



**"Improving Human Life by Advancing the Field of Transplantation"**

## **Careers in the Transplantation Sciences**

Presented By:

AST Basic Science Committee Work Group

Dr. Keith Bishop  
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## 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 2,000 physicians 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](http://www.a-s-t.org), and click on the Careers in the Transplantation Sciences link. For more information regarding careers in transplantation contact Dr. Keith Bishop at [kbishop@med.umich.edu](mailto:kbishop@med.umich.edu) or Rae Ann Broussard at [rbroussard@ahint.com](mailto:rbroussard@ahint.com).

**Please View the List of Laboratories Below**

## Laboratories In the United States

**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.  
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Director, Division of Transplantation  
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**Name of Institution:** University of Arkansas for Medical Sciences  
Little Rock, Arkansas

**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  
Division Chief, Transplantation and Hepatobiliary Surgery  
Director, Solid Organ Transplant Program  
University of Arkansas for Medical Sciences  
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4301 West Markham Slot 520-4  
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**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.  
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E-mail: [dsmith@baylorhealth.edu](mailto:dsmith@baylorhealth.edu)

**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  
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E-mail: [mieko.toyoda@cshs.org](mailto: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  
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Los Angeles, CA 90048  
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Email: [CuellarC@cshs.org](mailto:CuellarC@cshs.org)

**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  
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Boston, MA 02115  
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**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  
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**Name of Institution:** Cleveland Clinic Foundation/Allogene Laboratories  
Cleveland, Ohio

**Research Direction:** Allogene Laboratories is a large histocompatibility lab servicing several solid organ transplant programs and one bone marrow transplant program. A wide array of clinical and developmental research opportunities are available.

**Contact Information:** Daniel J. Cook, Ph.D.  
Allogene Laboratories/Cleveland Clinic Foundation  
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E-mail: [djc@tt.ccf.org](mailto:djc@tt.ccf.org)

**Name of Institution:** Cleveland Clinic Foundation  
Cleveland, Ohio

**Research Direction:** There are potentially postdoctoral positions at the Cleveland Clinic Foundation in Cleveland, Ohio in transplantation immunology, in the department of immunology. The laboratories study mechanisms of transplantation rejection and tolerance, as well as resistance to tolerance induction in mouse models.

**Contact Information:** Peter S. Heeger, MD  
Associate Staff and Co-Director of the Transplantation Immunology Program  
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Fax: 216-444-8372  
E-Mail [heegerp@ccf.org](mailto:heegerp@ccf.org)

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

**Research Direction:** My laboratory is currently focused on development of quantitative tests of liver function. The studies involve analytical techniques and instrumentation.

**Contact Information:** Gregory T. Everson, M.D.  
Professor of Medicine  
Director of Hepatology  
4200 East 9th Avenue, B-154  
Denver, CO 80262

**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.

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Website: [www.briscoelab.com](http://www.briscoelab.com)

**Name of Institution:** Harvard Medical School/ Beth Israel Deaconess Medical School

**Research Direction:** Transplant tolerance. What is it? How can we create it? Can we create new therapeutics to achieve tolerance? How can we recognize it?

**Contact Information:** Terry Strom, M.D.  
BIDMC/ Transplant Research Center  
77 Louis Pasteur Ave  
Harvard Institutes of Medicine; Room 1022  
Boston, MA 02115  
Phone: 617-667-0850

**Name of Institution:** Johns Hopkins University School of Medicine  
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, M.D.  
Johns Hopkins University School of Medicine  
Ross 970  
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Baltimore, MD 21205  
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**Name of Institution:** Loma Linda University  
Loma Linda, California

**Research Direction:** Assist in establishing an 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  
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Fax: 909-558-0408

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

**Research Direction:** The laboratory investigates hematopoietic cell transplantation in relation to several clinical applications, including tolerance induction. We have demonstrated that mixed hematopoietic chimerism induced with non-myeloablative conditioning in diabetic NOD mice not only induces tolerance to donor islets, but also reverses the ongoing autoimmune process (Diabetes 53:376, 2004). A post-doctoral position is available to examine the mechanisms of tolerance induction and reversal of autoimmunity.

