

PENN TRANSPLANT SURGERY FACULTY FY21



Kim M. Olthoff, MD is the Donald Guthrie Professor of Surgery in the Division of Transplantation at Penn, Chief of the Division of Transplant Surgery at Penn, and the Vice Chair for Faculty for Development. She attended the University of Chicago Pritzker School of Medicine, and completed a residency in general surgery at UCLA followed by a fellowship in transplantation and hepatobiliary surgery at the Dumont – UCLA Transplant Center, and joined the faculty at Penn in 1995. Dr. Olthoff's clinical practice focuses on adult and pediatric liver transplantation, living donor liver transplantation, and hepatobiliary surgery. She co-directs the multidisciplinary hepatobiliary tumor conference and the Liver Tumor Clinic at the Penn Transplant Institute, and is the Surgical Director of the Liver Transplant Program at CHOP.

Dr. Olthoff is a Past-President for the American Society of Transplant Surgery and was previously the Chair of the Liver-intestine Committee and on the Board of Directors of the United Network for Organ Sharing (UNOS).

Dr. Olthoff's research is focused on translational and clinical studies in liver regeneration, early allograft dysfunction, living donor transplantation, and transplant genomics. She has authored or coauthored over 250 original papers and book chapters.



Peter Abt, MD attended Brandeis University and received his medical degree at Dartmouth. He completed his general surgery residency at the University of Rochester in 2001 followed by a research and clinical fellowship in transplantation at the University of Pennsylvania. After fellowship he joined the faculty at the University of Rochester and was recruited back to Penn in 2007. Dr. Abt is the director of the abdominal transplant fellowship transplant program at Penn. Dr. Abt's clinical practice focuses on adult and pediatric liver, kidney, and pancreas transplantation as well as living kidney and liver donation. In addition, he has an active practice in dialysis access and laparoscopic liver surgery.

Dr. Abt's research interests primarily involve answering clinical questions related to transplantation through the use of national and regional data registries. Current investigations focus on understanding the benefit of kidney transplantation in non-renal transplant recipients and dual organ transplants. Ongoing translational studies address acute kidney injury in liver transplant recipients. Dr. Abt has authored or coauthored over 150 papers and book chapters, is an Associate Editor of the *American Journal of Transplantation*, and on the editorial boards of *Liver Transplantation* as well as *Clinical Transplantation*. Dr. Abt has served on various committees for the United Network of Organ Sharing (UNOS) as well as the American Society of Transplant Surgeons.

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Samir Abu Gazala, MD grew up in Jerusalem, and graduated with honors from the Hebrew University Medical School in Jerusalem. He completed his general surgery residency at the Hadassah Medical Center in Jerusalem and the Icahn School of Medicine at The Mount Sinai Medical Center in New York. He completed his fellowship in abdominal organ transplantation at the University of Pennsylvania. Later, he returned to Jerusalem to join the liver and kidney transplant and HPB programs in Hadassah and later became the director of the liver transplant and HPB surgery. Dr Abu-Gazala joined the faculty at the University of Pennsylvania in 2021 in the Division of Transplant-

ation.

Dr Abu-Gazala's surgical focus is liver and kidney transplantation, laproscopic HPB and laparoscopic donor nephrectomy. His research interest involves liver transplant immunology, liver cancer, and endocrine changes after bariatric surgery. He authored and co-authored over 30 publications and book chapters and serves as a reviewer in Transplantation and Surgery of Obesity and Related Disease.



Clyde F. Barker, MD is a native of Salt Lake City, a graduate of Phillips Exeter Academy, Cornell University and Cornell University Medical College. His entire subsequent career has been at the University of Pennsylvania. After internship, residency in surgery and fellowship in vascular surgery, he studied transplantation biology under Rupert Billingham as a Post Doctoral Fellow in the Department of Medical Genetics. In 1966, his first year on the faculty, he initiated the University's transplant program by performing a kidney transplant, now one of only a small number in the world that functioned for 48 years. From 1966-2001 he was Chief of Transplantation Surgery, from 1982-

2001, Chief of Vascular Surgery and from 1983-2001 John Rhea Barton Professor and Chairman of the Department of Surgery.

