"Improving Human Life by Advancing the Field of Transplantation"

Careers in the Transplantation Sciences

Presented By:
AST Basic Science Committee

Careers in the Transplantation Sciences

Through Laboratories Affiliated with the American Society of Transplantation

While organ transplantation is the treatment of choice for end stage organ disease, the immune response induced by the graft must be controlled. Recent advances have furthered our knowledge of the immunologic elements involved in acute and chronic graft rejection, but continued research is required if immunologic tolerance is to be achieved. Transplantation is at the frontier between basic and clinical research, and transplant immunology continues to be a center for the development of new immunologic paradigms. Progress will require a broad, multidisciplinary approach involving the areas of surgery, immunology, histocompatibility, pharmacology, pathology, infectious disease medicine, carcinogenesis, inflammation, and tissue repair. There is also a great need for the development and application of new technologies arising from this multidisciplinary approach. In general, these aspects of the transplant sciences are well synchronized with the new NIH roadmap, and this field will be one of the most exciting arenas to develop a scientific/medical career for many years to come.

The American Society of Transplantation (AST) invites emerging immunologists to consider the transplantation sciences as a career choice. The AST is comprised of over 2,700 physicians, surgeons, allied health professionals, and basic scientists. Areas of intense research include mechanisms of acute and chronic graft rejection, tolerance induction, basic T and B cell immunobiology, costimulatory pathways, cytokine regulation of the immune response, histocompatibility analysis, tissue repair, tissue engineering, the innate defense system, and immunopharmacology. **There are a number of laboratories across the nation and abroad currently seeking Ph.D. level post doctoral fellows who are interested in launching their career in the challenging field of transplantation science.**

For information regarding available positions at laboratories in this program please visit the AST website, www.a-s-t.org, and click on the Careers in the Transplantation Sciences link. For more information regarding careers in transplantation contact the AST National Office at ast@ahint.com.

Please View the List of Laboratories Below

Updated November 20, 2007

Laboratories In the United States

ALABAMA

Name of Institution: University of Alabama-Birmingham (UAB)
Birmingham, Alabama

Research Direction: Our lab has a focus on islet transplantation and research interest include cytoprotection, imaging of transplanted islets, and induction of tolerance.

Contact Information: Devin E. Eckhoff, M.D.
Associate Professor of Surgery
Director, Division of Transplantation
Department of Surgery
The University of Alabama at Birmingham
1530 3rd Avenue South, LHRB 748
Phone: (205) 934-7714
Fax: (205) 934-8378

CALIFORNIA

Name of Institution: Cedars-Sinai Medical Center, Transplant Immunology Laboratory
Los Angeles, California

Research Direction: To investigate the mechanism(s) responsible for the inhibitory effect of intravenous immunoglobulin (IVIG) using in vitro systems and animal models.

Contact Information: Mieko Toyoda, Ph.D.
Transplant Immunology Laboratory
Cedars-Sinai Medical Center
8723 Alden Dr. SSB #111,
Los Angeles, CA 90048
Phone: 310-423-4977
Fax: 310-423-0268
E-mail: mieko.toyoda@cshs.org

Name of Institution: Cedars-Sinai Medical Center
Los Angeles, California

Research Direction: The heart transplant research laboratory is actively involved in developing and testing animal models of transplant vasculopathy, use of viral vectors for development of gene therapies, and the use of stem cells as potential therapy for ventricular dysfunction or myocardial infarction.

Contact Information: Lawrence S. C. Czer, M.D.
Medical Director, Heart Transplant Program
or
Alfredo Trento, M.D.
Director, Cardiothoracic Surgery
Cedars-Sinai Medical Center
8700 Beverly Blvd, Room 6215
Los Angeles, CA 90048
Phone: (310) 423-3851
Fax: (310) 423-0852
Email: czer@csmc.edu
Email: CuellarC@cshs.org

Name of Institution: Loma Linda University
Loma Linda, California

Research Direction: Assist in NIH-funded islet transplant laboratory. Focus initially on the effect of growth factors on islets, transplant experiments will be in animal models. Future projects may include effect of immunosuppressants on islet function.

Contact Information: Eba Hathout, MD, FAAP
Professor of Pediatrics
Chief, Division of Pediatric Endocrinology and Diabetes
11175 Campus Street, CP A1120R
Loma Linda, California 92354
Email: ehathout@llu.edu PREFERRED
Phone: 909-558-4861
Fax: 909-558-0408

Name of Institution: Roche Palo Alto, LLC
Palo Alto, California

Research Direction: Our research activities focus on inflammation including transplantation, autoimmunity, and respiratory diseases: 1) Pre-clinical and clinical development of novel small molecule compounds and biologic agents targeting the immune cell pathways; 2) Application and development of vascularized organ transplantation and autoimmune disease models in rodents and large animals; 3) Use of state-of-the-art immunology and molecular and cellular biology techniques. Possibility of post-doctoral positions.

Contact Information: Dominic C. Borie, MD, PhD
Director, Transplantation Research
Inflammation Discovery, Roche Palo Alto, LLC
3431 Hillview Avenue, MS R7-101
Palo Alto, CA, 94304
Phone: 650-855-5746 Fax: 650-855-5501
Email: dominic.borie@roche.com

Name of Institution: Stanford University School of Medicine
Stanford, California

Research Direction: Active projects in the lab focus on: 1) the role of natural killer cells (NK) in transplantation; 2) the interactions of NK cells with dendritic cells; 3) the NK cell receptor rNKp30; and 4) modulation of hepatocyte apoptosis using reagents that target the pro-apoptotic molecule Bid.

Contact Information: Sheri M. Krams, Ph.D.
Stanford University School of Medicine
1201 Welch Road, MSLS P313
Stanford California, 94305-5492
Phone 650-498-6246
FAX 650-498-6250
Email: smkrams@stanford.edu
Website: http://www.stanford.edu/group/TIL/

Name of Institution: Stanford University
Stanford, California

Research Direction: We use information about human T lymphocytes to design novel immunotherapies, including HLA derived peptides. Active projects in the laboratory focus on the chemokine RANTES, especially regulation of its expression in T lymphocytes; the cytolytic molecule granulysin and the tolerance associated gene, lymphotactin.

Contact Information: Alan M. Krensky, M.D.
Stanford University
Department of Pediatrics
Division of Immunology and Transplantation Biology
300 Pasteur Drive
CCSR2105a
Stanford, CA 94305-5164
Phone: 650-498-6073
Fax: 650-498-6077
Email: krensky@stanford.edu

Name of Institution: Stanford University School of Medicine
Stanford, California

Research Direction: Our laboratory investigates the immune and viral aspects of Epstein-Barr virus B cell lymphomas in transplant recipients. In particular, we study the host T lymphocyte response to EBV and the tumor cell growth and cell death pathways that contribute to lymphomagenesis, In other studies we are examining the role of T regulatory cells, alternate T cell co-stimulatory molecules and cytokines in alloreactivity and tolerance induction.

Contact Information: Olivia M. Martinez, Ph.D.
Stanford University School of Medicine
1201 Welch Road, MSLS P312
Stanford, CA 94305-5492
Phone: (650) 498-6247
Fax: (650) 498-6250
Email: omm@stanford.edu

Name of Institution: Stanford University
Stanford, CA

Research Direction: Translational "bedside-to-bench" research with the use of high throughput technologies such as genomics and proteomics, to unravel the complex heterogeneity of kidney diseases, solid organ transplant rejection and tolerance. The aim of these studies is to identify potentially important diagnostic, prognostic and therapeutic markers for disease monitoring, treatment and prognosis. We have applied our studies to improve outcomes in pediatric kidney transplantation by identification of markers for acute rejection risk stratification, chronic non-human primate vascular injury, and based on our work, also developed a complete steroid avoidance protocol in pediatric kidney transplantation (currently the basis of a multicenter randomized NIH funded study).

Contact Information: Minnie Sarwal, MD MRCP PhD
Stanford University
Stanford, CA 94304-5208
Lab Office: 650-723-4517
Lab Main: 650-724-3320
Lab Fax: 650-498-6762
Email: msarwal@stanford.edu

Name of Institution: UCLA School of Medicine, Los Angeles, California

Research Direction: The main focus of our research is to unveil the mechanisms of leukocyte adhesion/migration and activation in the context of extracellular matrix (ECM) proteins and matrix metalloproteinases (MMP), in liver ischemia/reperfusion (I/R) injury.

Recent publications:
1) Fibronectin-alpha4beta1 integrin interactions regulate metalloproteinase-9 expression in steatotic liver ischemia and reperfusion injury. Am J Pathol. February 2007.
2) Metalloproteinase-9 deficiency protects against hepatic ischemia/reperfusion injury. Hepatology. September 2007.

Contact Information: Ana J. Coito, Ph.D.
Associate Professor
UCLA School of Medicine
The Dumont-UCLA Transplant Center
77-120 CHS
Box 957054
Los Angeles, CA 90095-7054
Telephone: 310-794-9480
Fax: 310- 267-2367
E-mail: acoito@mednet.ucla.edu

Name of Institution: UCLA Immunogenetics Center
Department of Pathology, David Geffen School of Medicine at UCLA
Los Angeles, California

Research Direction: Our current research efforts are focused on understanding the mechanism of chronic allograft rejection. The development of anti-HLA antibodies following transplantation is associated with transplant atherosclerosis, a manifestation of chronic allograft rejection. We postulate that anti-HLA antibodies are pathogenic in chronic rejection by binding to HLA class I molecules on endothelium and smooth muscle of the allograft and transducing signals that stimulate cell proliferation. Our studies have shown that when anti-HLA antibodies bind to distinct HLA-A and -B locus molecules on endothelial and smooth muscle cells there is increased tyrosine phosphorylation of intracellular proteins, induction of fibroblast growth factor receptor expression and cell proliferation. These studies suggest anti-HLA antibodies can play a key role in the initiation of proliferative signals, which stimulate the development of myointimal hyperplasia associated with chronic rejection of human allografts. Our current efforts are focused on elucidating the class I signal transduction pathway and studying this pathway in human transplant biopsies to obtain a better understanding of the mechanism underlying transplant rejection. Understanding this mechanism will permit the development of new therapeutic modalities to inhibit the signal transduction pathway and potentially aid in the treatment and prevention of transplant atherosclerosis. Pathway analysis of human allografts will also permit the identification of new biomarkers to diagnose rejection and monitor response to immunotherapy.

