

Kristian L. Brown, MD, PhD

EDUCATION AND TRAINING

Transplant/ General/Vascular
Access Surgeon
7/2015- present

Balboa Nephrology Medical Group/Sharp Memorial Hospital, San Diego CA

Abdominal Transplant/Hepatobiliary
Faculty Fellow Surgeon
7/2013- 7/2015

University of Southern California, Keck Medical Center, Children's Hospital,
Los Angeles

General Surgery Resident Physician
7/2005-6/2013

Department of General Surgery, Detroit Medical Center/Wayne
State University School of Medicine

Post Graduate Education (PhD)
8/2007- 3/2010

Biomedical Engineering Wayne State University, College of Engineering,
Smart Sensors and Integrated Microsystems Laboratory- Dissertation
Research: Raman Spectroscopic Modeling of T lymphocyte Activation
and Acute Renal Allograft Rejection Detection: Principle Investigators:
Drs. Greg Auner PhD, Scott Gruber MD, PhD, MBA
Graduation with Distinction/Honors

Graduate Education (MD)
8/2000- 6/2005

Doctorate of Medicine, University of California, San Diego School of
Medicine
2005: Thomas E. Carew Cardiovascular Research
Fellowship

Undergraduate Education (BS)
8/1996- 5/2000

Bachelors of Science- Cell and Molecular Biology/ Chemistry
San Diego State University
Minor: African Literary History
MARC Scholar
Howard Hughes Research Fellow
5/1998: Argonne National Laboratory (Argonne, IL) Research Fellow-
Engineered Functional Co-expression of CD4+/CD8+ Mature T
lymphocytes- PI: C. Watson, PhD
3/1999-1/2000: Salk Institute for Biological Science (San Diego, CA)
Research Fellow- Chemo-attractant Directed Development by
Netrins and The Substitutive Role of LH16-alpha In Hind Brain
Compensation- PI: K. Yee, PhD

PROFESSIONAL APPOINTMENT

Adjunct Assistant Professor of Biomedical Engineering, Smart Sensors
and Integrated Microsystems Laboratory, College of Engineering, Wayne
State University 5/2010- present

Advisory Committee Member, MARC Student Training for Academic
Research Program, Morehouse College/Atlanta University Center.
4/2010- present

MEDICAL LICENSURE

Michigan- 4301086239 – Current
California- A124291 – Current

PROFESSIONAL SOCIETIES

American Society of Transplant Surgeons
American Medical Association
Michigan State Medical Society
Wayne County Medical Society
American College of Surgeons- Resident member
National Medical Association
Biomedical Engineering Society
National League of Chemical Engineers
Golden Key Academic Engineering Honor Society
Society of Black Academic Surgeons- Associate member

HONORS AND AWARDS

San Diego State University (SDSU) 2013 Distinguished Alumni Award Recipient. The SDSU "Monty Award" first awarded in 1971 recognizes those who have made significant contributions to the university, the San Diego community or California, nationally or internationally. La Jolla, California. April 2013

Diverse Magazine. Named one of the 2012 National Top 12 Emerging Scholars under 40. January 5th 2012 Edition.

Southeastern Michigan Center of Medical Education 32nd Annual Research Forum Oral presentation. Second place winner. Raman Spectroscopic Evaluation of Activated T-lymphocytes: the new biomarker for acute renal allograft rejection. Meadow Brook Hall, Rochester Michigan. May 2010.

Sinai-Grace Hospital Research Forum. Best Oral Basic Science Presentation entitled: The development of Acute Rejection Biomarkers. April 2010.

Wayne State University, College of Engineering Inaugural Ralph H. Kummler Award for Distinguished Achievement in Graduate Student Research recipient. April 2010.

I-Surgitech Innovations in Medicine Award for best research presentation entitled: Noninvasive Detection of Acute Renal Allograft Rejection: Where we began, where we are, and where we will go. October 2009.

Michigan Chapter of the American College of Surgeons, Gift or Life Award for best research presentation in the area of transplantation entitled: Raman spectroscopic differentiation of activated versus non-activated T lymphocytes: an in vitro study of an acute allograft rejection model. May 2009.

Golden Key Academic Honor Society. College of Engineering, Department of Biomedical Engineering (GPA 3.89). January 2009.

Wayne State Alumni Association, David Fromm Research Symposium, third place Research Award for presentation of: Raman spectroscopic differentiation of activated versus non-activated T lymphocytes: an in vitro study of an acute allograft rejection model. October 2008.

