

CURRICULUM VITAE

Revised 6/23/2009

Name: Christian P. Larsen, M.D., D.Phil.

Office Address:

Academic Office Emory University Hospital Ph. (404) 727-5800 Fax: (404) 727-4716
1364 Clifton Road, NE
Suite B206
Atlanta, Georgia 30322

Clinical Office Mason Outpatient Transplant Clinic
1365 Clifton Road, NE, Suite B6400
Atlanta, GA 30322

Birthplace: New Haven, CT

Family: Wife: Clotilde (Cloé) A. Larsen
Daughters: Nicole Clotilde Larsen born 12/16/1982
 Jacqueline Rae Larsen born 07/25/1986

Citizenship: United States of America

Current Titles and Affiliations:

Academic appointments:

Joseph B. Whitehead Professor and Chairman, Department of Surgery
Emory University School of Medicine, Atlanta, Georgia
2009 - Present

Clinical appointments:

Director of Surgical Services
Emory Healthcare, Atlanta, Georgia
2009 – Present

Surgeon-in-Chief
Emory University Hospital, Atlanta, Georgia
2009 - Present

Associate Vice President and Executive Director, Emory Transplant Center
Emory University, Atlanta, Georgia
2008 – Present

Surgical Director, Pediatric Kidney Transplantation

Children's Healthcare of Atlanta
1999 - Present

Co-Director, Kidney/Pancreas Transplant Program
Emory University Hospital, Atlanta, Georgia
1994 - Present

Other appointments:

Training Faculty, Immunology and Molecular Pathogenesis Program
Graduate Division of Biological and Biomedical Sciences
Emory University, Atlanta, Georgia
1996 - Present

Member Immunology and Immunotherapy Program, Winship Cancer Center
Emory University School of Medicine, Atlanta, Georgia
1995 - Present

Affiliate Scientist, Yerkes Primate Research Center, Atlanta, Georgia
1993 - Present

Previous Academic and Professional Appointments:

Carlos and Marguerite Mason Professor of Surgery
Department of Surgery, Emory University, Atlanta, Georgia
2001 - 2009

Associate Professor of Surgery
Department of Surgery, Emory University School of Medicine,
Atlanta, Georgia
1996 - 2001

Assistant Professor of Surgery
Department of Surgery, Emory University School of Medicine,
Atlanta, Georgia
1991 - 1996

Assistant Professor, Joint Appointment
Winship Cancer Center, Emory University School of Medicine,
Atlanta, Georgia
1991 - 1995

Previous Administrative and/or Clinical Appointments:

Director, Emory Transplant Center
Emory University, Atlanta, Georgia

2000 - 2007

Vice Chairman of Research
Director, Renal Transplant Program
Children's Healthcare of Atlanta, Atlanta, Georgia
1999 - 2009

Division Chief, Transplantation
Department of Surgery, Emory University, Atlanta, Georgia
1999 – 2008

Director, Surgical Grand Rounds, Department of Surgery
Emory University School of Medicine, Atlanta, Georgia
1991 - 2002

Licensures/Boards:

Georgia Medical License Number: 033853
American Board of Surgery, #37769 - 1992, recertified 2001
National Board of Medical Examiners of the United States of America - 1985

Education:

1980 Bachelor of Arts, Chemistry, Emory College, Atlanta, Georgia
1984 Doctor of Medicine, Magna cum Laude, Emory University School of Medicine, Atlanta, Georgia
1990 Doctor of Philosophy, Transplantation Immunology, University of Oxford, Oxford, England
Dissertation: "The Migration and Function of Dendritic Leukocytes after Transplantation."