An additional focus of our research is in the development of methods for immunologic evaluation of the immune response in transplant patients. We are currently developing assays to measure both the humoral and cellular alloimmune response to the graft. These tests include monitoring of anti-HLA antibodies to identify patients at risk of rejection, monitoring the T cell indirect allorecognition pathway for the diagnosis of chronic rejection, study of immune and inflammatory gene expression during allograft rejection. We recently expanded this work to include using mass spectrometry based proteomic approaches to search for novel biomarkers for the early diagnosis of cardiac and renal transplant rejection.

Contact Information: Elaine F. Reed, Ph.D.
Professor of Pathology
Director, UCLA Immunogenetics Center,
Department of Pathology, David Geffen School of Medicine at UCLA
1000 Veteran Avenue, Rehab Bldg room 1335
Los Angeles, CA 90095
Phone: 310-794-4943
Email: ereed@mednet.ucla.edu

Name of Institution: University of California San Francisco
San Francisco, California

Research Direction: The research in my laboratory is aimed at elucidating the biological basis of immunologic tolerance and defining T-cell regulation in autoimmunity and transplantation. Basic research efforts are focused on Immune Tolerance, Islet Cell Transplantation, Autoimmune Diabetes, T cell immunity and clinical application of novel immunotherapeutics.

Contact Information: Jeffrey A. Bluestone
University of California, San Francisco
UCSF Diabetes Center
513 Parnassus Ave.
Box 0540 - HSW Room 1114
San Francisco, CA 94143-0540
Phone: 415-514-1683
Fax: 415-564-5813
Email: jbluest@diabetes.ucsf.edu

COLORADO

Name of Institution: University of Colorado Health Sciences Center
Denver, Colorado

Research Direction: My laboratory is mainly interested in quantitative assessment of hepatic function and metabolism. These are human physiology studies. I am looking for post-doc with analytical background ----- HPLC, GC/MS, stable isotopes. They would be full partner is design and implementation of studies examining heptatic function using metabolic clearance techniques, stable isotopes, balance methods, etc. The candidate would run the laboratory and manage two laboratory technicians, data analyst, and provide interface with other labs running proteomic and genomic studies. Interested candidates should send CVs to EMAIL address below or contact me via Mail/Phone/FAX/EMAIL.

Contact Information: Gregory T. Everson, M.D.
Professor of Medicine
Director of Hepatology
4200 East 9th Avenue, B-154
Denver, CO 80262
Phone: 303-315-4002
Fax: 303-372-8868
Email: michelle.jaramillo@uchsc.edu, greg.everson@uchsc.edu

CONNECTICUT

Name of Institution: Yale University School of Medicine (PI: Daniel R. Goldstein)
New Haven, Connecticut

Research Direction: One of the overall goals of Dr. Goldstein's laboratory is to understand the mechanisms of transplantation rejection and tolerance induction. The information generated from these studies may lead to improved therapy for transplant recipients. The other key goal of Dr. Goldstein's laboratory is to determine how aging modifies immune function and to develop protocols to enhance immune function with aging. Although his laboratory has predominantly employed murine experimental systems, Dr. Goldstein, a physician-scientist who treats patients with end stage diseases and after organ transplantation, is currently initiating a project in human immunology.

Recent publications:

1) Tesar BM, Walker WE, Unternaehrer J, Joshi NS, Chandele A, Haynes L, Kaech S, and Goldstein DR. Murine Myeloid Dendritic Cell Dependent Toll Like Receptor Immunity is preserved with Aging. *Aging Cell* 2006 (5) 473-486
2) Walker WE, Nasr IW, Camirand G, Tesar BM, Booth CJ, Goldstein DR. Absence of Innate MyD88 Signaling Promotes Inducible Allograft Acceptance. *The Journal of Immunology* 2006 (177):5307-5316.
3) Tesar B, Jiang D, Liang J, Palmer S, Noble P, Goldstein DR. The role of hyaluronan degradation products as innate alloimmune agonists. *American Journal of Transplantation* 2006 (6) 2622-26356
4) Tesar B and Goldstein DR Acute allograft rejection occurs independently of HSP-70. *Transplantation* 2007 (11) 1513-17
5) Walker WE and Goldstein DR Neonatal B Cells Suppress Innate Toll-Like Receptor Immune Responses and Modulate Alloimmunity. *The Journal of Immunology* 2007, (3) 1700-1710

Contact information: Daniel R. Goldstein, MD (PI)
Email: daniel.goldstein@yale.edu
Phone: 203 785 3271

FLORIDA

Name of Institution: University of Miami School of Medicine, Diabetes Research Institute
Miami, FL

Research Direction: Research is focused on studies of transplant tolerance and immune regulation in nonhuman primate islet allograft models and clinical islet transplant recipients. Areas of activity include interference with costimulation, hematopoietic chimerism, mesenchymal stem cells, T regulatory cells, development of novel assays for prediction of islet allograft rejection, alternative sites of islet implantation, and enhancement of islet engraftment.

Contact Information: Norma Sue Kenyon, Ph.D.
Martin Kleiman Chair in Diabetes Research
Professor of Surgery, Medicine, Microbiology & Immunology
Diabetes Research Institute, University of Miami School of Medicine
1450 NW 10th Avenue
Miami, FL 33136
Phone: 305-243-5346
Fax: 305-243-1042
E-mail: nkenyon@med.miami.edu

GEORGIA

Name of Institution: Emory University
Atlanta, Georgia

Research Direction: My lab is directed toward developing less morbid ways of preventing rejection. We use in vitro and animal models to develop transplant strategies, and then investigate them in clinical trials. We have significant interest in costimulatory pathways and are evaluating multiple anti-CD154 approaches pre-clinically. We are particularly interested in the expression of CD154 on platelets and the implications this has for immune activation. We are studying the role of monocytes in post-depletional immune responses and the importance of memory T-cells in determining ones alloresponsiveness.

Contact Information: Allan D. Kirk, MD, PhD, FACS
Professor of Surgery and Pediatrics
Scientific Director
Emory Transplant Center
101 Woodruff Circle, 5105-WMB
Atlanta, Georgia 30322
Tel: 404-727-8380
Fax: 404-727-3660
e-mail: adkirk@emory.edu
Web: http://www.transplant.emory.edu/kidney/index.cfm

Name of Institution: Emory Transplant Center**,** Emory University
Atlanta, GA

Research Direction: The goal of research in our laboratory is to free patients from the toxic side effects of daily immunosuppressant medicines and achieve permanent, long-term acceptance of organs. Areas of primary research focus in the laboratory include: (1) understanding the fundamental mechanisms involved in the T cell response to transplant tissues, specifically the role of costimulatory pathways in T cell activation, (2) the mechanisms involved in immunologic tolerance to self and transplanted tissues, and (3) the maintenance of protective immunity to pathogens following transplant tolerance induction. We have a strong interest in bringing basic research from mouse models, through non-human primate pre-clinical trials, and finally to clinical trials in humans.

Contact Information: Christian P. Larsen, MD DPhil
Carlos and Marguerite Mason Professor of Surgery
Director, Emory Transplant Center
Vice Chairman of Research, Department of Surgery
Director, Mason Transplantation Biology Research Center
Emory University
101 Woodruff Circle, Suite 5105
Woodruff Memorial Research Building
Atlanta, GA 30322
Ph: 404 727 8465
Fax: 404 727 3660
clarsen@emory.edu

ILLINOIS

Name of Institution: The University of Chicago
Chicago, Illinois

Research Direction: My laboratory focuses on the role of T cell-intrinsic NF-kB activation in the acute rejection of skin, heart and pancreatic islet allografts. In particular, we are investigating the mechanisms by which inhibition of T cell-NF-kB promotes transplantation tolerance. In addition, in collaboration with Anita Chong, we are interested in how bacteria and TLR agonists prevent or break transplantation tolerance.

Contact Information: Maria-Luisa Alegre, MD, PhD
Associate Professor
The University of Chicago
Department of Medicine
Section of Rheumatology
5841 S. Maryland Ave, N005C, MC0930
Tel: 773-834 4317
Fax: 773-702 8702
E-mail: malegre@midway.uchicago.edu

Name of Institution: University of Chicago
Chicago, Illinois

Research Direction: Transplantation tolerance - My lab is focused on defining the role of T regulatory cells in controlling alloreactive T and B cells, understanding the lineage of regulatory T cells and mechanisms of peripheral regulation.

Xenotransplantation - A second project in my lab is the understanding of the two paradoxical features of xenoantibodies - in inducing pathogenic injury and protective accommodation in two rodent models of antibody-mediated rejection and accommodation.

Contact Information: Anita Chong, Ph.D., Associate Professor
Transplant Surgery (MC5026), RM J547, University of Chicago
5841 S. Maryland Ave, Chicago, IL60637
Phone: 773-702-5521
Fax: 773-702-5517
Email: achong@uchicago.edu

Name of Institution: University of Illinois
Chicago, IL

Research Direction: We have observed that mesenchymal stem cells, rare stem cell residents of the bone marrow microenvironment, can directly suppress T cells in vitro, prolong skin grafts in vivo, and aid in allogeneic and xenogeneic stem cell engraftment in models of bone marrow transplantation. Our lab focuses on engineering stem cell grafts for the development of toleragenic strategies to whole organ allo- and xenografts.

Contact Information: Amelia Bartholomew, MD
840 South Wood Street
402 CSB, M/C 958
Chicago, Illinois 60612
Phone 312-996-9891
Fax: 312-996-0699
Email: ambart@uic.edu

IOWA

Name of Institution: University of Iowa Hospitals and Clinics, Department of Internal Medicine
Iowa City, Iowa

Research Direction: Our laboratory is interested in studying the mechanisms of embryonic stem cell immune privilege in a transplantation model and on directed differentiation of mesenchymal stem cells. Candidates must have a strong background in Immunology and Molecular Biology. Experience in Transplantation is not a requirement.