Wayne State Alumni Association, David Fromm Research Symposium, First place prize for best research presentation entitled: Clinical outcomes for hepatitis C positive renal allograft recipients. October 2007.

ORAL AND POSTER PRESENTATIONS

1. The Role of Endoscopic Sphincterotomy for the Treatment of Sphincter of Oddi Stenosis and Biliary Stones. Poster presented at the American College of Surgeons Clinical Congress, October 24th, 2011, San Francisco, CA.
2. Noninvasive Detection of Acute Renal Allograft Rejection Using Raman Spectroscopy: The New Frontier. Presented at the 96th Annual American College of Surgeons Clinical Congress. Podium Presentation at the Transplant Scientific Papers session. October 2010. Washington, DC.

3. Raman Spectroscopic Evaluation of Activated T-lymphocytes: the new biomarker for acute renal allograft rejection. Presented at the Michigan Center of Medical Education 32nd Annual Research Forum Oral presentation. May 2010. Meadow Brook Hall, Rochester, Michigan.
4. Noninvasive Detection of Acute Renal Allograft Rejection: Where we began, where we are, and where we will go. Presented at the I-Surgitech Innovations in Medicine Conference. October 2009. Wayne States School of Medicine. Detroit, Michigan.
5. Differentiation of Alloreactive versus CD3/CD28 stimulated T- lymphocytes Using Raman Spectroscopy: A greater specificity for noninvasive acute renal allograft rejection detection. Poster presented at the Postdoctoral Scholars Research Day. September 2009. Wayne State School of Medicine, Detroit, Michigan
6. Raman spectroscopic differentiation of activated versus non-activated T lymphocytes: an in vitro study of an acute allograft rejection model. Presented at the Michigan Chapter of the American College of Surgeons Collar Day. May 2009. Belleville, Michigan
7. Equivalent Outcomes with Primary and Re-transplantation in African-American Deceased-Donor Renal Allograft Recipients. Presented at the Central Surgical Association meeting. May 2009. Sarasota, Florida
8. Massive Fibromyxoid Sarcoma Masquerading As Tumoral Calcinosis Recurrence: An uncommon copresentation of two uncommon conditions. Oral presentation given at the Otolaryngology Section of the National Medical Association meeting. July 2008. Atlanta, Georgia
9. Outcome Predictors in African-American Deceased-Donor Renal Allograft Recipients Undergoing Contemporary Immunosuppression. Poster presented at the American Transplant Congress. May 31, 2008. Toronto, Canada
10. Outcome Predictors in African-American Deceased-Donor Renal Allograft Recipients Undergoing Contemporary Immunosuppression. Presented at the Michigan Chapter of the American College of Surgery. May 2008. Frankenmuth, Michigan
11. Preliminary Experience with Renal Transplantation in HIV+ Recipients: Low Acute Rejection and Infection Rates. Podium presentation given at the Academy of Surgery. December 2007. Detroit, Michigan
12. Clinical outcomes for hepatitis C positive renal allograft recipients. Presented at the Wayne State Alumni Association, David Fromm Research Symposium. October 2007. Detroit, Michigan
13. Preliminary Experience with Renal Transplantation in HIV+ Recipients: Low Acute Rejection and Infection Rates. Oral presentation given at the Association for Academic Surgeons/Society of University Surgeons meeting. February 2008. Huntington Beach, California
14. Intermediate-Term outcomes of hepatitis C positive Versus Hepatitis C negative deceased- donor renal allograft recipients. Presented at the Detroit Surgical Association. October 2007. Detroit, Michigan
15. Intermediate-Term outcomes of hepatitis C positive Versus Hepatitis C negative deceased- donor renal allograft recipients. Presented at the 50th Annual Midwest Surgical Conference. August 2007. Farmington, Pennsylvania

INVITED LECTURES

1. The Impact of Biomedical Engineering on the Future of Abdominal Transplant Surgery. Invited Lecturer, Morehouse College MBRS/RISE. MARC/ U*STAR Program. April 2013. Atlanta, Georgia
2. Surgically Implanted Biomaterials. Invited Lecturer, BME 3213- Biomaterials for Engineers Course. Lawrence Technological University. November 2011. Southfield, Michigan
3. Preliminary Experience with Renal Transplantation in HIV+ Recipients: Low Acute Rejection and Infection Rates. Invited Lecturer, Transplant Division Grand Rounds. St. John Hospital. April 2008. Detroit, Michigan