Postgraduate Training:

1991 - 1993 Fellow in Transplantation Surgery, Emory University Hospital, Department of Surgery, Atlanta, Georgia
1990 - 1991 Chief Resident in Surgery, Emory University Affiliated Hospitals Residency Program, Atlanta, Georgia
1988 - 1990 Livingston Surgical Research Fellow of Emory University at Nuffield Department of Surgery, University of Oxford, Oxford, England
1985 - 1988 Resident in Surgery, Emory University Affiliated Hospitals Residency Program, Atlanta, Georgia
1984 - 1985 Intern in Surgery, Stanford University Medical Center, Palo Alto, California

Committee Memberships:

National and International:

2006 - Present Mayo Clinic Scientific Advisory Board – NIH Xenotransplantation Research Consortium
2006 Ad hoc Member, National Advisory Allergy and Infectious Diseases Council

2005 Trans NIH Transplant Advisory Panel, NIH Advisory Council
 2005 Jan-Mar ASTS/Fujisawa Faculty Development Award Review Committee
 2004 Nominating Committee, American Society of Transplantation
 2003 - Present Member, NIH Clinical Islet Transplant Consortium Steering Committee
 2003 - 2004 Member, Abbott Immunoscience Scientific Advisory Council
 2001 Phase Five Communications, Beyond Acute Rejection: A New Educational Initiative Steering Committee
 2000 - 2003 Reviewer, NIH, NIAID Focus Group "Role of Clinical Research in the Extramural Program, DAIT"
 2000 - Present Chair, Steering Committee, NIH Non-Human Primate Tolerance Consortium
 1999 - 2003 NIH Steering Committee, Immune Tolerance Network
 1999 - 2003 NIH Scientific Review Committee, Immune Tolerance Network
 1999 Ad hoc Member, NAAID, DAIT Council, Allergy and Immunology
 1998 Reviewer, NIH Study Section, SAT Section
 1997 Reviewer, NIH Study Section, NHLBI Study Section
 1997 Reviewer, NIH Study Section, Program Project Grant
 1996 - 1997 Ethics Committee, American Society of Transplant Surgeons
 1996 Consultant/Reviewer, NHLBI Study Section
 1996 Reviewer, NIH Study Section, Program Project Grant
 1995 Reviewer, NIH Study Section, SAT
 1992 Reviewer, NIH Study Section Special Emphasis Panel

Regional and State:

1994 - Present Board of Directors, Georgia Transplant Foundation, Inc.

Institutional:

2009 - Present Chairs Advisory Council, Emory University School of Medicine
 2009 - Present Funds Flow Task Force, Emory Healthcare
 2009 - Present Veterans Administration (VA) Dean's Committee, Emory University School of Medicine
 2009 - Present Section Head Working Group (SHWG), The Emory Clinic
 2009 - Present Quality Council, Emory Healthcare
 2009 - Present Physician Steering Committee for Clinical Redesign, Emory Healthcare
 2009 - Present Professional Services Committee, Emory University Hospital
 2009 - Present Chair, Operating Room Committee, Emory University Hospital
 2009 - Present Medical Advisory Committee, Emory University Hospital
 2009 - Present Heart and Vascular Board, Emory University
 2009 - Present Emory Medical Care Foundation (EMCF), Emory Healthcare
 2009 - Present Emory Medical Care Foundation Finance Committee, Emory Healthcare
 2009 - Present Council of Chairs, Emory University School of Medicine
 2009 - Present Chairs Committee, Emory University School of Medicine
 2009 - Present Center for Comprehensive Informatics Charter Committee, Emory University
 2008 - Present President's Advisory Commission on Research Integrity and Professional Conflict Management, Emory University
 2008 - Present Heart and Vascular Center of Excellence Charter Committee, Emory University