Contact Information: Nicholas Zavazava, M.D.
Associate Professor of Internal Medicine
Director, Transplantation Research
University of Iowa Hospitals and Clinics
Department of internal Medicine, C51-F
200 Hawkins Dr., IA 52242 Iowa City, USA
Phone: 319 384 6577
Fax: 319 356 8280
Email: nicholas-zavazava@uiowa.edu

KENTUCKY

Name of Institution: University of Louisville, Kentucky
Louisville, Kentucky

Research Direction: We have pioneered a protein display approach designated as ProtEx* to engineer cells, tissues, and organs in a rapid and effective manner to display on their surface immunological proteins of interest for immunomodulation. This approach is being used to eliminate pathogenic T cells and/or induce regulatory mechanisms for tolerance to allogeneic and xenogeneic antigens using bone marrow cells, pancreatic islets, and heart grafts in rodents as model systems. For more information, visit http://ict.louisville.edu/bench/faculty/shirwan

Contact Information: Haval Shirwan, Ph.D.
University Scholar, School of Medicine,
Associate Professor, Department of Microbiology and Immunology,
Director, Molecular Immunology Program,
Institute for Cellular Therapeutics,
Baxter Bldg., Suite 404,
570 South Preston St.
University of Louisville, KY 40202-1760
Phone: 502-852-2066 (office)
Lab: 502-852-2065
Fax: 502-852-2085
E-mail: haval.shirwan@louisville.edu

Name of Institution: University of Louisville, School of Medicine
Louisville, Kentucky

Research Direction: A team of internationally recognized researchers with strong records in training productive scientists in immunology and transplantation has been formed to lead this research program. The goal is to provide high quality training in transplantation for postdoctoral fellows as a preparatory step to independent research careers.

The training committee, within the 21-member faculty group, invites applicants for postdoctoral research fellowships under a number of medical disciplines including immunology, microbiology, physiology, stem cell biology or tissue regeneration. Highly competitive salaries and state of the art research facilities are provided.

The candidates must have a Ph.D. or M.D, and be US citizens, non-citizen nationals or lawfully admitted for permanent residence.

Contact Information: Suzanne T. Ildstad, M.D.
Director, Institute for Cellular Therapeutics
Jewish Hospital Distinguished Professor of Transplantation
Professor of Surgery
University of Louisville, School of Medicine
570 South Preston Street, Ste 404
Louisville, Kentucky 40202-1760
Email: suzanne.ildstad@louisville.edu

MARYLAND

Name of Institution: The Johns Hopkins University, Immunogenetics Laboratory
Baltimore, Maryland

Research Direction: A research faculty position is available for clinical research in transplantation immunology with particular emphasis on mechanisms of down-regulation of donor-specific humoral immunity. The laboratory is a large Immunogenetics laboratory supporting the Comprehensive Transplant Center at Johns Hopkins, affording both clinical and research opportunities.

Contact Information: Mary S. Leffell, PhD
Johns Hopkins University
Immunogenetics Laboratory
2041 East Monument Street
Baltimore, MD 21502
Phone: 410-955-3600
Fax: 410-955-0431
E-mail: msleffel@jhmi.edu
Web: http://www.hopkinsmedicine.org/hla/

Name of Institution: Johns Hopkins University, Nephrology Division
Baltimore, Maryland

Research Direction: We are focusing on the role of T and B cells in ischemia reperfusion injury. We are using transgenic mouse technologies, micro-arrays, and basic immunology techniques.

Contact Information: Hamid Rabb, MD, FACP
Physician Director, Kidney Transplant Program
Johns Hopkins University School of Medicine
Ross 970
720 Rutland Ave
Baltimore, MD 21205
Phone: 410- 502-1555
Fax: 410-614-5129
Email: hrabb1@jhmi.edu

Name of Institution: Naval Medical Research Center
Bethesda, Maryland

Research Direction: The Navy Transplant program maintains active basic research in the areas of tolerance induction for skin and composite tissue transplants, expansion and use of adult stem cells in a variety of injury models, and ischemia/reperfusion injury. We currently have positions available for post-doctoral fellows.

Contact Information: Naval Medical Research Center
Douglas Tadaki
Transplantation Program
Radiation and Combat Injury Department
Combat Casualty Care Directorate
8901 Wisconsin Ave.
Building 46
Bethesda, MD 20889
Phone: (301) 295-1381
Fax: (301) 295-1237
E-mail: TadakiD@nmrc.navy.mil

Name of Institution: National Institutes of Health
Bethesda, Maryland

Research Direction: Our laboratory uses a rat heart transplant model and NIH's expertise in genomics and proteomics to study acute cardiac cellular rejection and transplant tolerance. Our research is translational in nature and we are involved in both animal and clinical protocols. Candidates should have surgical training and a background in immunology.

Contact Information: Michael A Solomon, MD
Senior Staff
NIH Clinical Center
10 Center Drive, Bldg 10, Rm 2C145
Bethesda. MD 20892
Phone: 301-496-9320
Fax: 301-402-1213
Email: MSolomon@CC.NIH.GOV

Name of Institution: University of Maryland
Baltimore, Maryland

Research Direction: Postdoctoral positions for scientists trained in immunology or related fields relevant to transplantation will be available on a sporadic basis. The Division of Cardiac Surgery in the Department of Surgery at Maryland has a long-standing interest in translational research in transplant immunology. Working mainly in primate allo- and xeno-transplantation models, we apply mechanistically informative tools to try to answer questions important to safely bring new immunomodulatory reagents and approaches to the clinic. A postdoctoral fellow in this lab will be assigned several related projects in support of existing funded studies, and encouraged to develop an independent extramurally funded research project within 3-5 years. Experience with cell culture, flow cytometry and molecular immunobiology techniques is expected, but highly motivated, well-trained investigators with other backgrounds will be considered. The research team has expertise in complex heart and lung surgical procedures; monitoring the innate and adaptive immunity over time in multiple anatomic compartments in individual primates; costimulation and chemokine receptor blockade using translational non-human primate models and multiple rodent transplant models (see *Immunologic Research*, 3:253-262, 2001; *Xenotransplantation*, 10:120-131, 2002; *Transplantation*, 75:950-959; 76:755-760; *Transplant Immunol,* 12:19-28; *Am J Transplant,* 3:680-688; 2003). The University provides excellent facilities and training for researchers in a multi-disciplinary environment. Extensive, careful mentorship is our highest priority.

Contact Information: Agnes Azimzadeh, PhD
University of Maryland School of Medicine
Division of Cardiac Surgery
10 S. Pine Street, MSTF Bldg., Rm 434C
Baltimore, Maryland 21201
Phone: 410-706-0594
Fax: 410-706-1200
E-mail: aazimzadeh@smail.umaryland.edu
Web site for the division: http://www.umaryland.edu/mdheart
Web site for U Maryland: http://www.umaryland.edu

Name of Institution: University of Maryland School of Medicine, Division of Cardiology
Baltimore, MD

Research Direction: Our laboratory is focusing on basic science mechanisms of post transplant atherosclerosis, evaluating the association of inflammation and oxidative stress on coronary artery disease as well as investigations targeting immunosuppression related nephrotoxicity.

We are looking for post docs who are capable of performing heart transplants in rodent models.

Contact information: Mandeep R. Mehra, MD
Herbert Berger Professor and Head of Cardiology
S3B06, 22 South Greene Street
Baltimore, MD 21201
Phone: 410-328-7716
Email: mmehra@medicine.umaryland.edu

MASSACHUSETTS

Name of Institution: Children's Hospital & Harvard Medical School
Boston, Massachusetts

Research Direction: We are studying the role of inflammation in transplant rejection. We are interested on the role of immune-mediated angiogenesis in the progression of inflammation, with special reference to cytokines and chemokines.

Desired Experience: Tissue culture, techniques of molecular biology (PCR, gene cloning, northern blot, Western blot etc).

Contact Information: Dr. Soumitro Pal, Ph.D.
Instructor & Associate Scientist
Harvard Medical School & Children's Hospital
Medicine/Nephrology
300 Longwood Avenue
Boston, MA 02115
Phone: 617-247-5195
E-mail: soumitro.pal@tch.harvard.edu

Name of Institution: Children's Hospital, Harvard Medical School
Boston, Massachusetts

Research Direction: Dr. Briscoe's research focuses on 3 broad areas of vascular biology that include 1) the function of leukocyte-endothelial interactions in angiogenesis and the role of angiogenesis factors in alloimmunity; 2) how leukocyte-endothelial cell interactions promote or sustain T cell activation and allorecognition; and 3) whether persistent endothelial activation is associated with or mediates chronic allograft rejection.

Contact Information: David M. Briscoe, M.D.
Children's Hospital
300 Longwood Ave.
Boston, MA 02115
Email: david.briscoe@tch.harvard.edu
Website: www.briscoelab.com

Name of Institution: Harvard Medical School / Beth Israel Deaconess Medical Center
Boston, MA

Research Direction: My research topic is the generation, function and stability of Foxp3+ regulatory T cells (Tregs) at both cellular and molecular levels. In transplantation, Foxp3+ Tregs protect target tissues from rejection by restraining the activities of cytopathic T cells. Tolerance is acquired when the cadre of antigen-specific Tregs achieves enduring functional dominance over cytopathic T cells despite cessation of therapy. Until quite recently, study of Foxp3+ Tregs was hampered by the lack of distinctive markers except for the Foxp3 transcription factor. Identification of Foxp3+ cells, however, had required methods to permeabilize and kill the cells in order to allow staining of intracellular Foxp3. We generated a bicistronic GFP knockin mouse expressing functional Foxp3 and enhanced green fluorescent protein (EGFP) under the Foxp3 promoter. This indicator mouse enables visualization, isolation and study of live Tregs.

(Continued)

Using this indicator system, we described in two separate papers (Nature 2006; 441:235-8. Nature 2007; 448:484-7) that pro-inflammatory cytokines IL-6 and IL-21 potently inhibit the generation of Foxp3+ Tregs induced by TGF-beta. Instead, IL-6/IL-21 and TGF-beta together induce the differentiation of highly pathogenic Th17 cells from naïve T cells. We thus uncovered the reciprocity of developmental pathways for transplant-protective Treg vs. transplant-destructive Th17 cells. The commitment of antigen-stimulated T cells is determined by the anti-(TGF-beta) or pro-inflammatory (TGF-beta + IL-6/IL-21) cytokines within the milieu of antigen recognition. We have also reported (J. Exp. Med. 2007; 204:1257-65) that Tregs uniquely express high levels of CD39 and CD73, two membrane-anchored ectoenzymes necessary for the generation of highly immunosuppressive adenosine molecules from ATP/AMP. CD39 deficient mice are autoimmune and exhibit defective Treg function. Thus, Foxp3+ Tregs express a distinctive set of cell surface markers that contribute to their suppressive action.