Dr. Barker's research interests have been primarily in transplantation, especially transplantation of the kidney, pancreas and isolated pancreatic islets. His research was continuously funded for over twenty-five years by grants from the National Institutes of Health, including an NIH Merit Award from 1987 to 1995. Dr. Barker has published more than 430 scientific papers and served on 12 editorial boards.

Dr. Barker's scientific memberships include the College of Physicians of Philadelphia, the American College of Surgeons, The Institute of Medicine of the National Academy of Sciences, the Association of American Physicians, the American Academy of Arts and Sciences and the American Philosophical Society of which he is now President. He has been President of the American Society of Transplantation Surgeons, the United Network for Organ Sharing, the Halsted Society, the U.S. Chapter of the International Society of Surgery and the American Surgical Association. He has served as visiting professor at 100 different universities and is an Honorary Fellow of the Royal College of Surgeons of England and of the Royal College of Surgeons in Ireland. Dr. Barker is the recipient of several lifetime achievement awards, including

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the Roche Pioneer Award of the American Society of Transplant Surgeons, the Sheen Award of the American College of Surgeons, the Medallion for Scientific Achievement of the American Surgical Association, the Jonathan Rhoads Gold Medal of the American Philosophical Society and the Distinguished Graduate Award of the School of Medicine of the University of Pennsylvania. He has been designated the 2009 recipient of the Thomas E. Starzl Prize in Transplantation and Immunology and the Lifetime Achievement Award of the Society of University Surgeons, and in 2010 he was awarded the Medawar Prize of the International Transplant Society.



Ty Dunn, MD, MS grew up in eastern Iowa and attended Hamline University in St. Paul, Minnesota where she majored in Biology and Classics. She received her medical degree from the University of Minnesota in 1994. Dr. Dunn completed her residency in general surgery at the University of Illinois at Chicago where she studied hepatocyte transplantation and earned her master's degree. She then returned to the University of Minnesota where she completed her fellowship in Transplantation and Immunology. Dr. Dunn joined the faculty at the University of Minnesota in 2006 where she later became the surgical director of the Living Kidney Donor Program and the

Kidney Transplant Program. She was recruited to Penn in 2018 to lead the Kidney and Pancreas Transplant Programs.

Dr. Dunn's surgical focus is in living kidney donation, kidney and pancreas transplantation, and total pancreatectomy and islet autotransplantation for chronic pancreatitis. Her clinical and research interests involve antibody mediated allograft rejection, islet transplantation, immunosuppression, and organ allocation policy. Dr. Dunn has been the PI or Co-I of more than 30 funded research trials and has authored or coauthored over 125 peer reviewed publications and book chapters. She serves as a reviewer for American Journal of Transplantation, Transplantation, and Clinical Transplantation. Dr. Dunn currently serves as Chair of the Scientific Studies Committee of the American Society of Transplant Surgeons and has previously served terms on the Kidney Pancreas Committee and Clinical Policy Board for LifeSource, as well as represented Regions 7 and 8 on the UNOS Pancreas Committee.



Brendan Keating received his D.Phil. (Ph.D.) in molecular genetics from the Department of Clinical Medicine at University of Oxford, UK, with lab-work completed in the Wellcome Trust. He completed a post-doctoral fellowship at the Institute of Translational Medicine and Therapeutics at UPenn, and was a visiting Scientist at the Wellcome Trust Sanger Institute, Cambridge, UK. Dr. Keating designed and developed genomic tools for cardiovascular related studies which have been used in over 200,000 DNA samples across 60 studies including the Framingham Heart Studies, and which have resulted in over a hundred genetic discoveries

in various metabolic and CVD-related traits such as myocardial infarction, dyslipidemia, adiposity, Type-2 Diabetes and Blood Pressure.

