

**CURRICULUM VITAE****I. PERSONAL INFORMATION:**

**Name:** Fadi G. Lakkis, MD

**Business Address:** Stanford University  
Division of Nephrology  
Department of Medicine  
Palo Alto, CA

**e-mail:** lakkisf@stanford.edu

**II. EDUCATIONAL BACKGROUND:****UNDERGRADUATE:**

10/1978 – 6/1981	American University of Beirut Beirut, Lebanon	BS with distinction (Biology & Chemistry)
------------------	--	---

**GRADUATE:**

9/1980 – 6/1985	American University of Beirut Beirut, Lebanon	MD
-----------------	--	----

**POSTGRADUATE:**

7/1985 – 6/1986	Research Fellow Beth Israel Hospital Harvard Medical School Boston, MA	Internal Medicine (Transplant Immunology) Mentor: Terry Strom, MD
7/1986 – 6/1989	Intern & Resident Wayne State University School of Medicine Detroit, MI	Internal Medicine Mentor: Michael Geheb, MD
7/1989 – 6/1991	Research Fellow Beth Israel Hospital Harvard Medical School Boston, MA	Transplant Immunology & Biomolecular Med. Mentors: Terry Strom, MD/John Murphy, PhD
7/1991 – 6/1992	Clinical Fellow Beth Israel Hospital Harvard Medical School Boston, MA	Nephrology Mentor: Franklin Epstein, M.D

III. PROFESSIONAL APPOINTMENTS:

7/1992 – 6/1998	Emory University School of Medicine Department of Medicine Division of Nephrology Atlanta, GA <u>Hospital Appointment:</u> VAMC, Emory University Hospital, & The Emory Clinic	Assistant Professor of Medicine
7/1998 – 8/2001	Emory University School of Medicine Department of Medicine Division of Nephrology Atlanta, GA <u>Hospital Appointment:</u> VAMC, Emory University Hospital, & The Emory Clinic	Associate Professor of Medicine (with tenure)
9/2001 – 7/2005	Yale University School of Medicine Department of Medicine Section of Nephrology & Department of Immunobiology New Haven, CT <u>Hospital Appointment:</u> Yale New Haven Hospital	Associate Professor of Medicine (Nephrology) & Immunobiology (with tenure)
9/2001 – 7/2005	Yale University Yale New Haven Hospital	Director, Transplant Medicine
8/2005 – 8/2006	Yale University School of Medicine	Visiting Professor
8/2005 – 6/2025	University of Pittsburgh School of Medicine Pittsburgh, PA <u>Hospital Appointment:</u> University of Pittsburgh Medical Center (Transplant Nephrology)	Professor of Surgery, Immunology & Medicine (with tenure)
8/2005 – 6/2025	Starzl Transplantation Institute University of Pittsburgh University of Pittsburgh Medical Center Pittsburgh, PA	Scientific Director
7/2007 – 6/2025	University of Pittsburgh Pittsburgh, PA	Frank & Athena Sarris Chair in Transplantation Biology
7/2019 – 6/2025	University of Pittsburgh	Distinguished Professor of Surgery
9/2023 – 12/2023	Bakar ImmunoX Department of Laboratory Medicine University of California San Francisco	Visiting Professor (sabbatical)

San Francisco, CA

7/1/2025 – present Professor of Medicine (Nephrology)  
Stanford University,  
Palo Alto, CA  
Hospital Appointment: Stanford University Hospital (Transplant Nephrology) (pending)

**IV. HONORS and AWARDS:**

1985 Alpha-Omega-Alpha Honor Medical Society  
1990 The National Kidney Foundation and The American Society of Nephrology  
Prize for Excellence in Research  
1996 Young Investigator Award, The Transplantation Society  
1999 The Wyeth-Ayerst Young Investigator Award, American Society of  
Transplantation  
2002 Young Investigator Award, American Society of Nephrology  
2002 Elected member, American Society of Clinical Investigation (ASCI)  
2006 Andrew Lazarovitz Lecturer, Canadian Society of Transplantation  
2007 Frank & Athena Sarris Chair in Transplantation Biology, University of Pittsburgh  
2008 Elected member, Association of American Physicians (AAP)  
2009 Basic Science Established Investigator Award, American Society of Transplantation  
2009 Distinguished Professor Award, Asian Society of Transplantation  
2012 Paul S. Russell Lectureship in Transplantation, MGH, Harvard Medical School  
2013 Presidential Lecture, Transplantation Society of Australia and New Zealand  
2019 Mohanakumar Lectureship in Transplantation, Washington University, St. Louis, MO  
2019 Henry Shavelle Visiting Professor, Harbor-UCLA Medical Center, Los Angeles, CA  
2019 Distinguished Professor of Surgery, University of Pittsburgh  
2020 Charles G. Orosz Memorial Lecture, The Ohio State University, Columbus, OH  
2021 Kidney Gift of Life, Medical Achievement Award, National Kidney Foundation  
2024 Barbara T. Murphy Endowed Lectureship, American Society of Nephrology  
2025 American Society of Transplantation Mentoring Award

**V. BOARD CERTIFICATION:**

1989 Internal Medicine  
1992 Nephrology (re-certified 2025)

**V. SCHOLARLY PUBLICATIONS:****A. Peer-reviewed Journal Articles (Original Research):**

- Melton LB, **Lakkis F\***, Moscovitch-Lopatin M, William J, DeLoria D, Strom TB. Antibody valence and induced signal transduction: The role of antibody valence in anti-CD3-induced signal transduction in isolated normal T cells. *Clinical Immunology and Immunopathology* 50:171-183, 1989. *\*Acquired, analyzed and interpreted data. Participated in drafting of the manuscript.*
- Wen Z, Tao X, **Lakkis F\***, Kiyokawa T, Murphy JR. Diphtheria toxin-related alpha-melanocyte-stimulating hormone fusion toxin. *Journal of Biological Chemistry* 266:12289-12293, 1991. *\*Acquired, analyzed and interpreted data.*
- Lakkis F**, Steele A, Pacheco-Silva A, Rubin-Kelley V, Strom TB, Murphy JR. Interleukin-4 targeted

- cytotoxicity: Genetic construction and *in vivo* immunosuppressive activity of a diphtheria toxin-related murine interleukin-4 fusion protein. *European Journal of Immunology* 21:2253-2258, 1991.
4. **Lakkis FG**, Landgraf BE, Wen Z, Strom TB, Murphy JR. Phe<sup>496</sup> and Leu<sup>497</sup> are essential for receptor binding and cytotoxic action of the murine interleukin-4 fusion toxin DAB389-mIL-4. *Protein Engineering* 5:241-246, 1992.
  5. **Lakkis FG**, Cruet EN. Cloning of rat interleukin-13 (IL-13) cDNA and analysis of IL-13 gene expression in experimental glomerulonephritis. *Biochemical and Biophysical Research Communications* 197:612-618, 1993.
  6. Katoh T, **Lakkis FG**, Makita N, Badr KF. Co-regulated expression of glomerular 12/15 lipoxygenase and interleukin-4 mRNAs in rat nephrotoxic nephritis. *Kidney International* 46:341-349, 1994. *\*Analyzed and interpreted data. Participated in drafting of the manuscript.*
  7. Nassar GN, Morrow JD, Roberts J, **Lakkis FG\***, Badr KF. Induction of 15-lipoxygenase by interleukin-13 in human blood monocytes. *Journal of Biological Chemistry* 269:27631-27634, 1994. *\*Trained and supervised first author. Participated in drafting of the manuscript.*
  8. **Lakkis FG**, Cruet EN, Fukunaga M, Munger KA. Evidence for reciprocal regulation of pro- and anti-inflammatory lymphokines in rat nephrotoxic serum (NTS) nephritis. *Advances in Prostaglandin, Thromboxane, and Leukotriene Research* 23:307-310, 1995.
  9. **Lakkis FG**, Baddoura FK, Cruet EN, Parekh KR, Fukunaga M, Munger KA. Anti-inflammatory lymphokine mRNA expression in antibody-induced glomerulonephritis. *Kidney International* 49:117-126, 1996.
  10. Saleem S, Konieczny BT, Lowry RP, Baddoura FK, **Lakkis FG**. Acute rejection of vascularized heart allografts in the absence of IFN $\gamma$ . *Transplantation* 62:1908-1911, 1996.
  11. Coelho SN, Saleem S, Konieczny BT, Parekh KR, Baddoura FK, **Lakkis FG**. Immunologic determinants of susceptibility to experimental glomerulonephritis: The role of cellular immunity. *Kidney International* 1997;51:646-652.
  12. **Lakkis FG**, Konieczny BT, Saleem S, Baddoura FK, Linsely PS, Alexander DZ, Lowry RP, Pearson TC, Larsen CP. Blocking the CD28-B7 T cell costimulation pathway induces long-term cardiac allograft acceptance in the absence of interleukin-4. *Journal of Immunology* 1997;158:2443-2448.
  13. Saleem S, Dai Z, Coelho SN, Konieczny BT, Assmann KJM, Baddoura FK, **Lakkis FG**. Interleukin-4 is an endogenous suppressor of neutrophil influx and subsequent pathology in acute antibody-mediated inflammation. *Journal of Immunology* 160:979-984, 1998.
  14. Roos A, Schilder-Tol EJM, Chand MA, Claessen N, **Lakkis FG**, Pascual DW, Weening JJ, Aten J. Differential regulation of expression of the MHC class II molecules RT1.B and RT1.D on rat B lymphocytes: effects of IL-4, IL-13 and IFN- $\gamma$ . *Immunology* 93:33-40, 1998. *\*Provided technical and material support.*
  15. Konieczny BT, Dai Z, Elwood ET, Saleem S, Linsley PS, Baddoura FK, Larsen CP, Pearson TC, **Lakkis FG**. Interferon- $\gamma$  is critical for long term allograft survival induced by blocking the CD28 and CD40L T cell costimulation pathways. *Journal of Immunology* 160:2059-2064, 1998.
  16. Dai Z, Konieczny BT, Baddoura FK, **Lakkis FG**. Impaired alloantigen-induced T cell apoptosis and failure to induce long term allograft survival in IL-2-deficient mice. *Journal of Immunology* 161:1659-1663, 1998.
  17. Ring GH, Saleem S, Dai Z, Hassan AT, Konieczny BT, Baddoura FK, **Lakkis FG**. Interferon- $\gamma$  (IFN $\gamma$ ) is necessary for initiating the acute rejection of major histocompatibility complex (MHC) class II-disparate skin allografts. *Transplantation* 67:1362-1365, 1999.
  18. Hassan AT, Dai Z, Konieczny BT, Ring GH, Baddoura FK, Abou-Dahab LH, El-Sayed AA, **Lakkis FG**. Regulation of alloantigen-mediated T cell proliferation by endogenous interferon- $\gamma$ : Implications for long-term allograft acceptance. *Transplantation* 68:124-129, 1999.
  19. Ring GH, Dai Z, Saleem S, Baddoura FK, **Lakkis FG**. Increased susceptibility to immunologically-mediated glomerulonephritis in IFN- $\gamma$ -deficient mice. *Journal of Immunology* 163:2243-2248, 1999.
  20. Dai Z, Arakelov A, Wagener M, Konieczny BT, **Lakkis FG**. The role of the common cytokine receptor  $\gamma$  chain ( $\gamma$ c) in regulating IL-2-dependent activation-induced CD8<sup>+</sup> T cell death. *Journal of Immunology*