2008 - Present	Woodruff Health Sciences Leadership Council, Emory Healthcare
2008 - Present	Clinical Service and Department Integration Task Force, Emory Healthcare
2008 - Present	Clinical Integration Committee, Emory Healthcare
2008 - Present	Woodruff Health Sciences Center Research Advisory Committee, Emory University
2008 - Present	Predictive Health Steering Committee, Emory University
2008 - Present	Expedited Credentialing Committee, Emory Healthcare
2007 - Present	Woodruff Health Sciences Center of Excellence Center Leadership, Emory Healthcare
2007 - Present	Woodruff Leadership Planning, Emory Healthcare
2007	Woodruff Health Sciences Center Clifton-Road Development Steering Committee
2007	Co-Chair, Interdisciplinary Centers Subcommittee
2007 - Present	School of Medicine Research Strategic Planning
2007 - 2008	School of Medicine Department of Microbiology-Immunology Chair Search Committee, Emory School of Medicine
2007	CTSA committee
2007 - Present	Atlanta Clinical and Translational Science Institute (ACTSI), Emory University
2002 - 2008	Clinical Investigator Advisory Council, Emory University
2006 - Present	Emory Healthcare Board Member
2005 - Present	Children's/Emory Oversight Committee
2005 - Present	Woodruff Health Sciences Center Performance Day (formerly Woodruff Health Sciences Center Numbers Day), Emory Healthcare
2005	Pulmonary/Lung Disorders Advisory Committee, Emory School of Medicine
2005	Dean of Research Search Committee, Emory School of Medicine
2004 - Present	Contract Pricing Committee, Emory Healthcare
2004 - Present	Chair, Department of Surgery Research Committee, Emory School of Medicine
2004	Pathology Chair Search Committee, Emory School of Medicine
2002 - Present	Woodruff Leadership Academy, Emory Healthcare
2002 - 2003	Research Strategic Planning Committee, Emory School of Medicine
1999	Yerkes Director Search Committee
1999 - 2008	Chair, Solid Organ Transplant Steering Committee
1999 - Present	Transplant 2000 Program Committee, Emory School of Medicine
1998	Medicine Chair Search Committee, Emory School of Medicine
1998	Curriculum 1 – Subcommittee, Emory School of Medicine
1997	Biomedical Core Facilities Subcommittee, Emory School of Medicine
1997	Dean's Research Advisory Committee, Emory School of Medicine
1997 - 1998	Emory School of Medicine Research Strategic Planning Committee
1997 - 1998	Co-Chair, Subcommittee for Research-Technology Strategic Planning
1996 - 1998	Chairman, Department of Surgery Research Strategic Planning Committee
1993 - Present	Evaluations and Promotions Committee for the Department of Surgery
1993 - Present	Emory Surgical Residents Promotions Committee
1981 - 1982	Emory University Medical School Curriculum Committee
1980	Emory College Honor Council

Consultantships:

September 2008 Expert Panel Reviewer, Belatacept Board of Directors, Science and Technology Sub-

Committee, Princeton, NJ
September 2008 Expert Panel Reviewer, Belatacept Advisory Board Meeting, Elizabeth, NJ
May 2007-Oct 2008 Expert Panel Reviewer, Belatacept Phase III Publications Committee Meeting, Princeton, NJ
Jan-March 2005 Expert Panel Reviewer, ASTS/Fujisawa Faculty Development Award Review Committee, American Society of Transplant Surgeons
May 2004 Expert Panel Reviewer, NIH Advisory Panel for Islet Cell Resource Centers, Bethesda, MD
April 2004 Expert Panel Reviewer, Abbott Immunology Scientific Advisory Committee Meeting, Worcester, MA
October 2002 Expert Panel Reviewer, Pfizer Pharmaceuticals, Providence, Rhode Island
December 2002 Expert Panel Reviewer, LEA29Y Transplant Advisory Board, Miami Beach, Florida
April 2001 Expert Panel Reviewer, Transplantation Research Portfolio, Novartis Pharma AG, Basel Switzerland

Manuscript Reviewer:

Annals of Surgery
American Journal of Transplantation
Graft, Editorial Board 1998
Journal of Clinical Immunology
Journal of Experimental Medicine
Nature Medicine
Journal of Immunology
New England Journal of Medicine
Nature Medicine
Journal of Experimental Medicine
Blood
Journal of Immunological Methods
Journal of Investigative Dermatology
Transplantation
Plastic and Reconstructive Surgery

Honors and Awards:

2009 Dean's Distinguished Faculty Lecture and Award, Emory University School of Medicine
2007 Thomas E. Starzl Prize in Surgery and Immunology, University of Pittsburgh
2006 TTS-Roche Award for Excellence in Translational Science, The Transplantation Society
2004 AST-Roche Basic Science Established Investigator Award, American Society of Transplantation
2002 - 2003 Dean's Clinical Investigator Award, Emory University School of Medicine
2002 Emory University- Great Teachers Lecture
1999 - 2000 Dean's Clinical Investigator Award, Emory University School of Medicine
1997 NIH Basic Science Award, American Society of Transplant Physicians,
1992 - 1994 Who's Who in Science and Engineering
1988 - 1990 Overseas Research Studentship, University of Oxford
1988 - 1990 Henry Goodger Scholarship, University of Oxford
1989 - 1990 British-American Research Fellowship of the American Heart Association

