lab with Ken Leichty and the Gorman brothers, and in 2014 he won both the Perloff Chief Resident Teaching Award and the Leonard D. Miller Teaching Award. After the HUP general surgery residency, Myron did a

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Wall of Fame (continued from page 10)

pediatric surgery fellowship at Cincinnati Childrens' Hospital and then in 2016 joined the faculty at UT Houston. Happily, in 2018 Myron was recruited back to Philadelphia where he is both a member of the division of general, thoracic, and fetal surgery at CHOP, and an assistant professor of surgery at Penn.

Nina Michelle Bowens was born in Newport News, Virginia.



She was valedictorian of her high school class and attended Harvard College, graduating cum laude with a major in neurobiology. She was a recipient of the John Harvard Scholarship Award. Nina then went to medical school at Cornell where she was recognized with an award as the best surgery student. She graduat-

ed AOA and matched at HUP in 2006. She was described as a "superb student" by both Drs. Michelassi and Jaques in letters of recommendation. During her residency Nina served on the departmental resident education committee, and ultimately became "REC chair". In 2011 she received the Gordon P. Buzby Leadership Award from the department. Nina was in Mike Parmacek's lab for 3 years, investigating the role of MRTF-B in vascular development. Upon completion of general surgery training, Nina took a vascular fellowship at Columbia. She is now an assistant professor of surgery at UCLA. She is well published in good journals including JVS, JCI and PNAS.

Holly Lynn Graves was born in Grand Rapids, Michigan. She



went to college at the University of Michigan where she was consistently on the Dean's list. While in medical school she coauthored 3 peer reviewed papers. After obtaining her B.S. in 2003, Holly matriculated at Columbia for medical school, graduating AOA in 2007. With an outstanding record and excellent let-

ters of recommendation, she matched at HUP that year. Her performance as a junior resident was highly rated, and she then went into the research lab with Brian Czerniecki. There she coauthored several clinical and basic research papers in excellent journals including PloS One, Journal of Surgical Oncology, and Pathology Research. Upon completion of general surgery training at HUP, Holly did the coveted HUP fellowship in Vascular Surgery and Endovascular Therapy. Currently she practices vascular surgery in South Jersey. Not surprisingly, since 2019 Holly has been a perennial South Jersey Top Doc.

William Hiesinger was born in Philadelphia and received his



A.B. cum laude from Dartmouth in 2002. He graduated AOA from Penn Medical School in 2007, receiving both the I.S.Ravdin Prize and the Clyde F. Barker Research Prize. Will scored at the 99th percentile on all steps of the USMLE exam. He matched at HUP for general surgery and as expected his per-

formance was exemplary. He spent 2 years in the lab with Joe Woo et al, and by completion of his general surgery training he had 20 publications, including first author papers in Circulation and the Journal of Thoracic and Cardiovascular Surgery. After finishing general surgery, Will stayed at HUP for cardiothoracic fellowship training. He was then recruited to Stanford as an assistant professor of cardiothoracic surgery in Dr. Woo's department where he also serves as director of the Stanford Mechanical Circulatory Support Program. A search of Will's name on public med yields over 60 papers, many coauthored with fellow HUP Surgery alums.

Caroline Edwards Reinke was born in Greenville, North



Carolina. She went to college and medical school at Duke. In 2003 she graduated magna cum laude, Phi Beta Kappa with a BS in biological anthropology and anatomy. In 2007 she also received her MD from Duke where she served on the admissions committee. Somehow Caroline also found the time and energy to get

an MS in public health from UNC in 2006. With this record and outstanding letters of recommendation from Danny Jacobs and Bryan Cleary, Caroline matched at HUP where she was prodigiously productive. She served as cochair of the HUP house staff quality and safety council, and also was on the HUP medical records committee and the mortality committee. Under Dr. Kelz' mentorship, she received another MSPH, with a focus on patient safety and healthcare quality. Caroline was a winner of the UPHS Quality and Patient Safety Award in 2011, and in 2012 she got both the departmental Rhoads Resident Research Award and the Buzby Leadership Award. After HUP general surgery training, Caroline went back to Duke for a fellowship in MIS/Bariatrics, and is currently on the faculty of Atrium Health/Carolinas Medical Center in Charlotte, NC. She has coauthored over 60 (continued on page 12) peer reviewed papers.

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Eduardo Rodriguez Zoppi was born in Miranda, Venezuela. He received his MD



from the Universidad Central de Venezuela (Escuela "Luis Razetti") in Caracas in 2004. His USMLE scores on steps 1 and 2 were at the 99th percentile. Eduardo worked as a physician in his home country until 2007 when he came to HUP as part of the nondesignated preliminary residency program. After two outstanding years, Eduardo earned a categorical position, and continued to excel. He was repeatedly rated as "outstanding" by the medical students, and many faculty evaluations comment

on his excellent technical ability and patient care skills. Eduardo spent his time in the lab with Dr. Naji and as a result he coauthored several excellent papers in high quality journals including Transplantation, Immunology Research, and Transplant Immunology. After completion of HUP general surgery training, Eduardo did a vascular fellowship at the University of South Florida. Currently he practices vascular surgery with the Memorial Healthcare System in Hollywood FL. When he is not taking care of his patients or his family, he is either watching or playing soccer.

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