- 163:3131-3137, 1999.
21. Van Den Berg JG, Aten J, Chand MA, Claessen N, Dijkink L, Wijdenes J, **Lakkis FG**, Weening JJ. Interleukin-4 and Interleukin-13 act on glomerular visceral epithelial cells. *Journal of the American Society of Nephrology* 11:413-422, 2000. \*Provided technical and material support.
  22. **Lakkis FG**, Arakelov A, Konieczny BT, Inoue Y. Immunologic ignorance of vascularized organ transplants in the absence of secondary lymphoid tissue. *Nature Medicine* 6:686-688, 2000.
  23. Wagener MS, Konieczny BT, Dai Z, Ring GH, **Lakkis FG**. Alloantigen-driven T cell death mediated by Fas ligand and tumor necrosis factor- $\alpha$  is not essential for the induction of allograft acceptance. *Transplantation* 69:2428-2432, 2000.
  24. Dai Z, Konieczny BT, **Lakkis FG**. The dual role of interleukin-2 in the generation and maintenance of CD8<sup>+</sup> memory T cells. *Journal of Immunology* 165:3031-3036, 2000.
  25. Inoue Y, Konieczny BT, Wagener ME, McKenzie ANJ, **Lakkis FG**. Failure to induce neonatal tolerance in mice that lack both IL-4 and IL-13 but not in those that lack IL-4 alone. *Journal of Immunology* 167:1125-1128, 2001.
  26. Akalin E, Hendrix RC, Polavarapu RG, Pearson TC, Neylan JF, Larsen CP, **Lakkis FG**. Gene expression analysis in human renal allograft biopsy samples using high-density oligoarray technology. *Transplantation* 72:948-953, 2001.
  27. Dai Z, **Lakkis FG**. Cutting Edge: Secondary lymphoid organs are essential for maintaining the CD4 but not CD8 naïve T cell pool. *Journal of Immunology* 167:6711-6715, 2001.
  28. Chalasani G, Dai Z, Konieczny BT, Baddoura FK, **Lakkis FG**. Recall and propagation of allospecific memory T cells independent of secondary lymphoid organs. *Proceedings of the National Academy of Sciences* (track II) 99:6175-6180, 2002.
  29. Bose A, Inoue Y, Kokko K, **Lakkis FG**. Cutting Edge: Perforin downregulates CD4 and CD8-mediated immune responses to a transplanted organ. *Journal of Immunology* 170:1611-1614, 2003.
  30. Goldstein DR, Tesar BM, Akira S, **Lakkis FG**. Critical role of the Toll-like receptor signal adaptor protein Myd88 in acute allograft rejection. *Journal of Clinical Investigation* 111:1571-1578, 2003.
  31. Dai Z, Li Q, Wang Y, Gao G, Diggs LS, Tellides G, **Lakkis FG**. CD4<sup>+</sup>CD25<sup>+</sup> regulatory T cells suppress allograft rejection mediated by memory CD8<sup>+</sup> T cells via a CD30-dependent mechanism. *Journal of Clinical Investigation* 113:310-317, 2004.
  32. Chalasani G, Li Q, Konieczny BT, Smith-Diggs L, Wrobel B, Dai Z, Perkins DL, Baddoura FK, **Lakkis FG**. The allograft defines the type of rejection (acute vs. chronic) in the face of an established effector immune response. *Journal of Immunology* 172:7813-7820, 2004.
  33. Li Q, Wang Y, Yi T, Chalasani G, Dai Z, Lorber MI, Tellides G, **Lakkis FG**. Technique for retransplanting heterotopic heart grafts in mice. *Microsurgery* 24:465-467, 2004.
  34. Tesar BM, Chalasani G, Smith-Diggs L, Baddoura FK, **Lakkis FG**, Goldstein DR. Direct antigen presentation by a xenograft induces immunity independently of secondary lymphoid organs. *Journal of Immunology* 173:4377-4386, 2004. \*Provided technical and material support.
  35. Baddoura FK, Nasr IW, Wrobel B, Li Q, Ruddle NH, **Lakkis FG**. Lymphoid neogenesis in murine cardiac allografts undergoing chronic rejection. *American Journal of Transplantation* 5:510-516, 2005.
  36. Dai Z, Nasr IW, Reel M, Deng S, Diggs L, Larsen CP, Rothstein DM, **Lakkis FG**. Impaired recall of CD8 memory T cells in immunologically-privileged tissue. *Journal of Immunology* 174:1159-1163, 2005.
  37. Yamada A, Salama AD, Sho M, Najafian N, Ito T, Forman J, Kewalramani R, Harada H, Clarkson MR, Mandelbrot DA, Sharpe AH, Oshima H, Yagita H, Chalasani G, **Lakkis FG**, Auchincloss H Jr., Sayegh MH. CD70 signaling is critical for CD28-independent CD8<sup>+</sup> T cell-mediated alloimmune responses *in vivo*. *Journal of Immunology* 174:1357-1364, 2005. \*Provided technical and material support.
  38. Nasr IW, Wang Y, Gao G, Deng S, Diggs L, Rothstein DM, Tellides G, **Lakkis FG**, and Dai Z. Testicular immune privilege promotes transplantation tolerance by altering the balance between memory and regulatory T cells. *Journal of Immunology* 174:6161-6168, 2005. \*Provided technical and material

support.

39. Obhrai JS, Oberbarnscheidt MH, Hand TW, Diggs L, Chalasani G, **Lakkis FG**. Effector T cell differentiation and memory T cell maintenance outside secondary lymphoid tissues. *Journal of Immunology* 176:4051-4058, 2006.
40. Poudyal M, Rosa S, Powell AE, Moreno M, Dellaporta SL, Buss LW, **Lakkis FG**. Embryonic chimerism does not induce tolerance in an invertebrate model organism. *Proceedings of the National Academy of Sciences* (track II) 104:4559-4564, 2007.
41. Kayler LK, **Lakkis FG**, Morgan C, Basu A, Blisard D, Tan HP, McCauley J, Wu C, Shapiro R, Randhawa PS. Acute cellular rejection with CD20-positive lymphoid clusters in kidney transplant patients following lymphocyte depletion. *American Journal of Transplantation* 7:949-954, 2007. *\*Critical revision of manuscript for important intellectual content.*
42. Nasr IW, Reel M, Oberbarnscheidt MH, Mounzer RH, Baddoura FK, Ruddle NH, **Lakkis FG**. Tertiary lymphoid tissues generate effector and memory T cells that lead to allograft rejection. *American Journal of Transplantation* 7:1071-1079, 2007.
43. Cuffy MC, Silverio AM, Qin L, Wang Y, Eid R, Brandacher G, **Lakkis FG**, Fuchs D, Pober JS, Tellides G. Induction of indoleamine 2,3-dioxygenase in vascular smooth muscle cells by interferon- $\gamma$  contributes to medial immunoprivilege. *Journal of Immunology* 179: 5246-5254, 2007. *\*Provided technical and material support.*
44. Powell AE, Nicotra ML, Moreno MA, **Lakkis FG**, Dellaporta SL, Buss LW. Differential effect of allorecognition loci on phenotype of *Hydractinia symbiolongicarpus* (Cnidaria:Hydrozoa). *Genetics* 177:2101-2107, 2007. *\*Critical revision of manuscript for important intellectual content.*
45. Obhrai JS, Oberbarnscheidt M, Zhang N, Mueller DL, Shlomchik WD, **Lakkis FG**, Shlomchik MJ, Kaplan DH. Langerhans cells are not required for efficient skin graft rejection. *Journal of Investigative Dermatology* 28:1950–1955, 2008. *\*Provided technical and material support. Supervised first author.*
46. Nicotra ML, Powell AE, Rosengarten RD, Moreno M, Grimwood J, **Lakkis FG**, Dellaporta SL, Buss LW. A hypervariable invertebrate allodeterminant. *Current Biology* 19:583-589, 2009. *\*Critical revision of manuscript for important intellectual content.*
47. Macedo C, Orkis EA, Popescu I, Elinoff BD, Zeevi A, Shapiro R, **Lakkis FG\***, Metes D. Contribution of naïve and memory T cell populations to the human alloimmune response. *American Journal of Transplantation* 9:2057-2066, 2009. *\*Co-senior author.*
48. Echeverri GJ, McGrath K, Bottino R, Hara H, Dons EM, van der Windt DJ, Ekser B, Casu A, Houser S, Ezzelarab M, Wagner R, Trucco M, **Lakkis FG**, Cooper DK. Endoscopic gastric submucosal transplantation of islets (ENDO-STI): technique and initial results in diabetic pigs. *American Journal of Transplantation*. 9:2485-2496, 2009. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
49. van der Windt DJ, Bottino R, Casu A, Campanile N, Smetanka C, He J, Murase N, Hara H, Ball S, Loveland BE, Ayares D, **Lakkis FG**, Cooper DK, Trucco M. Long-term controlled normoglycemia in diabetic non-human primates after transplantation with hCD46 transgenic porcine islets. *American Journal of Transplantation* 9:2716-2726, 2009. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
50. Zecher D, van Rooijen N, Rothstein DM, Shlomchik WD, **Lakkis FG**. An innate response to allogeneic nonself mediated by monocytes. *Journal of Immunology* 183:7810-7816, 2009.
51. Oberbarnscheidt MH, Obhrai JS, Williams AL, Rothstein DM, Shlomchik WD, Chalasani G, **Lakkis FG**. Type I interferons are not critical for skin allograft rejection or the generation of donor-specific CD8+ memory T cells. *American Journal of Transplantation* 10:162-167, 2010.
52. Zecher D, Oberbarnscheidt MH, Demetris AJ, Shlomchik WD, Rothstein DM, **Lakkis FG**. NK cells delay allograft rejection in lymphopenic hosts by downregulating the homeostatic proliferation of CD8+ T cells. *Journal of Immunology* 184:6649-6657, 2010.