1988 - 1989 Acting Clinical Lecturer in Surgery, University of Oxford
1988 University of Oxford, Rockefeller University Exchange Fellowship
1984 Magna Cum Laude Graduate, Emory University School of Medicine
1983 Alpha Omega Alpha (Medical School National Honor Society)
1983 Emory Student Delegate to the American College of Surgeons Clinical Congress
1980 Who's Who in American Colleges
1979 Phi Beta Kappa

Society Memberships:

2002 - Present The National Kidney Foundation
2002 - Present International Pancreas and Islet Transplant Association
2001 - Present The Society of Clinical Surgery
1997 - Present American Diabetes Association
1994 - Present American College of Surgeons, Fellow (FACS)
1993 - Present American Society of Transplant Surgeons
1992 - Present American Society of Transplantation (name change from ASTP)
1992 - Present American Association of Immunologists
1992 - Present American Society for the Advancement of Science
1992 - 2006 Georgia Surgical Society
1992 - 1998 Southeastern Surgical Congress
1991 - 1998 Association for Academic Surgery
1991 - Present The Transplantation Society

Organization of National or International Conferences:

a. Administrative positions:

1. Program Committee, American Society of Transplantation, 1998

b. Sessions as chair:

1. Chair, Scientific Session: Strategies to Ameliorate Experimental Rejection, American Transplant Congress Annual Meeting, May 18, 2004.
2. Co-Chair, Plenary Session I: Clinical Islet Transplantation, 6th International Congress of the Cell Transplant Society, Atlanta, Georgia, March 2-5, 2003.
3. Chair, Pre-Meeting Symposia, Clinical Tolerance Protocols, American Transplant Congress Annual Meeting, May 31, 2003
4. Chair, Concurrent Session 41: Immunosuppression. 1998 American Society of Transplant Physicians Scientific Session, Chicago, Illinois, May 10, 1998.
5. Organizing Committee and Moderator, American Society of Transplant Physicians and American Society of Transplant Surgeons TASK FORCE on Transplantation Tolerance, Chicago, Illinois, October 23-24, 1997.
6. Chair, Costimulatory Pathways II. 1997 American Society of Transplant Physicians Scientific Session, Chicago, Illinois, May 12, 1997.

7. Chair, Concurrent Session 17: Tolerance II - Costimulatory Pathways. 1996 American Society of Transplant Physicians Scientific Session, Dallas, Texas, May 28, 1996.
8. Chair, Basic Science Symposium: T Cell Activation, Joint American Transplant Meeting, Chicago, Illinois, May 13, 2001.
9. Chair, Clinical Science Symposium, American Society of Transplant Surgeons, Chicago, Illinois, May 14, 2000.
10. Chair, 24 Experimental, IPITA, Geneva Switzerland, May 5-8, 2005.
11. Chair, Islet and Beta Cell Development and Transplantation, Moving Towards Clinical Application, 2008 Keystone Symposia, April 6-11, 2008.

Research Focus:

The mission of the research laboratories of the Emory Transplant Center is to develop new therapeutic and diagnostic approaches improve outcomes after transplantation. The areas of active investigation include studies; (1) to improve our understanding the fundamental mechanisms involved in the T cell response to transplanted tissues, specifically the role of costimulatory pathways in T cell activation and to translate this knowledge into new safe and efficacious immunosuppressive agents and approaches, (2) to define the mechanisms involved in immunologic tolerance to self and transplanted tissues and to translate this knowledge into approaches to promote transplantation tolerance while preserving protective immune functions, and 3) to develop approaches to allow successful transplantation of allogeneic or xenogeneic islets for the treatment of type 1 diabetes.

Patents:

Issued

1999 “Methods for inhibiting an immune response by blocking the gp39/CD40 and CTLA/CD28/B7 Pathways and Compositions.” Bristol-Myers Squibb Co., Princeton, NJ, Emory University, Atlanta, Georgia

Pending

“Simultaneous Bone Graft with CTLA4-Ig and GP39 Monoclonal Antibody Induce Transplantation Tolerance.”