**Contact Information:** Megan Sykes, M.D.  
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E-Mail: [megan.sykes@tbrc.mgh.harvard.edu](mailto:megan.sykes@tbrc.mgh.harvard.edu)

**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  
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Department of Surgery, Transplantation Unit  
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**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  
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**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.  
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Fax: 419-383-3785

**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  
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**Name of Institution:** The Ohio State University  
Columbus, Ohio

**Research Direction:** Our laboratory is investigating the immune factors that contribute to post-transplant malignancies, with an emphasis on post-transplant lymphoproliferative disorder (PTLD) and post-transplant skin cancer. We are currently exploring the role(s) of antigen presenting cells as well as CD4+ and CD8+ T cells in these two areas. We use in both in vitro and in vivo approaches with animal models and also have human participants in our research.

**Contact Information:** Anne M. VanBuskirk, Ph.D.  
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Fax: (614) 293-3465  
Email: [vanbuskirk.1@osu.edu](mailto:vanbuskirk.1@osu.edu)

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

**Research Direction:** Research in the lab focuses on the discovery and development of new immunosuppressive regimens to prevent organ rejection in large animal allo- and xenotransplantation models. Responsibilities will consist of designing and running pharmacokinetic/pharmacodynamic/molecular biology assays, participating in transplantation procedures and postoperative prescriptions, gathering and analyzing data, and writing scientific publications.

**Contact Information:** Dominic C. Borie, M.D., Ph.D.  
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**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 alternate T cell co-stimulatory molecules and cytokines in alloreactivity and tolerance induction.

**Contact Information:** Olivia M. Martinez, Ph.D.  
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**Name of Institution:** UCLA Medical Center  
Los Angeles, California

**Research Direction:** We hypothesize that leukocyte-extracellular matrix (ECM) interactions are critical in the development of cold liver ischemia/reperfusion (I/R) injury. The main goal of our research is to unveil the mechanisms of leukocyte adhesion/migration and activation in the context of ECM proteins, in particular fibronectin (FN), in experimental models of ex -vivo liver cold ischemia followed by transplantation.

**Contact Information:** Ana J. Coito, Ph.D.  
Assistant Professor of Surgery  
The Dumont-UCLA Transplant Center  
Division of Liver & Pancreas Transplantation  
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Fax: 310- 267-2367  
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**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  
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Fax: 415-564-5813  
Email: [jbluest@diabetes.ucsf.edu](mailto:jbluest@diabetes.ucsf.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  
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**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  
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**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  
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Fax: 319 356 8280  
Email: [nicholas-zavazava@uiowa.edu](mailto:nicholas-zavazava@uiowa.edu)

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

**Research Direction:** We are interested in tolerance induction of auto, allogeneic, and xenogeneic antigens for the purpose of preventing/treating diabetes and preventing foreign graft rejection. A series of immunomodulatory proteins and a novel technology, ProtEx, are being used to display the proteins on the surface of cells and organs in a clinically friendly and save manner to induce tolerance  
([http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12654611](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12654611) and  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list\\_uids=12479825](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=12479825)).

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University Scholar, School of Medicine,  
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**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  
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**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  
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Web site for the division: <http://www.umaryland.edu/mdheart>  
Web site for U Maryland: <http://www.umaryland.edu>

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

**Research Direction:** Post-doctoral position in a group actively pursuing immunological studies of both non-human primate and clinical islet allograft recipients. Goals of the group are: 1) identification of safer methods of immune intervention, and ultimately, protocols for tolerance induction and 2) identification of methods for assessing the functional status of recipient T cells, correlation of function with graft status, and ideally, development of approaches for intervention when rejection and/or recurrent autoimmunity are decreasing functional islet mass.