53. van der Wint DJ, Semtanka C, Macedo C, He J, Lakomy R, Bottino R, Ekser B, Echeverri GJ, Metes D, Ijzermans JNM, Trucco M, Cooper DKC, **Lakkis FG**. Investigation of lymphocyte depletion and repopulation using alemtuzumab (Campath-1H) in cynomolgus monkeys. *American Journal of Transplantation* 10:773-783, 2010.
54. Rosa SF, Powell AE, Rosengarten RD, Nicotra ML, Moreno MA, Grimwood J, **Lakkis FG**, Dellaporta SL, Buss LW. Hydractinia allodeterminant *alr1* resides in an immunoglobulin superfamily-like gene complex. *Current Biology* 20:1122-1127, 2010. *\*Participated in conception and design. Supervised first author. Critical revision of manuscript for important intellectual content.*
55. Rosengarten RD, Moreno MA, **Lakkis FG**, Buss, LW, Dellaporta SL. Genetic diversity of the allodeterminant *alr2* in *Hydractinia symbiolongicarpus*. *Molecular Biology and Evolution* 28:933-947, 2011. *\*Critical revision of manuscript for important intellectual content.*
56. Li H, Matte-Martone C, Tan HS, Venkatesan S, McNiff J, Demetris AJ, Jain D, **Lakkis F**, Rothstein D, Shlomchik WD. Graft-versus-host disease is independent of innate signaling pathways triggered by pathogens in host hematopoietic cells. *Journal of Immunology* 186:230-241, 2011. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
57. Wang Y, Camirand G, Lin U, Froicu M, Deng S, Shlomchik WD, **Lakkis FG**, Rothstein DM. Regulatory T cells require mammalian target of rapamycin signaling to maintain both homeostasis and alloantigen-driven proliferation in lymphocyte-replete mice. *Journal of Immunology* 186:2809-2818, 2011. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
58. Oberbarnscheidt MH, Walch JM, Li Q, Williams AL, Walters JT, Hoffman RA, Demetris AJ, Gerard C, Camirand G, **Lakkis FG**. Memory T cells migrate to and reject vascularized cardiac allografts independent of the chemokine receptor CXCR3. *Transplantation* 91:827-832, 2011.
59. Zhang D, Zhang W, Ng TW, Wang U, Liu Q, Gorantla V, **Lakkis F**, Zheng XX. Adoptive cell therapy using antigen-specific CD4<sup>+</sup>CD8<sup>-</sup> T regulatory cells to prevent autoimmune diabetes and promote islet allograft survival in NOD mice. *Diabetologia* 54:2082-2092, 2011. *\*Provided technical and material support.*
60. Camirand G, Li Q, Demetris AJ, Watkins SC, Shlomchik WD, Rothstein DM, **Lakkis FG**. Multiphoton intravital microscopy of the transplanted mouse kidney. *American Journal of Transplantation* 11:2067-2074, 2011.
61. Powell AE, Moreno M, Gloria-Soria A, **Lakkis FG**, Dellaporta SL, Buss LW. Genetic background and allorecognition phenotype in *Hydractinia symbiolongicarpus*. *G3* 1:499-504, 2011. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
62. Ozaki KS, Yoshida J, Ueki S, Pettigrew GL, Ghonem N, Sico RM, Lee LY, Shapiro R, **Lakkis FG**, Pacheco-Silva A, Murase N. Carbon monoxide inhibits apoptosis during cold storage and protects kidney grafts donated after cardiac death. *Transplantation International* 25:107-117, 2012. *\*Critical revision of manuscript for important intellectual content.*
63. T-lymphocyte homeostasis and function in infant baboons: implications for transplantation. van der Windt DJ, Dons EM, Montoya CL, Ezzelarab M, Long C, Wolf RF, Ijzermans JN, **Lakkis FG**, Cooper DK. *Transplantation International* 25:218-228, 2012. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
64. Zecher D, Li Q, Williams AL, Walters JT, Baddoura FK, Chalasani G, Rothstein DM, Shlomchik WD, Demetris AJ, **Lakkis FG**. Innate immunity alone is not sufficient for chronic rejection but predisposes healed allografts to T cell-mediated pathology. *Transplantation Immunology* 26:113-118, . 2012.
65. Macedo C, Walters JT, Orkis EA, Isse K, Elinoff BD, Fedorek SP, McMichael JM, Chalasani G, Randhawa P, Demetris AJ, Zeevi A, Tan H, Shapiro R, Landsittel D, **Lakkis FG\***, Metes DM. Long-term effects of alemtuzumab on regulatory and memory T-cell subsets in kidney transplantation. *Transplantation* 93:813-821, 2012. *\*Co-senior author.*
66. Li H, Demetris AJ, McNiff J, Matte-Martone C, Tan HS, Rothstein DM, **Lakkis FG**, Shlomchik WD. Profound depletion of host conventional dendritic cells, plasmacytoid dendritic cells, and B cells does not

- prevent graft-versus-host disease induction. *Journal of Immunology* 188:3804-3811, 2012. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
67. van der Windt DJ, Marigliano M, He J, Votyakova TV, Echeverri GJ, Ekser B, Ayares D, **Lakkis FG**, Cooper DK, Trucco M, Bottino R. Early islet damage after direct exposure of pig islets to blood: has humoral immunity been underestimated? *Cell Transplantation* 21:1791-1802, 2012. *\*Critical revision of manuscript for important intellectual content.*
  68. Gloria-Soria A, Moreno MA, Yund PO, **Lakkis FG**, Dellaporta SL, Buss LW. Evolutionary genetics of the hydroid allodeterminants *alr2*. *Molecular Biology and Evolution* 29:3921-3932, 2012. *\*Critical revision of manuscript for important intellectual content.*
  69. Buss LW, Anderson C, Westerman E, Kritzerberger C, Poudyal M, Moreno MA, **Lakkis FG**. Allorecognition triggers autophagy and subsequent necrosis in the cnidarian *Hydractinia symbiolongicarpus*. *PLoS One* 7:e48914, 2012.
  70. Reichenbach DK, Li Q, Hoffman RA, Williams AL, Shlomchik WD, Rothstein DM, Demetris AJ, **Lakkis FG**. Allograft outcomes in outbred mice. *American Journal of Transplantation* 13:580-588, 2013.
  71. Walch JM, Zeng Q, Li Q, Oberbarnscheidt MH, Hoffman RA, Williams AL, Rothstein DM, Shlomchik WD, Kim JV, Camirand G, **Lakkis FG**. Cognate antigen directs CD8+ T cell migration to vascularized transplants. *Journal of Clinical Investigation* 123:2663-2671, 2013.
  72. Lin CH, Zhang W, Ng TW, Zhang D, Jiang J, Pulikottil B, **Lakkis F**, Gorantla VS, Lee WP, Brandacher G, Zheng XX. Vascularized osteomyocutaneous allografts are permissive to tolerance by induction-based immunomodulatory therapy. *American Journal of Transplantation* 13:2161-2168, 2013. *\*Provided technical and material support.*
  73. Ezzelarab MB, Zahorchak AF, Lu L, Morelli AE, Chalasani G, Demetris AJ, **Lakkis FG**, Wijkstrom M, Murase N, Humar A, Shapiro R, Cooper DK, Thomson AW. Regulatory dendritic cell infusion prolongs kidney allograft survival in nonhuman primates. *American Journal of Transplantation* 13:1989-2005, 2013. *\*Participated in conception and design.*
  74. Hautz T, Zelger BG, Nasr IW, Mundinger GS, Barth RN, Rodriguez ED, Brandacher G, Weissenbacher A, Zelger B, Cavadas P, Margreiter R, Lee WP, Pratschke J, **Lakkis FG**, Schneeberger S. Lymphoid neogenesis in skin of human hand nonhuman primate and rat vascularized composite allografts. *Transplantation International* 27:966-976, 2014. *\*Participated in conception and design.*
  75. Oberbarnscheidt MH, Zeng Q, Li Q, Dai H, Williams AL, Shlomchik WD, Rothstein DM, **Lakkis FG**. Non-self recognition by monocytes initiates allograft rejection. *Journal of Clinical Investigation* 124:3579-3589, 2014.
  76. Camirand G, Wang Y, Lu Y, Wan YY, Lin Y, Deng S, Guz G, Perkins DL, Finn PW, Farber DL, Flavell RA, Shlomchik WD, **Lakkis FG**, Rudd CE, Rothstein DM. CD45 ligation expands Tregs by promoting interactions with DCs. *Journal of Clinical Investigation* 124:4603-4613, 2014. *\*Participated in conception and design. Critical revision of manuscript for important intellectual content.*
  77. Jindal R, Unadkat J, Zhang W, Zhang D, Ng TW, Wang Y, Jiang J, **Lakkis F**, Rubin P, Lee WP, Gorantla VS, Zheng XX. Spontaneous resolution of acute rejection and tolerance induction with IL-2 fusion protein in vascularized composite allotransplantation. *American Journal of Transplantation* 15:1231-1240, 2015. *\*Provided technical and material support.*
  78. Zhang Q, Dai H, Yatim KM, Abou-Daya K, Williams AL, Oberbarnscheidt MH, Camirand G, Rudd CE, **Lakkis FG**. CD8+ effector T cell migration to pancreatic islet grafts is dependent on cognate antigen presentation by donor graft cells. *Journal of Immunology* 197:1471-1476, 2016.
  79. Zhuang Q, Liu Q, Divito SJ, Zeng Q, Yatim KM, Hughes AD, Rojas-Canales DM, Nakao A, Shufesky WJ, Williams AL, Humar R, Hoffman RA, Shlomchik WD, Oberbarnscheidt MH, **Lakkis FG\***, Morelli AE. Graft-infiltrating host dendritic cells play a key role in organ transplant rejection. *Nature Communications* 7:12623, 2016. *\*Co-senior author.*
  80. Boyette LB, Macedo C, Hadi K, Elinoff BD, Walters JT, Ramaswami B, Chalasani G, Taboas JM, **Lakkis FG\***,