PUBLICATIONS

1. Brown KL, Palyvoda OY, Thakur JS, Gruber SA, Auner GW. Biomolecular Modeling of T Lymphocyte Activation Using Raman Spectroscopy. 2014. *In press* for the Journal of Immunologic methods.
2. Sugawa C, Brown KL, Matsubara T, Bachusz R, Ono H, Chino A, Yamasaki T, Lucas CE. The role of endoscopic biliary sphincterotomy for the treatment of type 1 biliary dysfunction (papillary stenosis) with or without biliary stones. *Am J Surg.* 2014 Jan;207(1):65-9. doi: 10.1016/j.amjsurg.2013.04.007. Epub 2013 Sep 24.
3. Brown KL, Doshi MD, Singh A, Mehta K, Morawski K, Cincotta E, West MS, Gruber SA. Does donor race still make a difference in deceased-donor African-American renal allograft recipients? *Am J Surg.* 2010 Mar;199(3):305-9; discussion 309.
4. Brown KL, Bacal D. Large Adrenocortical Tumor: case report and literature review. *J Natl Med Assoc.* 2009 Dec;101(12):1287-90.
5. Gruber SA, Brown KL, El-Amm JM, Singh A, Mehta K, Morawski K, Cincotta E, Nehlsen-Cannarella S, Losanoff JE, West MS, Doshi, MD. Equivalent outcomes with primary and retransplantation in African-American deceased-donor renal allograft recipients. *Surgery.* Sept 2009;146(4):646-52; discussion 652-3.
6. Brown KL, Palyvoda OY, Thakur JS, Nehlsen-Cannarella SL, Fagoaga OR, Gruber SA, Auner GW. Differentiation of Alloreactive versus CD3/CD28 stimulated T- lymphocytes Using Raman Spectroscopy: A greater specificity for noninvasive acute renal allograft rejection detection. *Cytometry A.* 75: 917-23, 2009.
7. Brown KL, El-Amm JM, Doshi MD, Singh A, Cincotta E, Morawski K, Losanoff JE, West MS, Gruber SA. Outcome predictors in African-American deceased-donor renal allograft recipients. *Clin Transplant.* 2009 Aug;23(4):454-61.
8. Brown KL, Palyvoda OY, Thakur JS, Nehlsen-Cannarella SL, Fagoaga OR, Gruber SA, Auner GW. Raman spectroscopic differentiation of activated versus non-activated T lymphocytes: an in vitro study of an acute allograft rejection model. *J Immunol Methods.* 2009 Jan 1;340(1):48-54.
9. Gruber SA, Doshi MD, Cincotta E, Brown KL, Singh A, Morawski K, Alangaden G, Chandrasekar P, Losanoff JE, West MS, El-Amm JM. Preliminary experience with renal transplantation in HIV+ recipients: low acute rejection and infection rates. *Transplantation.* 2008 Jul;86(2):269-74.
10. Conway WC, Brown KL, Sugawa C, Lucas CE. Spontaneous gastric decompression of peripancreatic collection. *Am J Surg.* 2008 Oct;196(4):e29-30. Epub 2008 Jun 2.
11. Brown KL, El-Amm JM, Doshi MD, Singh A, Morawski K, Cincotta E, Siddiqui F, Losanoff JE, West MS, Gruber SA. Intermediate-term outcomes of hepatitis C-positive compared with hepatitis C-negative deceased-donor renal allograft recipients. *Am J Surg.* 2008 Mar;195(3):298-302; discussion 302-3.
12. Brown KL, Wilson RF, White MT. Carbon monoxide-induced status epilepticus in an adult. *J Burn Care Res.* 2007 May-Jun;28(3):533-6.
13. García RA, Brown KL, Pavelec RS, Go KV, Covell JW, Villarreal FJ. Abnormal cardiac wall motion and early matrix metalloproteinase activity. *Am J Physiol Heart Circ Physiol.* 2005 Mar;288(3):H1080-7.

MANUSCRIPTS IN PREPARATION

14. Brown KL, et al. Comparison of current noninvasive biomarkers for acute renal allograft rejection: a meta analysis.
15. Palyvoda OY and Brown KL. Molecular Analysis of Retinoblastoma Cell Population Using Raman Spectroscopy.

16. Brown KL, et al. Current Infectious Pathogen Patterns in Solid Organ Transplant Recipients: "Same actors, different stage? Analysis from a high volume transplant center.