Our work has also demonstrated (Eur. J. Immunol. 2007; 37:2400-4) that certain APC preclude and others promote the commitment of naïve CD4+ T cells into Foxp3+ immunoregulatory phenotype. As antigen activation is required for commitment to the Treg phenotype, it is notable and important that Cyclosporine, an immunosuppressive agent that blocks antigen-triggered TCR signaling, inhibits while Rapamycin promotes (in a TGF-beta-dependent manner) commitment to the Treg phenotype (Am. J. Transplant. 2007; 7:1722-32). Taken together, we now began to understand that concurrent activation of naïve T cells by TCR antigenic stimulation plus TGF-beta under the influence of pro-inflammatory type of cytokines and APC prevents the generation of Tregs, but favors the differentiation into highly potent tissue-destructive Th17 cells.

While it is widely believed that the Treg phenotype represents an unchangeable commitment, we have evidence supporting the opposite. Thus, the stability of Treg phenotype poses a major challenge for the therapeutic application of these cells. Going forward, we will use molecular techniques, novel animal models and novel therapeutics, to elucidate the mechanisms responsible for the commitment and maintenance of Treg lineage.

Contact Information: Wenda Gao, Ph.D.
Tel: (617) 667-0904
Fax: (617) 667-0923
Email: wgao@bidmc.harvard.edu

Name of Institution: Harvard Medical School/ Beth Israel Deaconess Medical School
Boston, MA

Research Direction: To understand the molecular and cellular basis of transplant tolerance, allograft and xenograft rejection. To study and understand the molecular and cellular basis of autoimmunity as well as finding ways to dampen or suppress it. To understand the mechanism and role of inflammation in transplants. In using these tools we aim to design new therapeutic and diagnostic approaches and test them in animal models. Finding new approaches and treatments to cure diabetes through prevention of islets graft rejection or recurrence of autoimmune disease. Our aim is to find protocols for tolerance induction in clinical transplantation.

Contact Information: Maria Koulmanda Ph.D.
Assistant Professor of Surgery, Harvard Medical School
Director, Islet Transplantation Research Laboratory
Beth Israel Deaconess Medical Center
Harvard Institute of Medicine; Rm 1027
77 Avenue Louis Pasteur
Boston, MA 02115
Phone: 617-667-0989 , 617-667-0850
Fax: 617-667-0988
Email: mkoulman@bidmc.harvard.edu

Name of Institution: Harvard Medical School / Beth Israel Deaconess Medical Center
Boston, MA

Research Direction: To understand the mechanisms that control T cell activation, T cell apoptosis, and T cell tolerance; to develop therapeutic strategies that create stable immune tolerance to organ transplants, and to determine whether transplant tolerance can be measurable and predictable.

Contact Information: Xian C. Li, MD, PhD.
Beth Israel Deaconess Medical Center
Harvard Medical School
330 Brookline Avenue, HIM-1025
Boston, MA 02215
Tel: 617 667-0926 (office), 617 667-0855 (lab)
FAX: 617 667-0923
E-mail: xli@bidmc.harvard.edu

Name of Institution: Harvard Medical School/ Beth Israel Deaconess Medical School
Boston, MA

Research Direction: To understand the molecular and cellular basis of transplant tolerance, we design novel therapeutic and diagnostic approaches and test them in animal models. Ultimately, our goal is to obtain tolerance in clinical transplantation.

Contact Information: Terry B. Strom, MD
Professor of Medicine & Surgery, Harvard Medical School
Director, Transplant Research Center
Beth Israel Deaconess Medical Center
Harvard Institute of Medicine; Rm 1026
77 Avenue Louis Pasteur
Boston, MA 02115
Phone: 617-667-0852
Fax: 617-667-0923
Email: tstrom@bidmc.harvard.edu
Administrative coordinator: Janice Norris
Phone: 617-667-0850

Name of Institution: Massachusetts General Hospital
Boston, MA

Research Direction: We are currently pursuing the dissection of the molecular and cellular mechanisms involved in direct and indirect T cell responses involved in allograft rejection. Based upon this knowledge, we are attempting to design antigen-specific strategies in mice and non-human primate models in order to induce tolerance to alloantigens and long-term graft survival in the absence of immunosuppressive treatment.

Contact Information: Dr. Gilles Benichou
Massachusetts General Hospital
Department of Surgery, Transplantation Unit
Harvard Medical School
55 Fruit Street
THIER 807
Boston MA 02114
Phone: 617-724-4206
Fax: 617-724-3901
Email: gbenichou@partners.org

Name of Institution: Massachusetts General Hospital/Harvard Medical School
Boston, Massachusetts

Research Direction: Dr. Sykes' research is in the areas of hematopoietic cell transplantation, achievement of graft-versus-leukemia effects without GVHD, organ allograft tolerance induction and xenotransplantation. Her research program aims to utilize bone marrow transplantation as immunotherapy to achieve graft-versus-tumor effects while avoiding the common complication of such transplants, graft-versus-host disease. Her laboratory studies in this area have led to novel approaches that have been evaluated in clinical trials at MGH. Another major area of her research has been to utilize bone marrow transplantation for the induction of transplantation tolerance, both to organs from the same species (allografts) and from other species (xenografts). Her laboratory has worked toward the development of clinically feasible, non-toxic methods of re-educating the T cell, B cell and NK cell components of the immune system to accept allografts and xenografts without requiring long-term immunosuppressive therapy. Her work has also extended into the area of xenogeneic thymic transplantation as an approach to tolerance induction and into the mechanisms by which non-myeloablative induction of mixed chimerism reverses the autoimmunity of Type 1 diabetes.

Contact Information: Megan Sykes, MD
Harold and Ellen Danser Professor of Surgery and Professor of Medicine (Immunology), Harvard Medical School.
Associate Director, Transplantation Biology Research Center, Massachusetts General Hospital.
MGH East, Bldg.149-5102, 13th Street
Boston, MA 02129
Phone 617-726-4070
Fax 617-724-9892
Email megan.sykes@tbrc.mgh.harvard.edu

Name of Institute: Transplantation Biology Research Center/Massachusetts General Hospital/Harvard Medical School
Boston, MA

Research Direction: Dr. Yamada's current research interests focus on finding new means, especially using the thymus, for inducing tolerance to allogeneic and xenogeneic organ transplants in preclinical large animal models. We have developed innovative procedures to transplant thymus or islets as a vascularized graft, a so called vascularized thymic lobe (VTL) (Transplantation 2002), Thymo-Kidney (TK) (J Immol. 2000) or islet-kidney (I-K) (Transplantation 2002) or thymo-islet-kidney (TIK)(Transplantation 2002). Utilizing newly established techniques, we have reported that vascularization permits the thymus and islets to function immediately after transplantation and induce transplant tolerance in MGH-miniature swine (PNAS 2004, PNAS 2006, Diabetes 2002,). We have extended this strategy to xenotransplantation, and demonstrated longer than 80 days survival of life-supporting xenogeneic renal grafts with normal creatinine levels in baboons using GalT-KO pig kidneys co-transplanted with vascularized thymic grafts (Nature Med 2005).

Contact Information: Kazuhiko Yamada, M.D. PhD.
MGH-East, Bldg 149-9019, 13th Street
Boston, MA, 02129
Phone: 617-726-4065
Fax: 617-726-4067
E-Mail: kaz.yamada@tbrc.mgh.harvard.edu

MICHIGAN

Name of Institution: University of Michigan
Ann Arbor, Michigan

Research Direction: Our research is focused on the regulation of T cell effector mechanisms following transplantation that culminate in graft rejection versus acceptance. Emphasis is placed on cytokine manipulation and the CD40 - CD40 ligand costimulatory pathway. Additional studies are focused on cytokines involved in the development of chronic graft rejection and gene therapy in the setting of transplantation.

Contact Information: D. Keith Bishop, Ph.D.
Associate Professor
General Surgery
Director, Graduate Program in Immunology
A560 MSRB II, Box 0654
University of Michigan Medical Center
Ann Arbor, MI 48109
Phone: 734-763-0326
Fax: 734-763-6199
E-mail: kbishop@umich.edu

MINNESOTA

Name of Institution: Hennepin County Medical Center, University of Minnesota
Minneapolis, Minnesota

Research Direction: The NIH funded projects of this laboratory focus on characterization of genotypes in large number of kidney transplant recipients and their donors, to study the impact on patient outcomes. The study of gene polymorphisms focuses on (1) ischemia reperfusion injury during kidney transplantation, (2) chronic kidney allograft dysfunction and (3) cardiovascular disease and (4) pharmacogenetics. We currently have a post-doctoral fellow position open. Experience in transplantation not required. Website: http://www.hcmc.org/depts/medicine/medresearch.htm.

Desired Experience: PCR, sequencing or genotyping using Applied Biosystems Technology.

Contact Information: Ajay Israni, M.D, M.S.,
Assistant Professor of Medicine, Adjunct Assistant Professor of Epidemiology
University of Minnesota
Hennepin County Medical Center
701 Park Avenue
Minneapolis, MN 55415-1829
Telephone: (612)-347-5871
Fax: (612)-347-2003
Email: isran001@umn.edu

Name of Institution: Mayo Clinic, Transplantation Biology Program
Rochester, Minnesota

Research Direction: Our laboratory investigates how B cells and immunoglobulin modify cellular immunity (Joao et al. Journal of Immunology 2004), and mechanisms of affinity maturation of antibody responses in transplantation.

Contact Information: Marilia Cascalho MD, PhD
Mayo Clinic
200 First Street SW
Rochester MN 55905
Phone: 507 538 1536
Fax: 507-284-4957
Email: Cascalho.marilia@mayo.edu,

Name of Institution: Mayo Clinic, Transplantation Biology Program
Rochester, Minnesota

Research Direction: The Mayo Clinic Transplantation Biology Program seeks to understand the biological and immunological hurdles to transplantation and to develop novel approaches to overcoming these hurdles. Currently comprised of four closely integrated research laboratories and core facilities, members of the Transplantation Biology Program pursue cutting-edge investigation in Transplantation Immunology, B Lymphocyte Biology, Molecular Genetics, and Pharmacogenomics. Members of the program work in a highly innovative and collaborative environment that extends far beyond the walls of the program, providing a valuable partnership with the greater basic science and clinical communities at the Mayo Clinic. The program offers world-class resources to graduate students, postdoctoral fellows and clinical trainees.