“Method of Allogenic Hematopoietic Stem Cell Transplantation without Graft vs. Host Disease”

“Methods of Inducing Organ Transplant Tolerance and Correcting Hemoglobinopathies”

Grant Support:

a. Active support:

1. **Federally funded:**

6/25/08 – 5/31/13	National Institutes of Health, R01-AI073707, Larsen (Principal Investigator) , “Determinants of T cell Fate in Transplant Tolerance,” Total Award. \$1,250,000.
12/01/96 - 12/31/11	National Institutes of Health, 2R37-AI40519-11, Larsen (Principal Investigator) , “Activation, Apathy, Anergy and Apoptosis in Transplantation.” Total award for current funding period: \$1,150,000
8/15/02 - 5/31/12	National Institutes of Health, 2U19-AI051731-06, Larsen (Principal Investigator) Transplant Tolerance in Non-Human Primates. Total award for current funding period \$2,031,018
9/30/04 - 7/31/09	National Institutes of Health, 1U01-AI065191-03, Larsen (Co-Principal Investigator) , “Islet Transplant Costimulatory Blockade with LEA29Y. Total Award (Emory/Edmonton) \$12,947,973.
9/30/05 - 9/29/10	National Institutes of Health, N01-AI-50025, Larsen (Principal Investigator) , Immune Function and Biodefense in Children, Elderly, and Immunocompromised Populations. Total Award:
\$7,480,224.	
9/01/06 - 07/31/11	National Institutes of Health, 5T32-AI70081-02, Larsen (Co-Director) , “Advanced Research Training in Transplantation Immunobiology,” Total Award: \$664,972.
7/01/03 - 9/30/13	National Institutes of Health, EMMES Corporation, Larsen (Principal Investigator) , Collaborative Islet Transplant Registry (CITR).
4/01/04 - 12/31/10	National Institutes of Health/UCSF, N01-AI15416, 3701sc, Larsen (Site-Principal Investigator) , Safety and Efficacy of Belatacept, Daclizumab and Sirolimus in Recipients of non-HLA Identical Living-Donor Renal Transplants, “ (Protocol ITN023ST), Total award: \$349,471.

2. Private foundation funded

10/1/05 - 9/30/10	Juvenile Diabetes Research Foundation, 4-2005-1328, Larsen (Program PI, Principal Investigator of Project 1, Co-PI for Projects 2 and 5) , Strategies for Large Scale Islet Replacement. <u>Project 1:</u> Development of Immunosuppressive Regimens to Facilitate Single Donor Islet Transplantation Using Efalizumab <u>Project 2:</u> Optimizing Immunotherapy and Anatomic Site for Allogeneic Islet Transplantation in Non-Human Primates <u>Project 5:</u> Non-Human Primate Models of Xenotransplantation Total Award: \$7,631,518.
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- 12/01/06 - 11/30/09 Juvenile Diabetes Research Foundation, 21-2006-882, **Larsen (Principal Investigator)**, Translational Strategies for Pancreatic Islet Xenotransplantation in Non-Human Primates. Total Award: \$2,518,918
- 10/01/07 - 9/30/09 Juvenile Diabetes Research Foundation, 17-2007-1064, **Larsen (Co-Investigator)**, Optimization of Encapsulated Islet Xenografts.
- 2/01/01 - 8/31/08 Bristol Myers Squibb, **Larsen (Principal Investigator)**, *Protocol IM 103-100*, Open label, randomized, controlled, multiple-dose study of efficacy and safety of BMS 224818 as part of a quadruple drug regimen in renal transplantation. Total Award: \$465,316.
- 02/13/06 - 02/13/09 Bristol Myers Squibb, IM 103-008, **Larsen (Co- Investigator)**, “Belatacept Evaluation of Nephroprotection and Efficacy as First-line Immunosuppression Trial.”
- 8/01/03 - 9/30/08 Roche Pharmaceuticals, **Larsen (Co-Investigator)**, ML17140, “Evaluate early inhibitor withdrawal in recipients of primary renal allografts maintained long-term with Mycophenolate Mofetil: MMF and Sirolimus.”
- 2001 - Present Carlos & Marguerite Mason Trust (Wachovia Bank), **Larsen (Administrator)**, Development of clinically applicable strategies to induce immunosuppression-free transplant survival: an integrated approach.