Dr. Keating joined the Faculty at The University of Pennsylvania in 2012, and moved his primary appointment to the Division of Transplantation in the Departments of Surgery in 2015. His major research interests focus on the analyses of miRNA, mRNA and polymorphisms of donor and recipient genomes in heart, liver, lung and kidney transplantation, with the aim of delivering individualized treatment of immunosuppression therapies post-transplant, and prediction of genetic signals that may underpin graft rejection and complications of rejection such as new onset of diabetes after transplantation (NODAT).

Dr. Keating is Principal Investigator of genome-wide association studies (GWAS) for solid-organ transplant studies within the Children's Hospital of Philadelphia, and instigated the formation of an international genomics consortium (iGeneTRaIN) for large-scale genomic studies using > 50,000 samples with existing GWAS data from a number of international transplant studies. Dr. Keating leads a number of NIH studies in solid-organ transplant multi-omics studies. Dr. Keating has led or co-authored over 140 publications and has given over 100 presentations in 25 countries including numerous national and international conferences.



Matthew Levine, MD, PhD attended Brown University, followed by a combined MD/PhD at Yale. He completed his PhD in immunobiology in the laboratory of Charles Janeway Jr., with work focusing on the discovery of positive selection events in the peripheral development of B cells. He then went on to complete general surgery residency at the Massachusetts General Hospital and a fellowship in abdominal organ transplantation at the University of California, San Francisco. He joined the faculty at the University of Pennsylvania in 2009 in the Division of Transplantation. Dr. Levine is Surgical Director of the Transplant Center at Children's Hospital of Philadelphia. He is clinically active in liver and kidney transplantation in adults and children, pancreas transplantation, and laparoscopic kidney donation

Dr. Levine's basic science research is focused on defining the role that histone deacetylases (HDACs) and heat shock proteins (hsps) play in tolerance of renal ischemia-reperfusion, work that is now funded by the NIH. This work has demonstrated significant renal function protection via HDAC inhibition by drug and by gene knockout. Additional directions of this work are defining the role that HDACs play in liver ischemia reperfusion injury and acetaminophen toxicity. Additional work is investigating the role of gender and hormone milieu on the response to renal ischemic injury with initiation of the Perioperative Estrogen in Renal Transplantation (PERT) clinical trial as an offshoot of that basic science effort. Dr. Levine has additional collaborative basic science studies investigating the role of costimulation blockade and cytokine pathway manipulation in rejection or tolerance of limb transplantation in murine models, work that has been funded by the Department of Defense in collaboration with Drs. Wayne Hancock and Scott Levin. He is active in clinical research as well, with projects pertaining to liver transplantation for hepatocellular carcinoma and efficacy and utility of renal transplantation in certain clinical scenarios, particularly pediatric transplantation. He was named a "Rising Star in

Transplantation” by the ASTS in 2018. He is a member of the American Society of Transplant Surgeons, Association for Academic Surgery and the Society of University Surgeons, is a section editor for the *American Journal of Transplantation*, and an associate editor of *Liver Transplantation*.



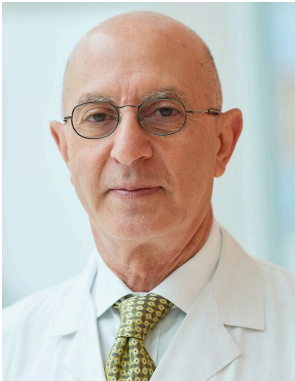
Ali Naji, MD, PhD completed his clinical residency and fellowship training in general, vascular and transplantation surgery at the Hospital of the University of Pennsylvania in Philadelphia, where he also obtained his PhD in Immunology. He joined the faculty at Penn in 1981, and is currently the J. William White Professor of Surgery. He is the Director of the Penn Islet Transplantation Program, and Associate Director of the Institute for Diabetes, Obesity and Metabolism at the University of Pennsylvania School of Medicine.