- Metes DM. Phenotype, function, and differentiation potential of human monocyte subsets. *PLoS One* 12(4):e0176460, 2017. **\*Co-senior author.**
81. Dai H, Friday AJ, Abou-Daya KI, Williams AL, Mortin-Toth S, Nicotra ML, Rothstein DM, Shlomchik WD, Matozaki T, Isenberg JS, Oberbarnscheidt MH, Danska JS, **Lakkis FG**. Donor SIRP $\alpha$  polymorphism modulates the innate immune response to allogeneic grafts. *Science Immunology* 2:eaam6202, 2017.
  82. Macedo C, Hadi K, Walters J, Elinoff B, Marrari M, Zeevi A, Ramaswami B, Chalasani G, Landsittel D, Shields A, Alloway R, **Lakkis FG**, Woodle ES, Metes D. Impact of induction therapy on circulating T follicular helper cells and subsequent donor-specific antibody formation after kidney transplant. *Kidney International Reports* 4:455-469, 2018. **\*Provided technical and material support.**
  83. Morin-Zorman S, Wysocki C, Zhu J, Li H, Zorman S, Matte-Martone C, Kisanga E, McNiff J, Jain D, Gonzalez D, Rothstein DM, **Lakkis FG**, Haberman A, Shlomchik WD. In vivo dynamics of T cells and their interactions with dendritic cells in mouse cutaneous graft-versus-host disease. *Blood Advances* 3: 2082-2092, 2019. **\*Participated in conception and design. Critical revision of manuscript for important intellectual content.**
  84. Hughes AD, Zhao D, Dai H, Abou-Daya KI, Tieu R, Rammal R, Williams AL, Shlomchik WD, Morelli AE, Oberbarnscheidt MH, **Lakkis FG**. Cross-dressed dendritic cells sustain effector T cell responses in islet and kidney allografts. *Journal of Clinical Investigation* 130:287-294, 2020.
  85. Dai H, Lan P, Zhao D, Abou-Daya K, Liu W, Chen W, Friday AJ, Williams AL, Tao S, Chen J, Chen W, Mortin-Toth S, Danska JS, Wiebe C, Nickerson P, Li T, Mathews LR, Turnquist HR, Nicotra ML, Gingras S, Takayam E, Kubagawa H, Shlomchik MJ, Oberbarnscheidt MH, Li XC, **Lakkis FG**. PIRs mediate innate myeloid cell memory to non-self MHC molecules. *Science* 368:1122-11-27, 2020.
  86. Abou-Daya KI, Tieu R, Zhao D, Rammal R, Sacirbegovic F, Williams AL, Shlomchik, WD, Oberbarnscheidt MH, **Lakkis FG**. Resident memory T cells form during persistent antigen exposure leading to allograft rejection. *Science Immunology* 6, eabc8122, 2021.
  87. Cherukuri A, Salama AD, Mehta R, Mohib K, Zheng L, Magee C, Harber M, Strauss H, Baker RJ, Tevar A, Landisttel D, **Lakkis FG**, Hariharan S, Rothstein DM. Transitional B cell cytokines predict renal allograft outcomes. *Science Translational Medicine* 13:eabe4929, 2021. **\*Participated in conception and design. Critical revision of manuscript for important intellectual content.**
  88. Macedo C, Tran LM, Zahorchak AF, Dai H, Gu X, Ravichandran R, Mohanakumar T, Elinoff B, Zeevi A, Styn MA, Humar A, **Lakkis FG**, Metes DM, Thomson AW. Donor-derived regulatory dendritic cell infusion results in host cell cross-dressing and T cell subset changes in prospective living donor liver transplant recipients. *American Journal of Transplantation* 21:2372-2386, 2021. **\*Participated in conception and design. Critical revision of manuscript for important intellectual content.**
  89. Rosales IA, Yang C, Farkash EA, Ashry T, Ge J, Aljabban I, Ayyar A, Ndishabandi D, White R, Gildner E, Gong J, Liang Y, **Lakkis FG**, Nিকেleit V, Russel PS, Madsen JC, Alessandrini A, Colvin RB. Novel intragraft regulatory lymphoid structures in kidney allograft acceptance. *American Journal of Transplantation* 22:705-716, 2022. **\*Provided technical and material support.**
  90. Sasaki K, Al Moussawy M, Abou-Daya KI, Macedo C, Hosni-Ahmed A, Liu S, Juya M, Zahorchak AF, Metes DM, Thomson AW, **Lakkis FG**, Abdelsamed HA. Activated-memory T cells influence naive T cell fate: a noncytotoxic function of human CD8 T cells. *Communication Biology* 5:634, 2022. **\*Participated in conception and design. Critical revision of manuscript for important intellectual content.**
  91. Tieu R, Zeng Q, Zhao D, Zhang G, Feizi N, Manandhar P, Williams AL, Popp B, Wood-Trageser MA, Demetris AJ, Tso JY, Johnson AJ, Kane LP, Abou-Daya KI, Shlomchik WD, Oberbarnscheidt MH, **Lakkis FG**. Tissue-resident memory T cell maintenance during antigen persistence requires both cognate antigen and interleukin-15. *Science Immunology* 8, eadd8454, 2023.
  92. Tran LM, Macedo C, Zhorchak AF, Gu X, Elinoff B, Singhi AD, Isett B, Zeevi A, Sykes M, Breen K, Srivastava A, Ables EM, Landsittel D, Styn MA, Humar A, **Lakkis FG**, Metes DM, Thomson AW. Donor-derived regulatory dendritic cell infusion modulates effector CD8<sup>+</sup> T cell and NK cell responses after liver

- transplantation. *Science Translational Medicine* 15:eadf4287, 2023. \*Participated in conception and design. Critical revision of manuscript for important intellectual content.
93. Barba T, Oberbarnscheidt M, Franck G, Gao C, This S, Rabeyrin M, Roufosse C, Moran L, Koenig A, Mathias V, Saison C, Dubois V, Pallet N, Anglicheau D, Lamarinthee B, Hertig A, Morelon E, Hot A, Paidassi H, Defrance T, Nicoletti A, Duong-Van-Huyen JP, Xu-Dubois Y, **Lakkis FG**, Thauinat O. Chemotaxis overrides killing response in alloreactive cytotoxic T-cells providing vascular immune privilege during cellular rejection. *Journal of Clinical Investigation* e155191, 2025. \*Participated in conception and design. Provided experimental data. Participated in data analysis.
94. Sun Z, Yi Z, Wei C, Wang W, Ren T, Cravedi P, Tedla F, Ward SC, Azeloglu E, Schrider DR, Li Y, Khan A, Zaroni F, Fu J, Ali S, Liu S, Liang D, Liu T, Li H, Xi C, Vy TH, Mosoyan G, Sun Q, Kumar A, Zhang Z, Farouk S, Campell K, Ochando J, Lee K, Coca S, Xiang J, Connolly P, Gallon L, O'Connell PJ, Colvin R, Menon MC, Nadkarni G, He JC, Kraft M, Jiang X, Zhang X, Kiryluk K, Cherukuri A, **Lakkis FG**, Zhang W, Chen SH, Heeger PS, Zhang W. LILRB3 genetic variation is associated with kidney transplant failure in African American recipients. *Nature Medicine* 31:1677-1687, 2025. \*Provided validation data. Participated in data analysis. Critical revision of manuscript for important intellectual content.
95. Zhao D, Dai H, Macedo C, Sanders SM, Elias C, Friday AJ, Zaidan M, Williams AL, Elinoff BD, Oberbarnscheidt MH, Danska J, Zeevi A, Randhawa P, Tevar AD, Hariharan S, Rothstein DM, Abou-Daya KI, Senev A, Tambur AR, Metes D, Thauinat O, **Lakkis FG\***, and Cherukuri A (\*co-senior author). Donor-recipient mismatch at the *SIRPA* locus adversely affects renal allograft outcomes. *Science Translational Medicine*, In press, July 16, 2025

## B. Reviews, Editorials, Commentaries, Book Chapters:

1. Murphy JR, **Lakkis F**, Vanderspeck J, Anderson P, Strom TB. Protein engineering of diphtheria toxin: Development of specific cytotoxic agents for the treatment of human disease. Frankel A, editor. *Immunotoxins*, Vol. 2. Boston: Martinus Nijhoff; p. 365-382, 1992.
2. Badr KF, **Lakkis FG**. Lipoxigenase products in normal and diseased glomeruli. *Annals of the New York Academy of Sciences* 744:216-228, 1994.
3. **Lakkis FG**, Martinez-Maldonado M. Conservative Management of Chronic Renal Failure and the Uremic Syndrome. Jacobson HR, Striker GE, Klahr S, editors. *The Principles and Practice of Nephrology*, 2nd ed. Philadelphia: BC Decker; p.614-621, 1995.
4. **Lakkis FG**, Coelho SN. The Role of Cytokines in Inflammatory Glomerular Injury. *Mineral and Electrolyte Metabolism* 21:250-261, 1995.
5. **Lakkis FG**, Campbell O, Badr KF. Vascular Diseases of the Kidney. Brenner BM and Rector RC Jr, editors. *The Kidney*, 5th ed. Philadelphia: WB Saunders; p. 1712-1730, 1995.
6. Saleem S, **Lakkis FG**, and Martinez-Maldonado M. Atheroembolic renal disease. *Seminars in Nephrology* 16:309-318, 1996.
7. **Lakkis FG**, Nassar GN, Badr KF. Hormones and the Kidney. Schrier RW and Gottschalk CW, editors. *Diseases of the Kidney*, 6th ed. Boston: Little, Brown and Company; p. 251-294, 1996.
8. **Lakkis FG**, Dai Z. Inflammatory and anti-inflammatory cytokines in glomerulonephritis. *EOS, Journal of Immunology and Immunopharmacology* 17:7-11, 1997.
9. **Lakkis FG**, Martinez-Maldonado M. Renal Insufficiency. Suki WN and Massry SG, editors. *Therapy of Renal Diseases and Related Disorders*, 3rd ed. Hingham, MA: Kluwer Academic Publishers; p. 767-776, 1997.
10. Ring GH, **Lakkis FG**. T lymphocyte-derived cytokines in experimental glomerulonephritis: Testing the Th1/Th2 hypothesis [editorial]. *Nephrology Dialysis Transplantation* 13:1101-1103, 1998.
11. **Lakkis FG**. Cytokines in graft rejection and acceptance: an ever-shifting paradigm. *Graft* 1:143-146,