b. Previous support

- 1998 - 2008 National Institutes of Health, 5P01-AI044644-09, **Larsen (Administrator and Principal Investigator)**, Transplant Tolerance: Costimulation, Cytokines and Chimerism. Total award: \$15,282,434- no cost extension
- 2005 - 2007 American Society of Transplantation, Larsen (Mentor), Characterization of the Effects of Alloreactive T Cell Population Magnitude and Affinity on Graft Rejection.” PI: Mandy Ford
- 2004 - 2007 Genzyme Corporation, Larsen (Principal Investigator), SMC-101-1025 Randomized, Prospective, Phase II Study Comparing Thymoglobulin® on a rapid discontinuation of corticosteroids protocol with standard corticosteroid therapy in living donor renal transplantation using Mycophenolate Mofetil and Tacrolimus maintenance therapy.
- 2005 - 2007 Bristol Myers Squibb, Larsen (Principal Investigator), “Adaptation and validity of the Modified Transplant Occurrence and Symptom Distress Scale for the use in LEY29 trials “Quality of Life Instrument (MTSOSDS) for Planned Phase III Study.”

- 2005 – 2006 Juvenile Diabetes Research Foundation, 6-2005-1179, Larsen (Principal Investigator), Human Islet Cell Isolation from Deceased Donor Pancreata.
- 2004 – 2006 National Institutes of Health, University of Pittsburgh, 5U01-AI051598-03-108875-2sc, Larsen (Collaborator), Rhesus monkey dendritic cells for transplant tolerance.”
- 2004 - 2006 National Institutes of Health, NIAID, 1R21-AI060609-01, Larsen (Principal Investigator), “Pathogenesis of Murine Polyomavirus Allograft Nephropathy.”
- 2003 - 2007 Novartis Pharmaceuticals, **Larsen (Co-Principal Investigator)**, “One year, multi-center, partially blind, double dummy, randomized study to evaluate the efficacy and safety of FTY720 combined with Neoral and corticosteroids vs. Cellcept combined with Neoral and corticosteroids in de novo adult renal transplant recipients.” Total Award: \$16,846.
- 2003 - 2005 American Society of Transplantation, Larsen (Mentor), “Developing A murine polyoma model to study the effects of tolerance induction”. PI Eun Han Lee
- 2002 - 2005 National Institutes of Health and UCSF, N01-AI54416-3119sc, Larsen (Site-PI), Mixed chimerism and renal allografting with non-myeloablative conditioning in patients with end-state disease due to multiple myeloma.
- 2004 - 2005 Alpha Genesis Inc., 1U01-AI49916, Larsen (Principal Investigator), “Specific pathogen free rhesus macaque breeding program.”
- 2003 - 2005 Novartis Pharmaceuticals, Larsen (Co-Principal Investigator), FTY720A, “One year, multicenter, partially blind, double dummy, randomized study to evaluate the efficacy and safety of FTY720 combined with Neoral® and corticosteroids vs. Cellcept® combined with Neoral® and corticosteroids in de novo adult renal transplant recipients.
- 2002 - 2005 Juvenile Diabetes Research Foundation, 4-2001-922, Collin Weber (PI), Larsen (Co-Principal Investigator), Project #1: Clinical Islet Transplantation: Development of Calcineurin inhibitor-free regimens using CD28 costimulation blockade. Project #2: Tolerance Induction to Primate Islet Allografts.
- 2001 - 2005 National Institutes of Health, R01-AI49155-01-AI, Mark Feinberg (PI), Larsen (Co-Principal Investigator), “Cellular Immune Responses in AIDS Pathogenesis.”
- 2002 - 2004 Hoffman-LaRoche, Larsen (Co-Principal Investigator), M67005, “The Use of Daclizumab (Zenapax®) and Mycophenolate Mofetil (CellCept®) in combination with corticosteroids and Neoral® (Low Dose versus Low

Dose followed by complete withdrawal) to optimize renal function in recipients of renal allografts.”