Contact Information: Jeffrey L. Platt, M.D.
Mayo Clinic
200 First Street, SW
MS 2-66
Rochester, MN 55905
Phone: 507-538-0313
Fax: 507-284-4957
Email: platt.jeffrey@mayo.edu

NEBRASKA

Name of Institution: University of Nebraska Medical Center
Omaha, Nebraska

Research Direction: The laboratory examines various issues related to the transplantation of liver cells. Work focuses on examining matrix interactions and the engraftment potential, differentiated function, and proliferative capacity of different cell populations in the treatment of liver-based metabolic disorders and liver failure. Specific areas of investigated include: xenografts, embryonic and fetal cell transplants, and development of transplantable cell lines.

Contact Information: Ira Fox, MD
Department of Surgery
983285 Nebraska Medical Center
Omaha NE 68198-3285
Telephone: 402-559-8859
Fax: 402-559-3434
E-Mail: ifox@surgery.unmc.edu

Name of Institution: University of Nebraska Medical Center
Omaha, Nebraska

Research Direction: Our laboratory's focus is on small bowel transplantations, with an emphasis on the immunologic mechanisms that cause rejection and the development of non-invasive methods for the detection of rejection in small bowel allografts.

Contact Information: Debra Sudan, MD
Department of Transplant
University of Nebraska Medical Center
983285 Nebraska Medical Center
Omaha, NE 68198-3285
Phone: 402-559-6170
Fax: 402-559-3434
E-mail: dsudan@unmc.edu

Name of Institution: University of Nebraska Medical Center
Omaha, Nebraska

Research Direction: The main focus of our laboratory is modulation of the availability and function of IL-2, and how such modulation impacts immune responses. In this context, our current interest is primarily in how the association of IL-2 with heparan sulfate impacts its function.

Contact Information: Lucile Wrenshall, MD, PhD
Associate Professor, Division of Transplantation
Co-Director, Kidney-Pancreas Transplant Program
University of Nebraska Medical Center, Omaha
983285 Nebraska Medical Center
Omaha, NE 68198-3285
Email: lwrenshall@unmc.edu
Phone: 402-559-7871

NEW JERSEY

Name of Institution: University of Medicine and Dentistry of New Jersey
Newark, New Jersey

Research Direction: The focus of the laboratory is to investigate mechanisms of dendritic cell – induced allograft tolerance and dendritic cell biology. We have a funded research position available.

Contact Information: Mark L. Jordan, M.D.
Harris L. Willits Professor and Chief,
Division of Urology
University of Medicine and Dentistry of New Jersey
185 South Orange Avenue, Suite MSB G 536
Newark NJ 07103
Phone: 973-972-4488
Fax: 973-972-3892

NEW YORK

Name of Institution: Columbia University
New York, New York

Research Direction: We are studying the mechanisms of antibody mediated rejection and accommodation. We use genetically modified murine transplant models of kidney and cardiac transplantation. We also have an active laboratory studying ischemia reperfusion injury and preservation amelioration of I/R injury. We use small and large animal models for studying I/R injury.

Contact Information: Benjamin Samstein, MD
Assistant Professor of Surgery
Transplant Immunology Laboratory
Division of Abdominal Organ Transplantation
Columbia University
622 West 168th Street
PH 14 Center Room 202
New York, NY 10027
Phone: 212-305-4199
Email: bs212@columbia.edu

Name of Institution: Mt Sinai School of Medicine
New York, NY

Research Direction: Postdoctoral positions are available at the Mt. Sinai School of medicine in transplantation immunology, in the Dept of Medicine and the Institute of Immunology. The laboratories study mechanisms of transplantation rejection including the link between complement and adaptive alloimmunity using mouse models as well as translational human immunology studies.

Contact Information: Peter S. Heeger, MD
Professor of Medicine
Mt Sinai School of Medicine
Annenberg Building Box 1243
One Gustave L. Levy Plaza
NY, NY 10029
Phone: 212 241 6324
Fax: 212 987-0389
Email: peter.heeger@mssm.edu

Name of Institution: University of Rochester Medical Center (URMC)
Rochester, New York

Research Direction: *Post-Doctoral Position in B Cell Immunology and Immune Modeling:*
A postdoctoral position is available at the University of Rochester, sponsored by the NIH. The research area of the group is computational modeling of human immune responses to transplantation antigens, influenza, and orthopox viruses. The ideal candidate will have an MD, PhD or MD/PhD with laboratory experience in immunology. The candidate will have a keen interest in the study and computational modeling of B cell immune responses and methods of enhancing these responses to viral pathogens, or suppressing their responses to transplant antigens. Experimental work will focus on determining the kinetics of human B cell responses to antigen dependant and independent activation stimuli, and the signaling that alters developmental pathways. This experimental data will be integrated into computational models of immune responses for transplant immunology and biodefense. Experience with flow cytometry or computer models is a plus.

The Rochester Center for Biodefense Immune Modeling is a multidisciplinary research group that includes basic and translational immunologists, mathematicians, clinical scientists, and biomedical informatics researchers.

Interested applications should e-mail a CV, a cover letter outlining their past and present research interests, and names and contact information of three references:

Contact Information: Martin S. Zand, MD, PhD
URMC - Department of Medicine
601 Elmwood Ave – Box 675
Rochester, NY 14642
USA
Fax: 585-442-9201
Email: Martin_Zand@URMC.Rochester.edu

NORTH CAROLINA

Name of institution: Duke University Medical Center
Durham, North Carolina

Research Direction: Dr. Scott Palmer is an Associate Professor of Medicine in the Division of Pulmonary, Allergy, and Critical Care Medicine, and Medical Director of the Lung and Heart-Lung Transplantation Programs at Duke University Medical Center. He completed his internship, residency, and Pulmonary and Critical Care fellowship at Duke University Medical Center. In addition, he completed a Master's degree in Health Sciences research. Dr. Palmer is actively engaged in numerous clinical, basic, and translational research related to lung transplantation, and has authored over 70 publications in peer-reviewed journals. Dr. Palmer currently leads a multi-center study through the Duke Clinical Research Institute (DCRI) designed to determine the efficacy of oral valganciclovir in the prevention of posttransplant cytomegalovirus infection. A major research focus is understanding how activation of pulmonary innate immunity promotes the development of lung allograft rejection through genetic and genomic analysis of human transplant recipients and through the development of novel animal models of lung transplant rejection. The Duke Lung Transplant Program consistently ranks as one of the largest volume centers in the world (routinely performing 60 lung transplant operations per year), and creates a wealth of clinical, basic, and translational research opportunities for fellows and faculty.

Additional information:
http://www.dukehealth.org/physicians/DD1B943C5978223385256DFD006A9323?search_highlight=scott%20palmer

Contact Information: Scott M. Palmer, MD, MHS
Box 103002, Suite 2073 MSRB2
106 Research Drive
Duke University Medical Center
Durham, NC 27710
Phone: 919-684-0245
Fax: 919-684-5266
Email: palme002@mc.duke.edu

Name of Institution: Duke University
Durham, North Carolina

Research Direction: Our focus is on translational research designed to investigate and halt the pathogenesis and disease of *Aspergillus fumigatus*. The laboratory goal is to stop hyphal growth, and we are targeting the stress response pathways in *A. fumigatus* as a means to deciphering virulence factors and improving antifungal therapy outcomes. At present, the highlight is on the calcineurin signaling pathway in *A. fumigatus,* and we have shown some exciting results that clearly demonstrate the power of inhibiting calcineurin to stop hyphal growth.

The lab uses numerous molecular biologic approaches, genomics through real-time PCR and microarrays, *in vitro* antifungal susceptibility testing, cell viability assays, and several different animal models all to reach our goal of deciphering and then stopping *A. fumigatus* pathogenesis.

Additional Information:
http://mgm.duke.edu/microbial/mycology/steinbach/

Contact Information: William J. Steinbach, MD
Assistant Professor of Pediatrics, Molecular Genetics, and Microbiology
Division of Pediatric Infectious Diseases
Room 00541 Blue Zone, Duke South
Research Drive
Duke University Medical Center
Durham, NC 27710 USA
Office: (919) 681-1504
Aspergillus Laboratory: (919) 681-2613
Administrative Assistant: (919) 684-3734
Fax: (919) 684-8902
Email: stein022@mc.duke.edu

Name of Institution: University of North Carolina
Chapel Hill, North Carolina

Research Direction: Isolating hepatic stem cells for use in cellular transplantation with a focus on the immunologic issues associated with transplantation of endoderm-derived stem cells. In addition looking at transdifferentiation of hepatic stem cells into insulin-producing cells.

Contact Information: David Gerber
CB#7211, 2111 Bioinformatics Bldg
Chapel Hill, NC 27599-7211
Phone: 919-966-8008
Fax: 919-966-6308
Email: david_gerber@med.unc.edu

OHIO

Name of Institution: Medical College of Ohio
Toledo, Ohio

Research Direction: My laboratory is interested in evaluating mechanisms of rejection in xenotransplantation. Specifically, the laboratory is focusing on the innate immune system and we have identified a lectin receptor on the surface of macrophages that we believe is involved in direct recognition of xenogeneic carbohydrates (sugars that are seen as foreign because they are from another species). The laboratory uses techniques involving protein biochemistry, carbohydrate biochemistry and cloning/expression/functional testing of the receptors and ligands involved in this interaction.

Contact Information: Michael A. Rees, M.D., Ph.D.
Medical College of Ohio
Department of Urology
Dowling Hall, Room 2168
3065 Arlington Avenue
Toledo, OH 43614-5807
Phone: 419-383-3961
Fax: 419-383-3785

Name of Institution: The Ohio State University and Medical Center
Columbus, Ohio

Research Direction: Research directions in our laboratory include investigation of mechanisms by which host immune cells interact with transplanted parenchymal cells, the role of the local immune environment in influencing rejection responses, and development of strategies to protect cell transplants from alloimmune damage.

Contact Information: Ginny L. Bumgardner MD PhD
The Ohio State University and Medical Center
1654 Upham Drive
373 Means Hall
Columbus, Ohio 43210
Phone: 614-293-6177
Fax: 614-293-4541
Email: bumgardner-1@medctr.osu.edu

Name of Institution: The Ohio State University
Columbus, Ohio

Research Direction: Postdoctoral fellowship positions are available for individuals with strong interests in the field of transplantation immunology. This laboratory is focused on defining mechanisms of allograft rejection (particular renal and pancreatic islet) and graft-vs-host disease pathology, towards the goal of devising therapeutic strategies for specific intervention in these important clinical problems.