- 1998.
12. **Lakkis FG.** The role of cytokines in transplantation tolerance: Lessons learned from gene-knockout mice. *Journal of the American Society of Nephrology* 9:2361-2367, 1998.
  13. **Lakkis FG,** Saleem S, Pearson TC, Larsen CP. Transplantation Immunobiology. Malluche HH, Sawaya BP, Hakim RM, Sayegh MH, editors. *Clinical Nephrology, Dialysis and Transplantation*, Vol. 2. Munich: Dustri-Verlag; p. III.1:1-III.1:15, 1999.
  14. Ring GH, **Lakkis FG.** Breakdown of self-tolerance and the pathogenesis of autoimmunity. *Seminars in Nephrology* 19:25-33, 1999.
  15. Dai Z, **Lakkis FG.** Role of cytokines, CTLA-4 and costimulation in transplant tolerance and rejection. *Current Opinion in Immunology* 11:504-508, 1999.
  16. Arakelov A, **Lakkis FG.** The alloimmune response and effector mechanisms of allograft rejection. *Seminars in Nephrology* 20:95-102, 2000.
  17. Ring GH, **Lakkis FG,** Badr KF. Vascular Diseases of the Kidney. Brenner BM, Rector RC Jr, editors. *The Kidney*, 6th ed. Philadelphia: WB Saunders; p. 1597-1620, 2000.
  18. Kokko KE, **Lakkis FG.** Role of Cytokines and Chemokines. Tejani AH, Harmon WE, and Fine RN, editors. *Pediatric Solid Organ Transplantation*, 1st ed. Copenhagen: Munksgaard; p. 35-43, 2000.
  19. Chalasani G., **Lakkis FG.** Immunologic Ignorance of Transplanted Organs. *Current Opinion in Organ Transplantation* 6:83-88, 2001.
  20. Platt JL, **Lakkis FG.** A scenic overlook on the road to clinical tolerance. [Congresses] *Trends in Immunology* 22:289-91, 2001.
  21. Kokko KE, Montero A, **Lakkis FG,** Badr KF. Hormones and the Kidney. Schrier RW, Gottschalk CW, editors. *Diseases of the Kidney*, 7th ed. Boston: Little, Brown and Company; 2001.
  22. Chalasani G, **Lakkis FG.** Cytokines and Transplantation. Thomson A, Lotze MT, editors. *The Cytokine Handbook*. London: Academic Press; p. 1297-1312, 2003.
  23. **Lakkis FG,** Sayegh MH. Memory T cells: A hurdle to immunologic tolerance. *Journal of the American Society of Nephrology* 14:2402-2410, 2003.
  24. Valujskikh A, **Lakkis FG.** Remembrances of things past: Memory T cells and allograft rejection. *Immunological Reviews* 196:65-74, 2003.
  25. **Lakkis FG.** Transplantation tolerance: A journey from ignorance to memory [editorial]. *Nephrology Dialysis Transplantation* 18:1979-1982, 2003.
  26. **Lakkis FG.** Where is the alloimmune response initiated [editorial]? *American Journal of Transplantation* 3:241-242, 2003.
  27. Rothstein DM, **Lakkis FG.** CTLA4 – Its Role in Transplant Tolerance and Rejection. Pociot F, editor. *CTLA4 in Autoimmune Diseases*. Georgetown, TX: Landes Bioscience; 2003.
  28. Obhrai JS, **Lakkis FG.** Transplantation tolerance: Babies take the first step [News & Views]. *Nature Medicine* 10:1165-1166, 2004.
  29. Goldstein DR, Bose A, **Lakkis FG.** Mechanisms of allograft rejection. Jameson J, editor. *Principles of Molecular Medicine*, 2<sup>nd</sup> ed. Totowa, NJ: Humana Press; 656-664, 2006.
  30. Starzl TE, **Lakkis FG.** The unfinished legacy of liver transplantation: emphasis on immunology [review]. *Hepatology* 43(2 Suppl 1):S151-63, 2006.
  31. Marcos A, **Lakkis FG,** Starzl TE. Tolerance for organ recipients: a clash of paradigms [editorial]. *Liver Transplantation* 12(10):1448-51, 2006.
  32. Zecher D, **Lakkis FG.** Declassifying glomerulonephritis [editorial]. *Journal of the American Society of Nephrology* 18: 1034 – 1035, 2007.
  33. Zecher D, **Lakkis FG.** Ignorance is bliss [editorial]. *Blood* 111:4426-4427, 2008.
  34. **Lakkis FG,** Dellaporta SL, Buss LW. Allorecognition and chimerism in an invertebrate model organism. *Organogenesis* 4:236-240, 2008.
  35. Oberbarnscheidt MH, Zecher D, **Lakkis FG.** The innate immune system in transplantation. *Seminars in*

- Immunology* 23:264-272, 2011.
36. van der Windt DJ, Bottino R, Kumar G, Wijkstrom M, Hara H, Ezzelarab M, Ekser B, Phelps C, Murase N, Casu A, Ayares D, **Lakkis FG**, Trucco M, Cooper DK. Clinical islet xenotransplantation: how close are we? *Diabetes* 61:3046-3055, 2012.
  37. **Lakkis FG**. The immune response to a transplanted organ: An overview. In Kaplan, Burkhart, Lakkis (eds). *Immunotherapy in Transplantation: Principles and Practice*; Wiley-Blackwell, 1<sup>st</sup> Ed.; pp 3-9, 2012.
  38. Oberbarnscheidt MH, **Lakkis FG**. Antigen presentation in transplantation. In Kaplan, Burkhart, Lakkis (eds). *Immunotherapy in Transplantation: Principles and Practice*; Wiley-Blackwell, 1<sup>st</sup> Ed.; pp 10-18, 2012.
  39. **Lakkis FG**, Lechler RI. Origin and biology of the allogeneic response. *Cold Spring Harbor Perspectives in Medicine*; 3(8), pli: a014993, 2013.
  40. **Lakkis FG**, Billiar TR. Molecular analysis of transplant rejection: Marching onward. *Journal of Experimental Medicine* 210:2147-2149, 2013.
  41. Walch JM, **Lakkis FG**. T-cell migration to vascularized organ allografts. *Current Opinion in Organ Transplantation* 19:28-32, 2014.
  42. Oberbarnscheidt MH, **Lakkis FG**. Innate allorecognition. *Immunol Rev* 2014; 258:154-159.
  43. **Lakkis FG**. Immunology: T<sub>REG</sub> in transplantation – a double-edged sword? *Nature Reviews Nephrology* 10:185-186; 2014.
  44. Zhuang Q, **Lakkis FG**. Dendritic cells and innate immunity in kidney transplantation. *Kidney International* 87:712-718, 2015.
  45. **Lakkis FG**, Palevsky PM. A new CJASN series: renal immunology for the clinician. *Clinical Journal of the American Society of Nephrology* 10:1273, 2015.
  46. Yatim KM, **Lakkis FG**. A brief journey through the immune system. *Clinical Journal of the American Society of Nephrology* 10:1274-1281, 2015.
  47. Zhang Q, **Lakkis FG**. Memory T cell migration. *Frontiers Immunology* 6:504 (epub), 2015.
  48. Hoffman W, **Lakkis FG**, Chalasani G. B cells, antibodies, and more. *Clinical Journal of the American Society of Nephrology* 11:137-154, 2016.
  49. Alegre ML, **Lakkis FG**, Morelli AE. Antigen presentation in transplantation. *Trends in Immunology* 37:831-843, 2016.
  50. Tieu R, **Lakkis FG**, Oberbarnscheidt MH. Getting down and dirty: Germ-exposed laboratory mice as a model of the adult human immune system. *Transplantation* 100:2490-2491, 2016.
  51. Dai H, **Lakkis FG**. Transplantation Immunobiology. In Gabriel M. Danovitch (ed). *Handbook of Kidney Transplantation*; Wolters Kluwer, 6<sup>th</sup> Ed. pp 21-45, 2017.
  52. **Lakkis FG**, Li XC. Innate allorecognition by monocytes and its role in graft rejection. *American Journal of Transplantation* 18:289-292, 2018.
  53. Hughes AD, **Lakkis FG**, Oberbarnscheidt MH. Four-dimensional imaging of T cells in kidney transplant rejection. *Journal of the American Society of Nephrology* 29:1596-1600, 2018.
  54. Zhao D, Abou-Daya KI, Dai H, Oberbarnscheidt MH, Li XC, **Lakkis FG**. Innate allorecognition and memory in transplantation. *Frontiers Immunology* 11:918, 2020.
  55. Chen S, **Lakkis FG**, Li XC. The many shades of macrophages in regulating transplant outcomes. *Cellular Immunology* 349:104064, 2020.
  56. Issa F, Strober S, Leventhal JR, Kawai T, Kaufman DB, Levitsky J, Sykes M, Mas V, Wood KJ, Bridges N, Welniak LA, Chandran S, Madsen JC, Nickerson P, Demetris AJ, **Lakkis FG**, Thomson AW. The fourth international workshop on clinical transplant tolerance. *American Journal of Transplantation* 21:21-31, 2020.
  57. Abdelsamed HA, **Lakkis FG**. The role of self-peptides in direct T cell allorecognition. *Journal of Clinical Investigation* 131:e154096, 2021.
  58. Al-Moussawy M, Abdelsamed HA, **Lakkis FG**. Immunoglobulin-like receptors and the generation of