- 1999 - 2004 University of Tennessee and Roche, Larsen (Co-Principal Investigator), ZEN049, “An open label, comparative trial of two Daclizumab dosing strategies in combination with Tacrolimus, Mycophenolate Mofetil, and Steroids for the prevention of acute allograft rejection in simultaneous kidney/pancreas transplant patients.”
- 1999 – 2004 National Science Foundation and Georgia Tech, EEC9731643 (E-15-A01-G1-013), Larsen (Co-Principal Investigator) “Engineering Immune Acceptance of Allogeneic Islets in Rhesus Macaques.”
- 1999 - 2004 National Institutes of Health, NIAMS 5P30-AR42687-07, S. Wright Caughman (PI), Larsen (Collaborator), “Emory Skin Diseases Research Core Center, Core C: Flow Cytometry and Molecular Analysis Component.”
- 2001 – 2003 Novartis Pharmaceuticals Corp., Larsen (Principal Investigator), “Induction of Hematopoietic Chimerism and Transplantation Tolerance in Rhesus Macaques.”
- 2002 – 2003 Novartis Pharmaceuticals Corp., Larsen (Co-Principal Investigator), COLO400AUS05. “A 6-month, multicenter, randomized open label study to compare the impact of Neoral® monitoring on safety and efficacy outcomes in de novo kidney transplant recipients.”
- 1999 - 2002 National Science Foundation and Georgia Tech, EEC9731643 (E-15-A01-G1-006), Larsen (Co-Principal Investigator), “Engineering Immune Acceptance of Vascular Arterial Allografts using Costimulation Blockade”
- 2002 – 2002 Abgenix, Larsen (Principal Investigator), “Study of Chimeric 6G3 monoclonal antibody in a model of kidney allotransplantation in monkeys.”
- 1999 – 2001 National Institutes of Health, N01 AI95380, Larsen (Site-Principal Investigator) “Collaborative Network for Clinical Research on Immune Tolerance.”
- 1999 – 2001 Bristol Myers Squibb, Larsen (Principal Investigator) “The Effects of LEA29Y on Renal Allograft Survival in Rhesus Macaques (Phase II).
- 1999 - 2000 Bristol Myers Squibb, (Principal Investigator) “The Effects of LEA29Y on Renal Allograft Survival in Rhesus Macaques.” (Phase I)
- 1999 - 2000 National Science Foundation, Georgia Tech/Emory Center for Engineering

- of Living Tissues (GETC), (Co-Principal Investigator), "Immune Responses to Implanted Encapsulated Cell Systems".
- 1996 - 2000 National Institutes of Health, 1 R01 DK50762-01, (Co-Principal Investigator), "The Role of Chimerism in Transplantation Tolerance: A Nonmyeloablative Strategy Using CTLA4-Ig and Bone Marrow Transplant."
- 1997 - 1999 Baxter-Healthcare Corporation, Alan Lumsden (PI), Larsen (Co-Investigator), "Required Postmarket Surveillance (RPS) Study of the Baxter ReinforcedePTFE Vascular Graft".
- 1994 - 1999 National Institutes of Health, #AR42687, (Investigator), "NIAMS: Skin disease research core center."
- 1993 – 1998 National Institutes of Health, #5 R29 AI33588, (Principal Investigator), "Dendritic cell function in organ transplantation."
- 1992 - 1993 Schering-Plough Research Institute, (Co-Principal Investigator), "Assessment of IL-10 as an immunomodulator in organ transplant."
- 1993 - 1994 Emory University Research Committee Grant, (Co-Principal Investigator), "The mechanism of anti-CD4 monoclonal antibody induced transplantation tolerance."
- 1993 - 1994 Plastic Surgery Educational Foundation, Consultant, "Prevention of rejection in rat limb transplantation using perfusion with monoclonal antibodies (mAb)."
- 1994 - 1995 Baxter Healthcare, (Co-Principal Investigator), "Passenger leukocyte depletion and microchimerism in renal transplantation."
- 1994 - 1995 Emory University Research Committee Grant, (Co-Principal Investigator), "The mechanism of CTLA4-Ig induced transplantation tolerance."
- 1994 - 1996 American Heart Association, (Co-Principal Investigator), "The mechanism of anti-CD4 monoclonal antibody induced transplantation tolerance."
- 1994 - 1995 Bristol-Myers Squibb Pharmaceutical Research Institute, (Co-Principal Investigator), "The efficacy of CTLA4-Ig on renal allograft survival in the primate model."
- 1995 - 1996 Bristol-Myers Squibb Pharmaceutical Research Institute, (Co-Principal Investigator), "The effect of CTLA4-Ig on renal allograft survival in primates..Phase II: effect of treatment delay and combination with cyclosporine."
- 1996 - 1997 Skin Disease Research Core Center Grant, Pilot and Feasibility Grant #11, NIH AR42687-03, (Co-Principal Investigator), "The role of CD40/gp39