Contact information: Gregg A. Hadley, PhD
or Ronald Pelletier, PhD
The Ohio State University
Division of Transplant Surgery
353 Means Hall, 1654 Upham Drive
Columbus, Ohio 43210
Phone: 614-293-8860
Email: gregg.hadley@osumc.edu , ronald.pelletier@osumc.edu

Name of Institution: Ohio State University Medical Center
Columbus , Ohio

Research Direction: My laboratory is interested in the molecular manipulation of lymphocytes that leads to allotolerance. In particular I am interested in immunosuppressive therapies including medications and dietary adjuncts that affect lymphocyte differentiation in vascular transplant models. Immunoprofiling of mouse lung and heart transplant models in terms of STAT protein function and expression is one component of the research interest. Translating surrogate markers of acute and chronic rejection to clinical lung and heart transplant care is the ultimate goal of our research efforts.

Contact Information: Susan D. Moffatt-Bruce, M.D., Ph.D.
Assistant Professor of Surgery
Division of Cardiothoracic Surgery
Ohio State University Medical Center
410 West 10th Avenue, N831 Doan Hall
Columbus, Ohio 43210
Phone: (614) 293-4509
Fax: (614) 293-3453
Email: susan.moffatt-bruce@osumc.edu

Name of Institution: University of Cincinnati
Cincinnati, Ohio

Research Direction: The main interest of my laboratory is in the pathogenesis and pathology of chronic allograft nephropathy particularly transplant glomerulopathy and the neointimal hyperplasia that characterizes chronic allograft nephropathy.

Contact Information: Prabir Roy-Chaudhury MD, PhD
Associate Professor of Medicine
Division of Nephrology, University of Cincinnati
MSB G-251, 231, Albert Sabin Way
Cincinnati OH 45267-0585
Phone: (513) 558 4006
Fax: (513) 558 4309

PENNSYLVANIA

Name of Institution: Children's Hospital of Pittsburgh
Pittsburgh, PA

Research Direction: We are developing cellular and molecular tools for personalized immunosuppression in children who receive liver and intestine transplantation. Platform technologies and assay systems include multiparametric flow cytometry, and genome-wide expression and genetic variation. Laboratory expertise in first-level data-mining, programming and analysis is integrated with intramural collaborations in the area of statistical genomics.

Desired Experience: Tissue culture, techniques of molecular biology (PCR, gene cloning, northern blot, Western blot etc).

Contact Information: Rakesh Sindhi, MD, FACS
Associate Professor of Surgery
University of Pittsburgh
Division of Transplantation
3715 Fifth Avenue
Pittsburgh, PA 15213
Phone/Fax: 412-692-6110/6116
E-mail: rakesh.sindhi@chp.edu

Name of Institution: University of Pittsburgh, School of Medicine, Division of Plastic Surgery
Pittsburgh, PA

Research Direction: *Composite Tissue Transplantatio*n**:** Major soft tissue and skeletal defects, including limb amputation, represent a deficit of form and function, as well as diminution of life quality for the affected individuals. Such defects can be treated with composite tissue allografts, wide range application is limited by the current need for high dose immunosuppression. To address this problem, our laboratory investigates novel techniques aiming for the induction of donor specific tolerance to composite tissue allografts and for minimization of long-term immunosuppression. Specifically, rejection of the skin as the most immunogeneic component or a composite tissue allograft is addressed and targeted with cellular as well as pharmacological treatment.

As a second focus, quality and velocity of nerve regeneration after composite tissue allotransplantation is investigated using specifically designed strategies for monitoring nerve regeneration after face and hind limb transplantation. These tools serve as the basis to test components that may positively influence nerve regeneration.

Contact Information:
W. P. Andrew Lee, MD
Professor of Surgery
Chief, Division of Plastic Surgery
690 Scaife Hall
3550 Terrace St.
Pittsburgh, PA 15261
Phone: 412-648-9207
Fax: 412-383-8986

Stefan Schneeberger, MD
Research Assistant Professor of Surgery
Director, CTA Program
Division of Plastic Surgery
678 Scaife Hall
3550 Terrace St.
Pittsburgh, PA 15261
Phone: 412-648-9207
Fax: 412-383-8986

Xin Xiao Zheng
Associate Professor of Surgery
Division of Plastic Surgery
Director, Protein Therapeutic Core Department
Thomas E. Starzl Transplant Institute
E1546 Thomas E. Starzl Biomedical Science
200 Lothrop St.
Pittsburgh, PA 15213
Phone: (412) 648-0177
Fax: (412) 624-9493

Name of Institution: University of Pennsylvania and Children's Hospital of Philadelphia
Philadelphia, PA

Research Direction: Ongoing basic science and clinical projects concern: 1) the epigenetic regulation of Foxp3, and the roles of 2) chemokine and 3) costimulation pathways in allograft rejection and tolerance.

Contact Information Wayne W. Hancock, MD, PhD
Professor of Pathology and Laboratory Medicine
University of Pennsylvania School of Medicine
Chief of the Division of Transplantation Immunology
Children's Hospital of Philadelphia
916B ARC, 3615 Civic Ctr. Blvd.
Philadelphia, PA 19104-4318
Phone: (215) 590-8709
Email: whancock@mail.med.upenn.edu

Name of Institution: University of Pennsylvania
Philadelphia, Pennsylvania

Research Direction: The HLA research program is part of a collaborative interdepartmental research group comprised of many laboratories interested in basic molecular characteristics of immune cells, receptor-related areas, autoimmunity, viral immunity and tolerance. The HLA lab, a major component of the Penn transplant center for over 25 years, is focused on the genetics of antigen recognition by the immune system, with emphasis on Human MHC. Ongoing projects focus on the development of new techniques that can be used for mechanistic studies to evaluate immune responses to human islet cell and solid organ allografts.

Contact Information: Dr. Malek Kamoun, Director
Immunology and Histocompatibility Testing Laboratory
Department of Pathology and Laboratory Medicine
HUP
7.020 Founders Pavilion
3400 Spruce St.
Philadelphia, PA 19104
Phone: 215-662-4022
Fax: 215-349-5090
Email: malekkam@mail.med.upenn.edu

Name of Institution: University of Pennsylvania
Philadelphia, Pennsylvania

Research Direction: My laboratory studies the molecular mechanisms that control pro-inflammatory cytokine gene expression in tolerant and regulatory T cells. These mechanisms include DNA methylation, chromatin modification, transcriptional repressors and cell cycle regulation.

Contact Information: Andrew D. Wells, Ph.D.
Assistant Professor of Pathology and Laboratory Medicine
University of Pennsylvania
Joseph Stokes, Jr. Research Institute
Biesecker Liver Pediatric Disease Center
The Children's Hospital of Philadelphia
916 Abramson Research Center
3516 Civic Center Boulevard
Philadelphia, PA 19104
Phone: 215-590-8710
Fax: 215-590-7384
Email: adwells@mail.med.upenn.edu

Name of Institution: University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

Research Direction: Our NIH-funded research is directed towards (1) elucidating the role of dendritic cells in determining the balance between transplant tolerance and immunity and (2) evaluating the potential of dendritic cells for therapy of allograft rejection and promotion of transplant tolerance. Studies currently include investigations in vitro, and in both experimental models and tolerant human liver transplant recipients. Please use the link below to obtain further information.
http://immunology.medicine.pitt.edu/

Contact Information: Angus W. Thomson, Ph.D., D.Sc.
Professor of Surgery and Immunology
University of Pittsburgh Medical Center
Director of Transplant Immunology
Associate Director for Basic Research
Thomas E. Starzl Transplantation Institute
200 Lothrop Street
Biomedical Science Tower W1544
Pittsburgh, PA 15213
Phone: 412-624-6392
Fax: 412-624-117

Name of Institution: Temple University Hospital
Philadelphia, PA

Research Direction: The main focus of the laboratory centers around: 1) study the role of immunosuppressive agents in mediating T cell apoptosis and the pathways involved and 2) the effect of preservation and reperfusion injury on the post transplant immune response

Contact Information: John A. Daller, MD, PhD, FACS
Associate Professor of Surgery
Director, Abdominal Organ Transplantation
Temple University Hospital
3322 N Broad Street
Philadelphia, PA 19140
Phone: 215-707-8799
Fax: 215-707-8894
Email: john.daller@tuhs.temple.edu

TEXAS

Name of Institution: Baylor University Medical Center
Dallas, Texas

Research Direction: My laboratory has been characterizing the swine MHC genes and developing methods for molecular typing. In this project we will be performing population studies of SLA haplotype frequencies in commercial pig breeds and characterizing common alleles for their peptide binding motifs. This will be used to develop SLA/peptide tetramers for vaccine research and transplantation studies.

Contact Information: Douglas M. Smith, M.D., Ph.D.
Director, Transplant Immunology Laboratory
Baylor University Medical Center
3500 Gaston Ave.
Dallas, TX 75246
Phone: 214-820-2119
Fax: 214_820-6384
E-mail: dsmith@baylorhealth.edu

Name of Institution: Texas Medical Specialty, Inc.
Dallas, Texas

Research Direction: Texas Medical Specialty services solid organ and bone marrow transplant programs & is involved in development and evaluation of new methodologies and their implications in clinical practice.

Contact Information: Afzal Nikaein, Ph.D.
Texas Medical Specialty, Inc.
7777 Forest Lane Building c, Suite 768
Dallas, Texas 75230
Phone: 972-566-5761
Fax: 972-566-7720
E-mail: Nikaein@cs.com or Afzal.Nikaein@hcahealthcare.com

VERMONT

Name of Institution: University of Vermont
Division of Transplantation Surgery and Immunology
Burlington, Vermont

Research Direction: We are currently focusing on the state of the immune system post depletion with Campath-1H. The idea is that if we understand the homeostatically proliferating immune system we may be able to manipulate it to induce tolerance. Currently, we are focusing on the role of T lymphocytes and NK cells post depletion.

Contact Information: Abrar Khan, MD., MPhil., FACS
Chief, Division of Transplantation Surgery and Immunology
Assistant Professor of Surgery, Cell and Molecular Biology
University of Vermont / Fletcher Allen Health Care
Phone: 802 656 9695
Email: abrar.khan@med.uvm.edu

VIRGINIA

Name of Institution: Virginia Commonwealth University - Medical College of Virginia Campus
Richmond, Virginia

Research Direction: The Hume-Lee Transplant Center is host to 3 research laboratories lead by Director of Transplant Research Robert A. Fisher, MD FACS, Professor of Surgery and Pediatrics. Our laboratories include an ISO 4 hepatocyte, islet and stem cell lab, a small animal lab, and the transplant molecular biology laboratory. Valeria R. Mas, PhD, Director of Transplant Molecular Biology, Assistant Professor of Surgery and Pathology directs post Doctoral (University accredited) and Resident molecular biology studies as a mission of the Transplant Surgical Division.