- innate immune memory. *Immunogenetics* 74:179-195, 2022.
59. Zaidan M, **Lakkis FG**. Tracking kidney transplant fitness. *Science* 381:1048-1049, 2023.
  60. Camirand, G., **Lakkis FG**. Tipping the balance toward transplantation tolerance: in vivo therapy using a mutated IL-2. *Journal of Clinical Investigation* 134(5):e178570, 2024.
  61. Thaunat O, **Lakkis FG**, Kosmoliaptsis V, Schinstock C, Tambur A, Heidt S, Naesens M. STAR 2025 innate working group: the potential role of innate allorecognition in kidney allograft damage. *American Journal of Transplantation*. 2025 Jul 5:S1600-6135(25)00376-4, online ahead of print.
  62. Cherukuri A, **Lakkis FG**, Oberbarnscheidt MH. Mechanisms of Transplant Rejection. In Alpern, Seldin and Giebisch's *The Kidney: Physiology & Pathophysiology*, 6th Edition, In Press.
  63. Kanj R, Elias C, Cherukuri A, **Lakkis FG**. Transplantation Immunobiology. In Gabriel M. Danovitch (ed). *Handbook of Kidney Transplantation*; Wolters Kluwer, 7<sup>th</sup> Edition, In Press.

### C. Books

1. Kaplan, Burkhart, **Lakkis** (eds). *Immunotherapy in Transplantation: Principles and Practice*. Wiley-Blackwell, 2012.

### D. Letters:

1. **Lakkis FG**. Reply to "Confounding variables complicate conclusions in *aly* model. [letter]." *Nature Medicine* 2001; 7:1165-1166.
2. **Lakkis FG**. Transplant rejection: Mind your T-cell language [letter]. *Nature Medicine* 2002; 8:1043.
3. **Lakkis FG**. Jolting Joe. Letter to the *New York Times* (Dec. 30, 2007)
4. **Lakkis FG**, Chalasani G, Hariharan S. Antibody-mediated rejection of solid-organ allografts. *New England Journal of Medicine* 2018; 79:2580.

## VI. RESEARCH GRANTS

### A. Current Funding:

7/1/2025 – 6/30/2030	NIH-NIAID (1U01 AI191596-01) Innate allorecognition and KIR/LILR/HLA associations in kidney transplantation Role: PI
6/14/24 - 5/31/2029	NIH-NIAID (1R01 AI184546-01) Innate Allorecognition at the Maternal-Fetal Interface Role: PI
12/20/2022 - 11/30/2027	NIH-NIAID (5R01 AI172973-02) Innate Allorecognition in Clinical Organ Transplantation Role: PI
2/01/2001 - 4/30/2026 (NCE)	NIH-NIAID (5R01 AI49466-21) T Cell Memory in Organ Transplantation Role: PI
3/6/2024 - 1/31/2029	NIH-NIAID (U01 AI177308)

Mechanisms and Therapeutic Targeting of T cell Regulation in Heart Allograft Recipient Monkeys

Role: Co-I

6/7/2024 - 4/30/2029

NIH-NIAID (R01 AI184406)

Innovative Approaches to Enhance Regulatory Myeloid Cell Function and Renal Transplant Survival in Nonhuman Primates

Role: Co-I

6/13/2022 - 6/13/2027

NIH/NIAID (U01 AI170074)

Promoting and Visualizing Immune Regulation in Transplantation

Role: Co-I

### B. Submitted Funding:

Submitted 6/2024

NIH-NHLBI (1P01 HL178422)

Mechanisms sustaining tissue inflammation in transplantation

Project 3: Targeting T<sub>pro</sub> to prevent acute and chronic heart transplant rejection

Role: PI

### C. Past Funding:

1989 - 1991

National Kidney Foundation Research Fellowship

Role: Trainee

Mentor: Strom, T.B.

1992 - 1994

National Kidney Foundation Young Investigator Grant

Role: PI

10/1/1994 - 9/30/1998

VA Merit Review Grant

Regulation of Glomerulonephritis by T Cell Cytokines

Role: PI

1995 - 1997

The Carlos and Marguerite Mason Trust for Transplantation

The Role of Interleukin-4 in Transplantation Tolerance

Role: PI

6/1/1997 - 5/30/2002

NIH-NIAID (R29 AI41643-06)

Regulation of T Cell Survival in Organ Transplantation

Role: PI

1998 - 2000

The Carlos and Marguerite Mason Trust for Transplantation

The Role of Interleukin-2 in Transplantation Tolerance Induction

Role: PI

10/1/1998 - 9/30/2002

Veterans Affairs Merit Review Award (competitive renewal)

- Regulation of Glomerulonephritis by T Cell Cytokines  
Role: PI
- 9/1/1998 - 8/31/2002 NIH-NIAID (U19 AI44644-04)  
Program Title: Transplant Tolerance: Costimulation, Cytokines & Chimerism  
Project 2: T Cell Activating Cytokines in Tolerance Induction  
Role: PI
- 10/1/03 - 9/30/05 Roche Organ Transplantation Research Foundation  
Immunologic Ignorance of Transplanted Organs  
Role: PI
- 9/1/2002 - 2/28/2008 NIH-NIAID (P01 AI44644-05) (competitive renewal of U19)  
Program Title: Transplant Tolerance: Costimulation, Cytokines & Chimerism  
Project 3: T Cell Homeostasis in the Alloimmune Response  
Role: PI
- 7/1/2005 - 6/30/2007 American Society of Nephrology  
A Model Organism to Study Innate Allorecognition  
Role: PI
- 4/1/2006 - 3/31/2009 NIH-NIAID (R21 AI066242-01)  
A Model Organism to Study Chimerism  
Role: PI
- 8/1/2007 - 7/31/2009 NIH-NIDDK (P30 DK79312-01)  
O'Brien Center for Renal Imaging  
Pilot Project: Memory T Cell Migration to the Kidney  
Role: PI
- 9/1/2009 - 8/31/2011 NIH-NIAID (R56 AI079103)  
A Model Organism to Study Allorecognition and Chimerism  
Role: Co-PI
- 9/1/2009 - 8/31/2011 NIH-NIAID (P01 AI081678)  
Program Title: Liver APC, Hepatic Injury, and Transplantation  
Project 3: Hepatic Stellate Cells as Regulators of Inflammatory and Immune  
Role: Co-I
- 8/1/2006 - 7/31/2012 NIH-NIAID (P01 AI064343)  
Program Title: Peripheral Mechanisms of Immunologic Tolerance  
Project 3: Immunological Ignorance as an Adjunct to Tolerance  
Role: PI
- 7/1/2011 - 6/30/2015 NIH-NIAID (R01 AI096553)  
T and B Cell Homeostasis after Induction Therapy in Kidney Transplantation  
Role: PI

- 8/15/2016 - 7/31/2017 NIH/NIAID (R34 AI123033)  
Dendritic Cell (DCreg) Therapy in Live Donor Renal Transplant Recipients  
Role: Co-I
- 9/1/2007 - 7/31/2018 NIH/NIDDK (P30 DK079307)  
Pittsburgh Center for Kidney Research  
Core C (Imaging)  
Role: Co-I
- 6/13/2018 - 5/31/2019 NIH/NIAID (R34 AI36782)  
Randomized Controlled Trial of Anti-TNF to Preserve Allograft Function in High-Risk Renal Transplant Patients Based on a B Cell Biomarker.  
Role: PI
- 5/1/2017 - 6/30/2022 UPMC Immune Transplant & Therapy Center  
Regulatory dendritic cell (DCreg) therapy in living donor liver transplantation  
Role: Co-I
- 6/26/2017 - 5/31/2022 NIH/NIAID (U01 AI132758)  
Mechanisms and promotion of immune regulation by CD4+ regulatory T cells within allografts  
Role: Co-I
- 8/17/2017 - 7/31/2022 NIH/NIAID (U19 AI131453)  
Regulatory immune cell therapy, promotion of tolerance and underlying mechanisms in NHP renal transplantation  
Role: Co-I
- 9/27/2012 - 5/31/2025 NIH-NIAID (5R01 AI099465-10)  
Innate Recognition of Allogeneic Non-self  
Role PI
- 5/1/2018 - 4/30/2025 NIH/NIAID (U01 AI36779)  
Dendritic Cell (DCreg) Therapy in Live Donor Renal Transplant Recipients  
Role: Co-I

VII. CLINICAL TRIALS:

- 5/2017 - 6/2022 UPMC Immune Transplant & Therapy Center  
Regulatory dendritic cell (DCreg) therapy in living donor liver transplantation  
Role: Co-I
- 5/2018 - present NIH/NIAID (U01 AI36779)  
Dendritic Cell (DCreg) Therapy in Live Donor Renal Transplant Recipients  
Role: Co-I

**VIII. PATENTS:**

U.S. 08/445,311 "Use of Interleukin-13 for induction of 15 Lipoxygenase."

**IX. EDITORIAL SERVICE:****A. Editorial Boards**

1998-2002	Editorial Board member, <i>Graft</i>
2000-2004	Editorial Board member, <i>Journal of the American Society of Nephrology</i>
2000-2004	Associate Editor, <i>Journal of Immunology</i>
2006-2007	Editorial Board member, <i>American Journal of Transplantation</i>
2007-present	Editorial Board member, <i>Journal of the American Society of Nephrology</i>
2010-2011	Associate Editor, <i>American Journal of Transplantation</i>
2012-present	Consulting Editor, <i>Journal of Clinical Investigation</i>
2024-present	Editorial Board Member, <i>JCI Insight</i>

**B. Other Peer Review Activities**

Reviewer for *NEJM*, *Nature*, *Science*, *Science Immunology*, *Science Translational Medicine*, *Nature Immunology*, *Blood*, and other peer-reviewed journals.

