

Clinical Service Portfolio

Clinically, I am known nationally and internationally as a kidney-pancreas transplant surgeon with unique areas of expertise in advance laparoscopy (living donor nephrectomy), incompatible kidney transplantation, transplantation of HIV-infected patients, and transplant-related outcomes and quality. I spend approximately 50% of my effort seeing patients and operating (see case volume and work RVU production), and in so doing, have expanded the clinical services offered at UAB in three distinct areas:

(1) Incompatible Kidney Transplant Program (Surgical Director): With my specialized knowledge and publication track record in incompatible kidney transplantation, I have been given charge of the Incompatible Kidney Transplant Program (InKTP). The InKTP program at UAB now supports almost 50% of the living donor kidney transplant program, and employs one full-time nurse practitioner and one full-time registered nurse. UAB is now home to the Southeast's most comprehensive InKTP program, offering kidney paired donation as well as desensitization, and under my leadership, we have:

- Built collaborations with the UAB blood bank (established in-house blood group antibody titers and increased access to inpatient and outpatient plasma exchange)
- Built collaborations with the UAB HLA laboratory (established desensitization protocols)
- Performed the first blood group incompatible kidney transplant at UAB
- Performed the first 3-way paired exchange at UAB
- Performed first combined KPD-desensitization transplant at UAB
- Established the nation's largest single center living donor kidney chain
- Established a strong referral practice for highly sensitized patients
- Lead center in industry sponsored trials (ClinicalTrials.gov - NCT01399593; NCT01178216)

These accomplishments have brought local, regional, and national attention, and have been chronicled by news outlets such as ABC News Nightline and National Public Radio.

Evidence of Regional, National and International Reputation:

- Birmingham Business Journal's Top 40 Under 40 2015 (peer nominated); Al.com's Women Who Shape the State 2015 (patient nominated); News coverage (see supplement section)
- Invited Lectures
 - Local – 6 lectures (UAB Nephrology Grand Rounds, UAB Department of Surgery Grand Rounds, Alabama Kidney Foundation, Alabama Organ Center Seminar Series, Children's Hospital of Alabama Grand Rounds)
 - National – 9 lectures (National Kidney Foundation, UNOS Region 6, University of Chicago, UNC Chapel Hill, Medical University of South Carolina, University of Pennsylvania, University of Florida, Emory University, Oregon Health Sciences)
 - Societal – 2 lectures (American Society of Transplant Surgeons)
 - International – 1 lecture (British Transplantation Society)
- Moderator/Panelist (8) – American Transplant Congress, World Transplant Congress, American Society of Transplant Surgeons Winter Symposium
- National Committees
 - American Society of Transplant Surgeons, Providing Better Access to Organs Task Force
 - American Transplant Congress, Abstract Review Committee (Sensitized Patient), Chair
 - American Society of Transplantation – Kidney/Pancreas Committee

(2) HIV Kidney Transplant Program (Surgical Director): To date, I have written more original research articles on transplantation of HIV-infected patients than any other investigator in the US. In response to this, I was asked to take charge of the HIV kidney transplant program. Under my leadership, we have:

- Established ongoing collaborations with the UAB 1917 (HIV) Clinic
- Established protocols for waitlisting and peri/post-transplant patient management

- Lead center in NIH-funded multi-center trials (U01 AI118594; R34 AI23023)
- Performed the first kidney transplant in an HIV-infected end-stage renal disease (ESRD) patient in the state of Alabama
- Evaluated and listed more than 50 HIV-infected ESRD patients, making UAB home to the largest number of HIV-infected transplant candidates in the US
- Established a research protocol for HIV-to-HIV transplantation, affording UAB HIV+ waitlist candidates increased access to kidney transplantation through implementation of the HOPE Act

Development of an HIV kidney transplant program is significant, as the HIV-epidemic has shifted from urban, coastal cities to the Deep South. The largest rate of growth of new HIV-cases is among heterosexual African American women in the Deep South, and as a result of improvements in antiviral therapies, HIV-infected patients are living longer and developing more chronic diseases. In fact, HIV-associated nephropathy is now the third leading cause of ESRD among African Americans. UAB's time is now, and through establishment of this program, I have poised UAB to make significant and seminal contributions to the care of HIV-infected transplant recipients.

Evidence of Regional, National and International Reputation:

- American Transplant Congress 2013 Young Investigator Award; American Society of Transplant Surgeons Winter Symposiums (2013 and 2014) Junior Investigator Award
- Invited Lectures
 - Local – 5 lectures (UAB Nephrology Grand Rounds, UAB Department of Surgery Grand Rounds, UAB Infectious Diseases Grand Rounds, UAB Center for Outcomes & Effectiveness Research, UAB CFAR))
 - National – 2 lectures (Pacific Northwest Tissue Bank, UNC Chapel Hill)
 - Societal – 1 lectures (American Transplant Congress)
- National Committees
 - American Society of Transplant Surgeons, Providing Better Access to Organs Task Force
 - American Society of Transplantation – Kidney/Pancreas Committee

(3) UAB Transplant Analytics, Informatics & Quality (TAIQ) (Director): My background includes a Master of Public Health degree with an emphasis in biostatistics and epidemiology. I have used this training to develop an academic focus that overlaps with my clinical pursuits, which involves complex statistical analyses and modeling of transplant outcomes. Given these strengths, I was named Director of the New Transplant Institute's TAIQ group. In this role, I lead 12 full-time staff and am responsible for:

- Data acquisition, integrity, and analyses for all solid organ transplant programs within the UAB Health System.
- Reporting of outcomes to Centers for Medicare and Medicaid Services, other payers, and University Hospital to ensure UABs regulatory compliance
- Development and maintenance of quality assessment and program improvement projects designed to improve the efficiency and quality of care our patients receive
- Represent the Transplant Institute on the University Hospital and Safety and Mortality Review Committees

Through my leadership, we have begun to automate data acquisition, established routine procedures for ensuring data integrity, and developed rolling survival reports as well as patient specific report projections. As a result, providers and institutional officials now have access to real-time data and outcomes ensuring UAB's solid organ transplant programs maintain the highest quality care.