**Contact Information:** Norma Sue Kenyon, Ph.D.  
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**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.  
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General Surgery  
Director, Graduate Program in Immunology  
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**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  
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Newark NJ 07103  
Phone: 973-972-4488  
Fax: 973-972-3892

**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  
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983285 Nebraska Medical Center  
Omaha, NE 68198-3285  
Email: [lwrenshall@surgery.unmc.edu](mailto:lwrenshall@surgery.unmc.edu)  
Phone: 402-559-2556

**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  
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E-Mail: [ifox@surgery.unmc.edu](mailto:ifox@surgery.unmc.edu)

**Name of Institution:** University of Pennsylvania  
Philadelphia, Pennsylvania

**Research Direction:** A major project ongoing in my laboratory is to study the role of epigenetic modulation of DNA methylation and chromatin structure at effector cytokine genes during tolerance induction. I have a position available for a post-doctoral fellow interested in T cell tolerance research.

**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

**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](mailto:malekkam@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: 412-624-1172

**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  
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Chapel Hill, NC 27599-7211  
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Fax: 919-966-6308  
Email: [david\\_gerber@med.unc.edu](mailto:david_gerber@med.unc.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  
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G4/702 CSC  
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Email: [burlingham@surgery.wisc.edu](mailto:burlingham@surgery.wisc.edu)

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

**Research Direction:** Our lab is focused on studying pancreatic islet development and differentiation from embryonic stem cells with the long term objective of generating transplantable ES cell-derived islet tissue for treating diabetes. We are also studying the immunogenicity of ES cell derivatives and the implications for transplantation.

**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](mailto:jon@surgery.wisc.edu)  
Phone: 608-263-4768  
Fax: 608-262-6280

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

**Research Direction:** The University of Wisconsin Division of Transplantation in the Department of Surgery has received a five-year NIH training grant to provide comprehensive training to MDs and PhDs wishing to pursue two years of post-graduate education in transplantation research. To be eligible, the candidates must be United States citizens in order to apply. The purpose of this grant is to develop translational research in the field of organ transplantation through a comprehensive curriculum combined with basic experimental research in transplantation immunology, organ preservation, or stem cell therapy applications in transplantation.

**Contact Information:** Majed M Hamawy, Ph.D.  
Senior Scientist  
H4/749  
600 Highland Ave  
Department of Surgery  
University of Wisconsin Medical School  
Madison, WI 53792  
Phone: 608-265-9149  
Lab: 608-265-9147  
Fax: 608-265-9255

**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](mailto:Stuart@surgery.wisc.edu)

**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](http://www.medmicro.wisc.edu/Department/Data/striker.html)

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

**Research Direction:** The University of Wisconsin Division of Transplantation in the Department of Surgery has received a five-year NIH training grant to provide comprehensive training to MDs and PhDs wishing to pursue two years of post-graduate education in transplantation research. To be eligible, the candidates must be United States citizens in order to apply. The purpose of this grant is to develop translational research in the field of organ transplantation through a comprehensive curriculum combined with basic experimental research in transplantation immunology, organ preservation, or stem cell therapy applications in transplantation.

**Contact Information:** Majed M Hamawy, Ph.D.  
Senior Scientist  
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University of Wisconsin Medical School  
Madison, WI 53792  
Phone: 608-265-9149  
Lab: 608-265-9147  
Fax: 608-265-9255

**Name of Institution:** Wake Forest University School of Medicine  
Winston Salem, North Carolina

**Research Direction:** We are currently recruiting for a director for our HLA lab for the Wake Forest University transplant program. The lab is independent.