**X. SERVICE AS GRANT REVIEWER**

1998-2000	National Kidney Foundation Young Investigator Grant Review Committee
1999-2001	American Heart Association National Immunology and Microbiology II Peer Review Group
1999	NIH/NIDDK CSR Special Emphasis Panel (human islet transplantation)
1999-2003	NIH/NIAID (Standing Member) Allergy, Immunology and Transplantation Research Committee
2001-2005	Roche Organ Transplantation Research Foundation ( <i>ad hoc</i> 2014)
2004	NIH/NIAID Transplantation, Tolerance, and Tumor Immunity Study Section <i>Ad hoc</i> member
2010	NIH/NIAID ZRG1 IMM-J02 & ZRG1 IMM-E (55)
2013- present	NIH/NHLBI & NIAID Miscellaneous Transplantation P01 Review Panels/SEPs
2015-2019	NIH/NIAID (Standing Member) Transplantation, Tolerance and Tumor Immunity Study Section
Others:	Swiss Science Foundation, Canadian Institutes of Health Research (CIHR), US-Israel Binational Science Foundation, Raine Medical Research Foundation (The University of Western Australia).

XI. UNIVERSITY ADMINISTRATIVE SERVICE**A. Committee service**

1995 – 2000	Member, Research and Development Committee Veterans Affairs Medical Center, Atlanta, GA
1997 – 1999	Chairman, Research and Development Committee Veterans Affairs Medical Center, Atlanta, GA
2001 – 2005	Member, Executive Committee, Vascular Biology and Transplantation Program Yale University School of Medicine, New Haven, CT
2003	Member, Search Committee for Chief of Gastroenterology Yale University School of Medicine, New Haven, CT
2003 – 2005	Member, Steering Committee, Yale New Haven Hospital Organ Transplant Center Yale University School of Medicine, New Haven, CT
2005	Member, Search Committee for Director, Human and Translational Immunology Program Yale University School of Medicine
2007	Member, Search Committee for MGB Chair University of Pittsburgh School of Medicine
2008-present	Member, Scientific Committee, RiMED, Palermo, Italy University of Pittsburgh School of Medicine
2008-	Member, PRC/DSMB, Starzl Transplantation Institute, University of Pittsburgh University of Pittsburgh School of Medicine (Chair 2011-2013)
2010-2012	Member, Promotion & Tenure Committee University of Pittsburgh School of Medicine
2010-2015	Member, Dickson Prize Committee, University of Pittsburgh School of Medicine University of Pittsburgh School of Medicine
2016-2019	Member, Department of Laboratory and Animal Research (DLAR) Steering Committee
2017-2020	Member, Executive Committee, Immune Transplant and Therapy Center, UPMC
2022	Member, Chancellor's Distinguished Research Award Selection Committee
2023	Member, Search Committee for Immunology Chair University of Pittsburgh School of Medicine
2023-2024	Member, MSTP Admissions Committee

**B. Leadership roles**

2005-2025	Scientific Director, Thomas E. Starzl Transplantation Institute University of Pittsburgh School of Medicine
-----------	--

XII. SERVICE TO PROFESSIONAL ORGANIZATIONS:

1997	Co-chairman, Cytokines and Anticytokines Focus Group American Society of Transplant Physicians & American Society of Transplant Surgeons Task Force on Tolerance
1998	Member, Program Committee National Kidney Foundation
1998	Invited participant, The Strategic Planning Conference on Renal

1999	Research Priorities (Sponsored by the ASN and NIH) Member, Program Committee American Society of Nephrology
1999, 2000	Member, Program Committee American Society of Transplantation
1999-2001	Member, Basic Sciences Committee American Society of Transplantation
2001	Chairman, Program Committee American Society of Transplantation
2001-2004	Councilor (Board Member) American Society of Transplantation
2002-2005	Member, Transplant Advisory Committee American Society of Nephrology
2002-2004	Member, Awards Committee American Society of Transplantation
2003-2006	Chairman, Young Investigator Award Committee American Society of Nephrology
2004-2005	Member, Nominations Committee American Society of Transplantation
2008-2009	Member, Program Committee American Society of Nephrology
2009	Member, Nominations Committee American Society of Nephrology
2011	Chair, Immunobiology Program Committee The Transplantation Society
2014, 2015	Member, International Advisory Committee World Transplantation Congress
2014-2017	Member, External Advisory Board Canadian National Transplantation Research Program (CNTRP)
2019-present	Member, Executive/Organizing Committee International Workshop on Clinical Transplant Tolerance

### XIII. PRESENTATIONS:

#### **A. Invited University Lectures / Visiting Professorships:**

1995	The Immunobiology Vaccine Center, University of Alabama at Birmingham
1997	Georgia Institute of Technology, Petit Institute for Bioengineering
1998	Duke University, Renal Section
1999	University of Pittsburgh, Thomas E. Starzl Transplantation Institute
1999	Mount Sinai School of Medicine, Renal Section
1999	University of Texas-Houston, Renal Section
1999	University of Florida College of Medicine, Renal Section
1999	Northwestern University, Renal Section
1999	Yale University, Renal Section
1999	Case Western Reserve University, Renal Section
2000	Washington University, Renal Section
2000	Yale University, Interdisciplinary Program in Vascular Biology and Transplantation

2000 Mount Sinai School of Medicine, Immunobiology  
 2000 Sohag University, Sohag, Egypt  
 2000 Harvard University, Brigham & Women's Hospital, Laboratory of Immunogenetics  
 2001 Duke University, Renal Section  
 2001 Yale University, Immunobiology Section Retreat  
 2002 University of Michigan, Transplant Surgery Section  
 2002 Boston University, Renal Section  
 2002 Johns Hopkins University, Immunology Council Lecture Series  
 2003 University of Iowa, Medical Grand Rounds  
 2003 Emory University Transplant Center  
 2003 Harvard Medical School, The Children's Hospital, Renal Section  
 2004 University of Pennsylvania, Renal Section & Transplantation Immunology  
 2004 University of Maryland, Section of Transplantation Surgery  
 2004 University of Alberta, Renal Section & Section of Immunology  
 2004 University of Minnesota, Center for Immunology  
 2004 University of Massachusetts, Medical Grand Rounds  
 2004 UCSF, Transplantation Seminar  
 2004 University of Pittsburgh, Thomas E. Starzl Transplantation Institute  
 2004 MGH, Harvard University, Transplantation Grand Rounds and Renal Grand Rounds  
 2004 Beth Israel Deaconess Hospital, Harvard University, Transplantation Seminar  
 2005 MGH, Harvard University, Program in Immunology  
 2006 University of Chicago, Committee on Immunology  
 2006 University of Toronto, Department of Immunology  
 2006 University of Indiana, Department of Medicine (Medical Grand Rounds) & Section of Nephrology (Renal Research Conference)  
 2007 Duke University, Renal Section  
 2007 University of California, San Diego, Renal Division  
 2007 Beth Israel Deaconess Medical Center, Harvard Medical School, Renal Division & Transplantation Center  
 2008 Northwestern University, Chicago, Transplant Program  
 2008 Scripps Research Institute, San Diego, Immunology Department  
 2008 Washington University, George M. O'Brien Center for Kidney Disease  
 2009 University of Alabama at Birmingham, Medical Grand Rounds  
 2010 New York University, Renal Division  
 2010 New York Society of Nephrology  
 2010 Boston University, John R. Murphy Festschrift  
 2011 University of Michigan, Immunology Program  
 2012 Paul S. Russell Lectureship in Transplantation, MGH, Harvard Medical School.  
 2013 Nephrology Section, Westmead Hospital, University of Sydney, Australia  
 2015 Section of Immunobiology, Yale University School of Medicine  
 2016 University of Helsinki, *Biomedicum*  
 2016 Emory University Transplant Center & Department of Immunology  
 2016 Harvard University, Brigham & Women's Hospital, Renal Grand Rounds  
 2016 Northwestern University (Chicago), Renal Grand Rounds  
 2016 Mayo Clinic (Rochester), Transplant Grand Rounds  
 2016 Georgetown University Transplant Center  
 2017 Columbia University, Department of Immunology  
 2017 University of Cincinnati (Children's Hospital)

2017	David Geffen School of Medicine, UCLA (Immunology Research Theme)
2017	University of Massachusetts School of Medicine (Dept. of Medicine)
2018	Université de Montréal, Centre de Recherche Hôpital Maisonneuve-Rosemont
2019	Washington University in St. Louis (Dept. of Surgery)
2019	Harbor-UCLA Medical Center (Medicine, Nephrology, Immunology)
2019	University of Chicago, Committee on Immunology
2020	The Ohio State, Transplant Division
2020	Yale University, Transplant Program
2020	Center for Immunology, University of Minnesota
2021	University of Pennsylvania's Cell Therapy and Transplantation Research Seminar
2021	Renal Grand Rounds, University Health Network, Toronto Canada
2021	Johns Hopkins Immunology Forum
2021	Duke University, Transplant Center Retreat (Keynote)
2022	Johns Hopkins, John R. Murphy Symposium
2022	Harvard Medical School, Beth Israel Hospital, Renal Division
2023	UCSF, Immunology (ImmunoX)
2023	Stanford, Division of Nephrology
2023	Northwestern University, Department of Medicine
2024	Yale, Human and Translational Immunology Program Retreat (Keynote)
2025	Emory University Transplant Center