Dr. Naji has had continuous NIH funding during his faculty tenure at Penn whose basic research efforts have focused on the immunobiology of transplantation and immune pathogenesis of autoimmune diabetes. His investigations were the first to demonstrate the critical role of recurrent anti-beta cell autoimmunity as a basis for the failure of islet transplantation for treatment of Type 1 diabetes mellitus (T1D). Most recently, his group's efforts have focused on the role of B lymphocytes in the pathogenesis of T1D and organ transplant rejection demonstrating the requisite role of B lymphocytes as antigen presenting cells in the pathogenesis of islet inflammation and immunologic rejection. Translation of his basic research in islet transplantation studies have demonstrated the efficacy of B lymphocyte targeting for the induction of islet allograft tolerance in diabetic non-human primates. Dr. Naji and his group are investigating the clinical efficacy of B lymphocyte directed immunotherapy as part of the cooperative NIH sponsored islet transplantation consortium. He has received numerous awards for his work in diabetes, and has served as chair of the Medical Science Advisory Board of the Juvenile Diabetes Research Foundation

Dr. Naji has published over 200 peer-reviewed manuscripts, and served on numerous NIH study sections including Surgery/Anesthesia/ Trauma, Immunological Sciences and Transplantation/ Tolerance/Tumor Immunology. He is an associate editor for the journals *Transplantation*, *Diabetes* and *Transplantation Immunology*.



Robert R. Redfield III, MD grew up in Maryland and graduated magna cum laude from the University of Maryland School of Medicine. He completed his general surgery residency at the University of Pennsylvania and completed his post-doctoral research fellowship in transplant immunobiology in Dr. Ali Najj's lab. He completed his transplant fellowship training at the University of Wisconsin where he stayed on faculty prior to joining the Penn Transplant Institute as the Surgical Director of the Living Donor Kidney Program. Clinically his focus is on kidney and pancreas transplantation, minimally invasive living donor nephrectomy and renal autotransplantation. He is an active investigator and has received federal, societal and industry funding to support his basic, translational and clinical research studies that aim to enhance access to transplantation and improve allograft survival.



Abraham Shaked, MD, PhD is the Eldridge L. Eliason professor of Surgery, and the Executive Director of the Penn Transplant Institute at the University of Pennsylvania. He completed his residency at Mount Sinai in New York, and continued his clinical and scientific work at UCLA in Los Angeles. Dr. Shaked was recruited to direct the liver transplant program at the Hospital of the University of Pennsylvania (HUP) and the Children Hospital of Philadelphia (CHOP) in 1995. He is the past Chief of the Transplant Division, and currently the Director of the Penn Transplant Institute (PTI); a large center that provides the infrastructure for all thoracic, abdominal, and VCA clinical transplantation, performing over 500 solid organ transplants per year. Dr. Shaked is a past president of the American Society of Transplant Surgeons.

Dr. Shaked research interests are focused on investigating donor/recipient genetic interactions, and exploring omics biomarkers, in the setting of alloimmune activation, diagnosis of rejection, management of immunosuppression, and the long term well-being of the recipient. We have established extensive biobank, storing donor and recipient specimens, that is linked to an electronic clinical database. Assayed and clinical data are shared with local and national investigators, resulting in productive scientific studies that contributing to better understanding of transplantation immunology, and improving patient management.



Dr. Fred Vyas received his MBBS and post graduate training in General Surgery at Medical College Baroda, Vadodara, India. After completing his training, he joined Christian Medical College (CMC) in Vellore, India as a faculty in the department of General Surgery before transitioning to HPB Surgery. He completed his fellowship in Transplant Surgery at the Hospital of University of Pennsylvania and an additional pediatric and multi-visceral transplant at fellowship at Children's Hospital of Pittsburgh.

Owing to service obligations with government of India and CMC Vellore, on completion of fellowship, Dr. Vyas returned back to CMC Vellore in Department of HPB Surgery and Liver Transplantation and assumed leadership of the department in December 2018, where he was responsible for expanding the liver transplant program by establishing the living donor and pediatric transplant programs, and was able to position the Department of HPB Surgery and Liver Transplantation as a Center of Excellence in India.

His areas of interest include liver transplantation, living donor liver transplants and pediatric transplantation as well as liver surgery and operations for hilar cholangiocarcinoma. He has authored or co-authored over 38 publications.