**Contact Information:** Dave Kiger at [dkiger@wfubmc.edu](mailto:dkiger@wfubmc.edu)

**Name of Institution:** Yale University  
New Haven, Connecticut

**Research Direction:** Recent publications:  
1) Critical role of the Toll-like receptor signal adaptor protein MyD88 in acute allograft rejection, . J. Clin. Invest. May 15, 2003

Recent accepted abstracts:

- 1) REJECTION OF FULLY MHC MISMATCHED ALLOGRAFTS IS INDEPENDENT OF MYD88, A TOLL/IL-1 SIGNAL ADAPTOR Acute Rejection: Basic. American Transplant Congress (Poster)
- 2) AGING IMPAIRS T CELL ACTIVATION AND TH1 IMMUNITY LEADING TO A REDUCED ABILITY TO REJECT FULLY MHC MISMATCHED SKIN ALLOGRAFTS. Acute Rejection: Novel Mechanisms. Mini oral.

**Contact Information:** Daniel R. Goldstein  
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Fax: 203-785-7567  
E-mail: [daniel.goldstein@yale.edu](mailto:daniel.goldstein@yale.edu)

## Laboratories Outside of the United States

**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](mailto:pc006581@yahoo.com.tw)

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

**Research Direction:** We are focusing on two topics in transplantation:

- developing novel therapeutic strategies to improve long-term graft survival on the basis of immunopathogenesis and functional genomics
- improvement of the presently available immunosuppression of transplant patients by standardised immune monitoring programs including gene expression approaches
- generation of clinical protocols for optimising immunosuppression and inducing tolerance on the basis of extended preclinical data

**Contact Information:** Hans-Dieter Volk, Head of the Institute of Medical Immunology  
Institute of Medical Immunology  
Charite University Hospital  
CCM  
Schumannstr. 20/21  
D-10117 Berlin, Germany  
Email: [hans-dieter.volk@charite.de](mailto: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  
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Phone: 0049-30-450 552303  
Fax: 0049-30-450 552913  
E-mail: [stefan.tullius@charite.de](mailto:stefan.tullius@charite.de)  
Housing can be provided

**Name of Institution:** Imperial College London  
London, England

**Research Direction:** i) Developing pre-clinical models of transplantation tolerance  
ii) Regulating vascular inflammation in order to inhibit leucocyte migration and tissue injury  
iii) Defining the fingerprint of clinical transplantation tolerance

**Contact Information:** Professor Robert Lechler  
Department of Immunology, Division of Medicine, Faculty of Medicine  
Imperial College London, Hammersmith campus,  
Du Cane Road, London, W12 0NN, U.K.  
Phone: 44 208 383 2088  
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E-mail: [r.lechler@imperial.ac.uk](mailto:r.lechler@imperial.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

**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:** Hospital for Sick Children, University of Toronto  
Toronto, Canada

**Research Direction:** Our laboratory investigates neonatal tolerance in both murine and human models. Our murine models are focused on cardiac allograft acceptance induced by fetal liver hemopoietic cells and on ABO-incompatible transplantation. Our human system investigates B cell tolerance induced in infants by ABO-incompatible heart transplantation. We also have active clinical trials for participation.

**Contact Information:** Dr. Lori West  
The Hospital for Sick Children  
555 University Avenue  
Toronto, ON  
Canada M5G 1X8  
Phone: 416-813-6674  
Fax: 416-813-6846  
E-mail: [lori.west@sickkids.ca](mailto:lori.west@sickkids.ca)

**Name of Institution:** University of Western Ontario  
London, Ontario

**Research Direction:** The project is to study the mechanisms of tubular epithelium injury in renal allograft rejection. Research experience in apoptosis, molecular biology (gene expression and plasmid construction) and immunohistochemistry is required for postdoc position.

**Contact Information:** Caigan Du, Ph.D.  
The Robarts Research Institute, Room#206  
100 Perth Drive,  
London, Ontario N6A 5A5  
Canada  
Phone: 519-663-5777 ext 34204  
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**Name of Institution:** University of Wuerzburg, Zentrum Operative Medizin  
Wuerzburg

**Research Direction:** Mechanisms of allorecognition in experimental transplantation  
Mechanisms of allorecognition in human transplantation (clinical trial)  
Immunomodulatory 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  
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