#### **B. Invited Lectures at National and International Meetings:**

1997	The American Society of Transplant Physicians 16th Annual Meeting
1997	The American Society of Nephrology 30th Annual Meeting
1997	The Spanish Congress of Nephrology
1998	The American Society of Transplant Physicians 17th Annual Meeting
1999	The American Society of Transplantation 18th Annual Meeting
1999	Canadian Society of Transplantation/Canadian Society of Immunology
2000	American Society of Transplantation 4 <sup>th</sup> Annual Winter Symposium
2000	Transplant 2000 - Joint Meeting of the American Society of Transplant Surgeons and the American Society of Transplantation
2000	The XXth Brazilian Congress of Nephrology
2000	The American Society of Nephrology 33 <sup>rd</sup> Annual Meeting
2001	FASEB/AAI Annual Meeting
2002	American Transplant Congress
2002	FASEB Summer Meeting on Transplantation Immunology
2002	Federation of Clinical Immunology Societies (FOCIS) Meeting
2002	Asian Immunology and Oncology Forum. Beirut, Lebanon.
2003	International Society of Nephrology – Forefronts in Nephrology – Immunology in Renal Diseases (Berlin, Germany)
2003	The Raja N. Kuri Symposium on Renal Physiology, American University of Beirut
2004	American Transplant Congress
2004	American Diabetes Association 64 <sup>th</sup> Scientific Sessions
2004	FASEB Summer Meeting, Transplantation Immunology
2004	The 20 <sup>th</sup> Meeting of the Transplantation Society, Vienna, Austria
2005	International Society of Heart Lung Transplantation, Plenary Session
2006	World Transplantation Congress
2006	The Andrew Lazarovitz Lecturer at the Canadian Society of Transplantation

- 2007 The Transplantation Society Basic Science Symposium
- 2008 American Transplant Congress
- 2008 The Transplantation Society Meeting
- 2008 RiMED Annual Meeting (Rome)
- 2008 American Society of Nephrology Annual Meeting
- 2009 American Transplant Congress
- 2009 European Society of Transplantation
- 2009 Congress of the Asian Society of Transplantation (Keynote Speaker)
- 2010 American Transplant Congress
- 2010 International Congress of the Transplantation Society
- 2010 American Society of Nephrology
- 2010 American Society of Reconstructive Transplantation
- 2011 Indiana University – O’Brien Center Imaging Workshop
- 2011 American Transplant Congress
- 2011 American Society of Nephrology
- 2013 Transplantation Society of Australia and New Zealand
- 2013 Basic Science Meeting of the Transplantation Society
- 2013 American Society of Nephrology
- 2013 European Society of Transplantation
- 2014 14<sup>th</sup> Beaune Seminar (Transplantation Research), France
- 2014 American Association of Immunologists (AAI) Annual Meeting
- 2014 World Transplantation Congress
- 2015 European Society of Transplantation
- 2016 American Transplant Congress
- 2016 Basic Science Meeting, AST/ESOT
- 2017 American Transplant Congress
- 2017 European Society of Transplantation
- 2018 Keystone Symposia on Molecular and Cellular Biology (Immunological Memory)
- 2018 American Transplant Congress
- 2019 American Association of Immunologists (AAI) Annual Meeting
- 2020 American Society of Transplantation Annual Meeting
- 2020 The Transplantation Society Annual Meeting
- 2020 The Canadian Society of Transplantation (Keynote)
- 2021 American Transplant Congress
- 2022 Autumn Immunology Conference, Chicago
- 2022 Francophone Society of Transplantation, Lyon, France (Keynote)
- 2024 American Association of Immunologists (AAI) Annual Meeting
- 2024 American Transplant Congress
- 2024 11<sup>th</sup> International Living Donor Abdominal Organ Transplant Conference, Rome, Italy
- 2024 16<sup>th</sup> International Congress on Lung Transplantation, Paris, France (Keynote)
- 2024 American Society of Nephrology Renal Week (Barbara Murphy Endowed Lectureship)
- 2024 Annual Nephrology Meeting, University of Regensburg, Germany
- 2025 Federation of Clinical Immunology Societies (FOCIS), Boston
- 2025 European Society of Transplantation, London, UK
- 2025 World Transplantation Congress, San Francisco

#### XIV. COMMUNITY SERVICE:

Multiple years: Science Fair Organizing Committee: Fairview Elementary & Dorsyville Middle Public Schools, Pittsburgh

Multiple years: Judge, International Science Fair

#### XV. TRAINEES:

1992-present Served as clinical mentor for medical students, residents, and clinical fellows on renal transplant service at Emory, Yale, and the University of Pittsburgh

1992-present Mentored 30+ post-doctoral research fellows and 10+ junior faculty in the laboratory, including NIH K08-awardees (Daniel Goldstein, Geetha Chalasani, Mark Snyder, Aravind Cherukuri) at Emory, Yale, and the University of Pittsburgh

2001-present Mentored 2 MD/PhD (MSTP) students (Jeff Walch & Roger Tieu), 3 PhD students (Tim Hand, Sabrina Rosa, Dawn Reichenbach), and 1 MD (PSTP) student (Andrew Hughes) at Yale and the University of Pittsburgh

Present: Currently mentoring 2 post-doctoral fellows (Riwa Kanj, Zhouqi Tang)

#### **Selected trainees with established academic careers:**

- 1. Daniel R. Goldstein, MD:** Eliza Maria Mosher Collegiate Professor in Internal Medicine, Director, Michigan Biology of Cardiovascular Aging, University of Michigan. (until his passing in 2024)
- 2. Enver Akalin, MD:** Professor of Clinical Medicine and Surgery and Medical Director, Kidney and Pancreas Transplantation, Albert Einstein College of Medicine, NY
- 3. Sandra Neiva Coelho, MD:** Professor of Medicine/Nephrology, Universidade Federal de Pernambuco, Brazil.
- 4. Zhenhua Dai, MD, PhD:** Professor/Senior Scientist, Guangdong Provincial Academy of Chinese Medical Sciences and the 2nd Affiliated Hospital of Guangzhou University of Chinese Medicine, Guangzhou, China
- 5. Geetha Chalasani, MD:** Associate Professor of Medicine, Renal-Electrolyte Division, University of Pittsburgh.
- 6. Anirban Bose, MD:** Clinical Associate Professor of Medicine/Nephrology, University of Rochester, NY
- 7. Daniel Zecher, MD:** Professor, Department of Nephrology, University Hospital Regensburg, Germany
- 8. Timothy W. Hand, PhD:** Associate Professor of Pediatrics and Immunology, University of Pittsburgh
- 9. Daqiang Zhao, MD, PhD:** Associate Professor of Transplant Surgery, Tongji Hospital, Huazhong University of Science and Technology, Wuhan, China
- 10. Martin H. Oberbarnscheidt, MD, PhD:** Assistant Professor of Surgery & Immunology, University of Pittsburgh
- 11. Isam W. Nasr, MD:** Assistant Professor of Surgery, Associate Director, Pediatric Trauma Program, Johns Hopkins University, Baltimore, MD
- 12. Geoffrey Camirand, PhD:** Assistant Professor of Surgery and Immunology, University of Pittsburgh
- 13. Khodor Abou-Daya, MD:** Assistant Professor of Surgery, University of Pittsburgh

#### XVI. TEACHING

##### **University Courses:**

2001-2005 Yale University School of Medicine Immunobiology for Medical Students

2001-2005 Yale University School of Medicine Immunobiology Seminar Course for Graduate Students

2001-2005 Yale University School of Medicine Immunobiology 531b (undergraduate and graduate students)

2005-present	Lecturer, University of Pittsburgh Starzl Transplantation Institute & Department of Immunology
2006	University of Pittsburgh Department of Immunology Seminar Series
2006	University of Pittsburgh Joint Collaborative Conference in the Division of Pulmonary, Allergy, and Critical Medicine
2006	<i>Keynote Speaker</i> , University of Pittsburgh Winter Academy, Naples, FL
2006	University of Pittsburgh Pediatric Grand Rounds
2006	University of Pittsburgh Evolutionary Biology Consortium [organizer]
2007	Scholarly Project, University of Pittsburgh School of Medicine
2008	<i>Keynote Speaker</i> , RiMED (Rome), University of Pittsburgh
2009	<i>Keynote Speaker</i> , MSTP, 2 <sup>nd</sup> Look, University of Pittsburgh
2010	Children's Hospital Research Seminar in Molecular Medicine, University of Pittsburgh
2011	STI Fellows' Seminar, University of Pittsburgh
2011, 12, &17	Speaker, Acute Kidney Injury Symposium, University of Pittsburgh <b>Symposium co-organizer 2011-2019</b>
2012	Speaker, Pittsburgh-Tsinghua Symposium
2013	Speaker, Pittsburgh-Tsinghua-HKUST Symposium
2013-2016	Ethics of Human Subject Research for Graduate Students, University of Pittsburgh
2015	Speaker, Immunology Retreat, University of Pittsburgh
2017	Speaker, Acute Kidney Injury Symposium, University of Pittsburgh
2018	Speaker, Immunology Retreat, University of Pittsburgh
2023	Speaker, Immunology Seminar Series, University of Pittsburgh
2024	Speaker, TTT Immunology Retreat, University of Pittsburgh

#### National & International Courses:

1997 - 2000	The American Society of Transplantation Fellows' Symposium on Transplantation Medicine <b>Course Organizer in 2000</b>
1998 - 2003	The American Society of Nephrology Postgraduate Education Courses "Renal Transplantation: From Bench to Clinic" <b>Course Organizer in 1999 &amp; 2000</b>
1999	The American Society of Nephrology 4th Annual Board Review Course
2001	The American Society of Transplantation 5 <sup>th</sup> Annual Winter Symposium "The Road to Clinical Tolerance" <b>Symposium Organizer</b>
2003	American Transplant Congress – Postgraduate Course
2002 - 2003	American Society of Nephrology Annual Meeting – Postgraduate Course
2006	FASEB Summer Meeting: Transplantation Immunology <b>Course Organizer</b>
2006	American Society of Nephrology – Postgraduate Course
2008	The Transplantation Society Basic Science Symposium
2008	FASEB Summer Meeting: Transplantation Immunology <b>Course Organizer</b>
2008-2009	FOCIS Advanced Course in Basic and Clinical Immunology
2009 - 2013	American Transplant Congress – Postgraduate Course
2010	International Congress of the Transplantation Society – Postgraduate Course
2012	American Society of Nephrology - Advances in Research Conference: Alloimmunity

and Autoimmunity

**Course Organizer**

2017-present International Workshop on Transplantation Tolerance (Biennial Meeting)  
Member, Executive Organizing Committee  
Workshop Organizer 2019

**Teaching Awards:** Nominated for the Bohmfalk Basic Science Teaching Award at Yale University (2005)