On going research include tolerance induction studies in small animal models, genes related to the progression and recurrence of Hepatocellular Carcinoma in transplant patients, establishing the molecular pathways involved in chronic allograft nephropathy, angiogenesis soluble factors as HCC non-invasive markers for monitoring HCV cirrhotic patients awaiting liver transplantation, hepatocyte transplantation as a life support bridge in terminal liver failure.

Contact Information: Robert A. Fisher, MD, FACS
Director of Transplant Research
PO Box 980254
Richmond, VA 23298
Ph: 804-828-2461
Email: rafisher@vcu.edu

Name of Institution: Virginia Commonwealth University / Medical College of Virginia
Richmond, VA

Research Direction: The lab studies basic molecular mechanisms of organ preservation injury in order to advance clinical preservation of organs and tissues. The objective is to improve the quality of conventional hypothermic preservation and develop novel strategies to mitigate warm ischemic injury to advance non-heart beating donation and expand the donor pool. Molecular mechanisms and signaling of natural stress preconditioning are studied and used to induce preservation tolerance in recovered organs .

Contact Information: Martin J. Mangino, Ph.D.
Professor of Surgery, Anesthesiology, and Physiology
Virginia Commonwealth University
Medical College of Virginia
7108 West Hospital
1200 E. Broad St.
Richmond, VA 23298
Email: mjmangino@vcu.edu

WASHINGTON

Name of Institution: University of Washington
Seattle, WA

Research Direction: Our lab is focused on: 1). Mechanisms of solid organ transplant tolerance and rejection; 2) The role of liver resident leukocytes, particular DC, γδT and NKT cells in hepatic tolerance, T regulatory cell induction, and peripheral immune regulation; 3) The role of NO in liver I/R injury.

Contact Information: Wei Li, MD, PhD
Research Assistant Professor of Surgery
University of Washington Medical Center
C405, Box 356410
1959 NE Pacific Street
Seattle, WA 98195
Phone: (206) 616-9120
Fax: (206) 616-0612
Email: weili8@u.washington.edu
Website: http://depts.washington.edu/microsrg/index.html

WISCONSIN

Name of Institution: Medical College of Wisconsin
Milwaukee, Wisconsin

Research direction: Ischemia-reperfusion injury is a risk factor for kidney transplant rejection and is one of the leading causes of acute renal failure. The etiology of ischemic injury is complex involving a cascade of events including activation of inflammatory signaling pathways and oxidative stress. This predicament is observed in renal transplants that have been subjected to both warm and cold ischemia. My laboratory is interested in the role of oxidative and nitrative stress in acute renal failure and kidney transplantation. We use both animal models and cell culture systems in our work and utilize molecular and biochemical techniques. We are currently working on projects: 1) to elucidate the antioxidant protective mechanisms in the Brown Norway (BN) rat, a strain that is resistant to acute renal failure, 2) to examine the transcriptional and posttranslational regulation of antioxidant proteins in acute renal failure and kidney transplantation, and 3) to determine the role of superoxide and nitric oxide in acute renal failure and kidney transplant rejection. Our overall goal is to help devise clinical strategies that target either oxidant producing systems or utilize antioxidant systems to limit acute renal failure and prevent delayed graft function.

Contact Information: Vani Nilakantan, Ph.D.
Assistant Professor
Division of Transplant Surgery
Medical College of Wisconsin
Kidney Disease Center, H4135
8701 Watertown Plank Road
Ph: (414)456-4819
E-mail: vnilakan@mcw.edu

Name of Institution: University of Wisconsin
Madison, Wisconsin

Research Direction: We are interested in the following subject areas: 1) Mechanisms of Tolerance in Organ Allograft recipients 2) Autoimmunity induced by transplantation 3) Microchimerism, and 4) Soluble HLA and cross-presentation

Contact Information: William J. Burlingham, Ph.D.
Associate Professor of Surgery
University of Wisconsin
G4/702 CSC
600 Highland Ave.
Madison, WI 53792
Phone: 608-263-0119
Fax: 608-263-7652
Email: burlingham@surgery.wisc.edu

Name of Institution: University of Wisconsin Hospital
Madison, Wisconsin

Research Direction: The University of Wisconsin Transplantation Division has a rich history of basic research in the field of transplantation and includes 5 laboratories with NIH funding in the areas of immunology, organ preservation, and stem cell research. We have an NIH training grant to support post-doctoral training of individuals who plan a career in transplantation research. This is available for U.S. citizens or permanent residents of the U.S.

Contact Information: Dr. Stuart J. Knechtle
Division of Transplantation, University of Wisconsin Hospital
600 Highland Ave
Madison, WI 53792
E-Mail: Stuart@surgery.wisc.edu

Name of Institution: University of Wisconsin, Madison
Madison, Wisconsin

Research Direction: Our laboratory is interested in using embryonic stem (ES) cells to study pancreatic islet development. We have recently described the derivation of pancreatic progenitor cells, characterized by the expression of a homeodomain transcription factor called **p**ancreatic and **d**uodenal homeobo**x** 1 (PDX1) from murine and human ES cells.

Contact Information: Jon S. Odorico, M.D., F.A.C.S.
Assistant Professor of Surgery
Div. of Transplantation/ Dept. of Surgery
University of Wisconsin- Madison
University of Wisconsin Hospital
H4/756 CSC
600 Highland Ave.
Madison, WI 53792
Email: jon@surgery.wisc.edu
Phone: 608-263-4768
Fax: 608-262-6280
Website:
http://www.surgery.wisc.edu/transplant/research/odoricolab/index.shtml

Name of Institution: University of Wisconsin-Madison
Madison, Wisconsin

Research Direction: We are interested in the selection and evolution of Hepatitis C Virus (HCV) in transplant patients. HCV is the major indication for liver transplant, and a common reason for graft failure. By studying how immunosuppressants potentiate the virus we hope to determine how to defeat it.

Contact Information: Rob Striker, MD/PhD
University of Wisconsin-Madison
1300 University, Medical Science Bldg
Rm 4638
Madison, WI 53706
Phone: 608-262-4725
Fax: 608-262-8418
Website: www.medmicro.wisc.edu/Department/Data/striker.html

Laboratories Outside of the United States

AUSTRIA

Name of Institution: MEDICAL UNIVERSITY OF VIENNA
Vienna, Austria

Research Direction: Our group focuses on translational research in the field of transplant immunology. In particular we are developing experimental protocols for tolerance induction through donor hematopoietic cell transplantation and mixed chimerism.

Contact Information: Thomas Wekerle, MD
Div. of Transplantation, Dept. of Surgery
Waehringer Guertel 18
1090 Vienna, Austria
Phone: +43-1-40400-5621
Fax: +43-1-40400-6872;
Email: Thomas.Wekerle@meduniwien.ac.at;
Website: www.muw.ac.at/transplant-lab

CANADA

Name of Institution: University of Alberta
Edmonton, Alberta
Canada

Research Direction: Our laboratory seeks to better understand the process of recruitment of the lymphocyte from the blood to the allograft. We specifically focus on the signals integrated by the vascular endothelium that allow the lymphocyte to cross the microvascular endothelium. Engagement of cell surface adhesion molecules displayed by vascular endothelial cells elicits signal transduction pathway activation in the endothelial cell and is associated with structural changes of the endothelial cell. Identification and understanding the role of such signalling events may allow the development of novel therapeutic approaches.

Contact Information: Allan G. Murray MD
Associate Professor, Medicine
Rm 250 HMRC
University of Alberta
Edmonton, AB
Canada T6G 2S2
Phone: 780 407 8741

Name of Institution: University of Alberta
Edmonton, Alberta

Research Direction: The overarching goal of the Transplant Immunology Research Program directed by Dr. West at the University of Alberta is the development of a comprehensive research focus encompassing specific projects related to transplantation, particularily in T and B cell immunobiology and tolerance. These projects range from molecular level 'gene therapy' and cell biology investigations in murine transplant models through to clinical projects that include patient and population outcomes, quality-of-life studies and clinical drug trials. Bi-directional translational research is a crucial component in this regard, bridging the basic laboratory with the clinic.
Website: http://www.cardiactransplantresearch.med.ualberta.ca/

Contact Information: Dr. Lori J. West
Alberta Diabetes Institute
6-002, Health Research Innovation Facility, East
University of Alberta
Edmonton, Alberta, CANADA
T6G 2E1
Email: ljwest@ualberta.ca

Name of Institution: Alberta Transplant Applied Genomics Centre, University of Alberta
Edmonton, Alberta, Canada

Research Direction: Please visit our website at http://transplants.med.ualberta.ca

Contact Information: Nephrology and Transplantation Research Lab
250 Heritage Medical Research Centre
University of Alberta
Edmonton, AB T6G 2S2
Phone: 780-407-8880
Fax: 780-407-3417

Name of Institution: The University of British Columbia
Vancouver, British Columbia, Canada

Research Direction: Strategies for preserving renal graft function before and after transplantation. Projects focus on: 1) Physiological alternations and cell death in renal tissue in cold preservation (ischemia/hypothermia); 2) Donor factors in the regulation of renal inflammation during renal allograft rejection; and 3) The role of renal stem cells in renal tissue repair of renal allograft.

Contact Information: Caigan Du, Ph.D.
Assistant Professor
Department of Urologic Sciences,
The University of British Columbia
Jack Bell Research Centre
2660 Oak Street,
Vancouver, V6H 3Z6
Tel: 604-875-4111 ext 63793
E-mail: caigan@interchange.ubc.ca

Name of Institution: Robarts Research Institute, The University of Western Ontario
London, Ontario, Canada

Research Direction: The goal of the Madrenas laboratory is to discover the mechanisms that regulate T cell activation through the antigen receptor (TCR) using cutting-edge molecular and cellular approaches, and to translate these discoveries into feasible immunotherapeutic targets. Currently, we are studying the mechanisms that stabilize TCR signalosomes and that sustain signaling, the mechanism of CTLA-4-mediated signaling, and the contribution of novel kinases in the differentiation of pathogenic T cells in models of autoimmunity and alloreactivity.

Contact Information: J. Madrenas, M.D., Ph.D.
Canada Research Chair in Transplantation and Immunobiology
Professor, Microbiology and Immunology, and Medicine
Director, FOCIS Centre for Clinical Immunology and Immunotherapeutics
Room 2.05, P.O. Box 5015, 100 Perth Drive
London, Ontario, Canada N6A 5K8
Phone: (519) 663-5777, ext. 34242
FAX: (519) 663-3443
Website: http://www.robarts.ca/madrenas

Name of Institution: University of Western Ontario
London, Canada

Research Direction: One of focus of my lab is studying of chronic renal rejection by exploring the relation of TGF-β signaling pathway with the renal fibrosis. The other research focus of our laboratory is to develop and provide routine histology, immunohistochemistry, molecular pathology and other techniques to the researchers involved in experimental transplantation research.

Contact information: Bertha Garcia, MD, FRCPA, FASCP
Professor
Chairman, Department of Pathology
4044 Dental Science Building
Department of Pathology
University of Western Ontario
London, ON N6A 5C1
Tel: 519-661-2032
Fax: 519-661-3370
Email: bertha.garcia@schulich.uwo.ca
http://publish.uwo.ca/~bgarcia/

Name of Institution: Multi Organ Transplantation Program/Lawson Health Research Institute/London Health Science Center, University of Western Ontario London, Ontario, Canada

Research Direction: Our current research projects focus on CD3+CD4-CD8- (double negative, DN) regulatory T cells and induction of immune tolerance in transplantation. In addition, we are interesting in studying the role of NK cells in graft injury. Representative Publication list:

1. Zhang Z-X, Yang L, Young KJ, DuTemple B. Zhang L. Identification of a previous unknown antigen-specific regulatory cell and its mechanism of suppression. Nature Medicine. 2000. July, 6(7):782-789.
2. Zhang Z-X, Young KJ, Zhang L. CD3+CD4-CD8- ab-T cell as immune regulatory cell (Review article). J. Mol. Med. 2001, 79(8):419-427.
3. Zhang Z-X, Stanford W.L., Zhang L. Ly-6A is critical for the function of double negative T cells. Eur. J. Immunol. 2002, 32:1584-1592.
4. Zhang Z-X, Ford MS, Chen W, Zhang L. Double negative T regulatory cells can develop outside the thymus and do not mature from CD8+ T cell precursors (co-first author). J. Immunol. 2006, 177(5):2803-9.
5. Zhang Z-X, Ma Y, Wang H, Arp J, Jiang J, He K, Huang X, Madrenas J, Zhong R. Double negative T cells, activated by xenoantigen, lyse autologous B and T cells using a perforin/granzyme-dependent, Fas-FasL- independent pathway. J. Immunol. 2006.177(10):6920-9.
6. He K, Ma Y, Wang S, Min W, Zhong R, Jevnikar A, Zhang Z-X. Donor Double negative T cells promote mixed chimerism and tolerance. Eur. J. Immunol. 2007, (In press).

Contact Infromation:

Zhu-Xu Zhang, Ph.D.
Assistant Professor
Departments of Medicine, Pathology
University of Western Ontario
C8-106
Multi Organ Transplantation Program
Lawson Health Research Institute
London Health Science Center
339 Windermere Road
London, N6A 5A5
Canada
Email. zhuxu.zhang@lhsc.on.ca

COLOMBIA

Name of Institution: Grupo de Inmunología Celular e Inmunogenética
Universidad de Antioquia
Medellín Colombia

Research Direction: Our laboratory is investigating the tolerance mechanisms present in patients with long-term graft survival, including a limited number of patients without immunosuppression. We have studied the phenotype and activity of circulating T cell subsets, their TCR repertoire and the T cell signaling. We are particularly interested in the role of Tregs in human operational tolerance. We have been also studying the effect of sCD30 on graft survival.

Contact Information: Luis F. García
Coordinador
Grupo de Inmunología Celular e Inmunogenética
Sede de Investigación Universitaria
Universidad de Antioquia
Carrera 53 #61-30 Lab 410
Medellín, Colombia
Tel. +57 4 210 6446
Fax +57 4 210 6455
Email: lfgarcia@udea.edu.co

GERMANY

Name of Institution: Institute of Medical Immunology, Charite University Hospital
Berlin, Germany

Research Direction: We are focusing on the following topics in transplantation:

- developing novel therapeutic strategies to improve long-term graft survival on the basis of immunopathogensis and functional genomics
- improvement of the presently available immunosuppression of transplant patients by standardised immune monitoring programs including gene expression approaches (biomarker guided trials)
- immune monitoring guided management of infectious complications
- addressing the issue of donor-reactive memory T/B cells in transplantation by monitoring strategies and novel therapeutic options
- generation of clinical protocols for optimising immunosuppression and inducing tolerance on the basis of extended preclinical data
- development of adoptive T cell therapy (virus specific effector T cells, regulatory T cells)

Contact Information: Hans-Dieter Volk, Head of the Institute of Medical Immunology and of the Berlin-Brandenburg Center for Regenerative Therapies (BCRT)
Institute of Medical Immunology
Charite University Hospital
CCM
Charitéplatz 1
D-10117 Berlin, Germany
Email: hans-dieter.volk@charite.de

Name of Institution: Charité- Campus Virchow Clinic, Humboldt University
Berlin, Germany

Research Direction: Topics:

- Chronic graft deterioration, effects of alloantigen-dependent and independent risk factors
- HO-1 metabolism
- Brain death (in cooperation with J. Pratschke, MD, PhD)
- Marginal grafts, donor treatment
- Age related alterations of the immune response and graft immunogenicity
- Tolerance induction, regulatory T-cells

Models:

- renal, heart, liver transplantation in rats and mice (heart, renal)
- Morphology, Immunohistology, cell isolation, culture, and transferal
- RT-PCR, blotting techniques, microarray (in cooperation with the Dept. of Medical Immunology/Prof. Dr. H.-D. Volk)

Cooperation:

- Transferal of experimental data into the clinical arena (currently: donor treatment, age related immune responses)
- Dept. of Medical Immunology/Prof. Dr. H.-D. Volk/hans-dieter.volk@charite.de)
- J. Pratschke, MD, PhD (johann.pratschke@charite.de/brain death model)

Publication/funding record:

- > 100 Medline listed publications
- Continuous funding by the Deutsche Forschungsgemeinschaft for the last decade, and recently also by the EU

Contact Information: PD Dr. Stefan G. Tullius
Department of General-, Visceral- and Transplantation Surgery,
Charité- Campus Virchow Clinic, Humboldt University
Augustenburger Platz 1
D- 13353 Berlin
Germany
Phone: 0049-30-450 552303
Fax: 0049-30-450 552913
E-mail: stefan.tullius@charite.de
Housing can be provided

Name of Institution: Universitätsspital Bern (Inselspital)
Bern, Germany

Research Direction: My laboratory is currently working in the field of ABO-mismatched transplantation, Complement-inhibition, Ischemia/Reperfusion injury. We are regularly seeking for MD-students or postdocs (MD or PhD)

Contact Information: PD Dr. Paul Mohacsi, FESC, FACC
Leitender Arzt
Herzinsuffizienz und Herztransplantation
Klinik und Poliklinik für Kardiologie
Universitätsspital Bern (Inselspital)
CH 3010 Bern
Phone: +41-31-632 84 67
Fax: +41-31-632 45 60

Name of Institution: University of Wuerzburg, Zentrum Operative Medizin
Wuerzburg, Germany

Research Direction: Mechanisms of allorecognition in experimental transplantation
Mechanisms of allorecognition in human transplantation (clinical trial)
Immunmodulatory functions of MHC peptides
Non-immunologic mechanisms of chronic graft dysfunction
Tumor immunology - Specific Immunotherapies

Contact Information: Prof. Dr. Ana Maria Waaga-Gasser
University of Wuerzburg, Zentrum Operative Medizin
Dept. of Surgery,
Molecular Oncology and Immunology
Oberduerrbacher Str. 6
97080 Würzburg
Phone: +49-931-201-31715
Fax: 0931-201-31729
E-mail: waaga-gasser@chirurgie.uni-wuerzburg.de

SOUTH KOREA

Name of Institution: KEIMYUNG UNIVERSITY KIDNEY INSTITUTE
Daegu, Korea (South Korea)

Research Direction: Mechanism of Chronic allograft nephropathy; Oxidative stress and Lipid metabolism in transplantation

Contact Information : Seungyeup Han, M.D.
Keimyung Univ. Dongsan Medical Center
Div. of Nephrology Dpt. of Medicine
194 Dongsan-dong, Jung-gu, Daegu, 700-712 KOREA
Phone: +82-53-250-7399
Fax: +82-53-254-8168
Email: hansy@dsmc.or.kr

TAIWAN

Name of Institution: Chang Gung Memorial Hospital
Kaohsiung, Taiwan

Research Direction: Dendritic cell in indirect pathway

Contact Information: Mao-Meng Tiao
No 123 Ta Pei Road
Niaosung hsiang
Kaohsiung, Taiwan 833
Phone: 886-7-7317123 ext 8795
Fax: 886-7-7338009
Email: pc006581@yahoo.com.tw

UNITED KINGDOM

Name of Institution: King's College London,
London, UK

Research Direction: i) Developing pre-clinical models of transplantation tolerance
ii) Defining the fingerprint of clinical transplantation tolerance
iii) Dissecting the role of CD4+CD25+ Tregs in transplantation tolerance. Mechanism of Action, regulation of naïve and memory effector functions.

Contact Information: Professor Robert Lechler
Vice-Principal (Health)
King's College London
Room 1.4 Hodgkin Building
Guy's Campus
London SE1 1UL
Tel 020 7848 6981
Fax 020 7848 6982
Email:robert.lechler@kcl.ac.uk

Name of Institution: Sir William Dunn School of Pathology
Oxford, England

Research Direction: We are studying ways by which the immune system can be tolerised to transplanted tissues. In particular, we wish to know how antigens may selectively induce regulatory T-cells. The projects involve use of TCR-transgenic models, genetically engineered dendritic cells and the use of Serial Analysis of Gene Expression to identify functional genes of interest.

Contact Information: Prof. Herman Waldmann
Sir William Dunn school of Pathology
South Parks Road
Oxford OX13RE
Phone: 011448165275503
Fax: 011441865275501