interactions in microvascular endothelial cell activation, T cell-EC adherence, and lymphocyte recruitment into skin and cardiac allografts”.

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| 1995 - 1997 | Carlos and Marguerite Mason Trust (Wachovia Bank), Principal Investigator, "Immunosuppression and transplant tolerance: an integrated approach." |
| 1996 - 1997 | Bristol-Myers Squibb Pharmaceutical Research Institute, Co-Principal Investigator, "The effect of CTLA4-Ig on renal allograft survival in primates. Phase III: effect of maintenance treatment in combination with cyclosporine and prednisone." |
| 1997 - 1998 | Roche Pharmaceuticals, (Co-Principal Investigator), "Analysis of a Single-Center Experience with Mycophenilate Mofetil Based Immunosuppression in Renal Transplantation". |
| 1997 - 1998 | Bristol-Myers Squibb Pharmaceutical Research Institute, Principal Investigator, "CD40/CD28 blockade on renal allograft on renal allograft survival in the Rhesus Macaque. |

Formal Teaching:

1. Concepts of Immunology Course, Emory University School of Medicine, Atlanta, Georgia, 2000 – Present- Graduate Student – 1.5 hr lecture.
2. "Immunology of Transplantation Lecture," 2nd Yr Med Students, Emory University School of Medicine, Atlanta, Georgia, 1 hr lecture 2000 - Present
3. Transplantation Immunology Lecture to Residents on "Transplantation," Emory University School of Medicine, Atlanta, Georgia, 1994 - 2005
4. Pathophysiology Lecture on "Transplantation," Emory University School of Medicine, Atlanta, Georgia, August 18, 2000.
5. Basic Science Course, Children's Healthcare of Atlanta, Atlanta, Georgia, November, 2005
6. Lunch and Learn Talk (field station personnel), Yerkes Research Center, Atlanta, Georgia, June and November, 2004

Supervisory Teaching:

a. Graduate Students directly supervised:

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|----------------|--|
| 2007 - Present | Ivanna Ferrer– PhD student, Microbiology & Immunology |
| 2004 - Present | Christopher R. Gilson – Masters student, Immunology and Molecular Pathogenesis |
| 2004 - 2008 | Shana Coley – MD/PhD student, Immunology and Molecular Pathogenesis |

2004 – 2007	Christopher R. Gilson – Masters student, Immunology and Molecular Pathogenesis
2002 - 2007	Brent Koehn – PhD, Immunology and Molecular Pathogenesis
2001 - 2002	Melody Walsh –Masters in Immunology
2000 - 2003	Thomas Jones – MD/PhD, Immunology and Molecular Pathogenesis
1999 - 2003	Andrew Adams – MD/PhD, Immunology and Molecular Pathogenesis
1998 - 2001	Matthew Williams – PhD student, Immunology and Molecular Pathogenesis
1997 - 2000	Joel Trambley – MD/PhD student, Medical Scientists Program
1996 - 1999	Adam W. Bingaman – MD/PhD student, Immunology & Molecular Pathogenesis
1996 - 1999	Joyce Tan - PhD student, Immunology & Molecular Pathogenesis
1995 - 1997	Mary O’Connell – Masters student, Immunology & Molecular Pathogenesis

b. Post-doctoral fellows directly supervised:

2009 – Present	Swetha Srinivasan, MD
2009 – Present	Peter Thompson, MD
2009 – Present	William Kitchens, MD
2008 - Present	Natalie Reisman, MD
2008 - Present	Andrew Page, MD
2008 - Present	Raul Badell, MD
2008 - 2009	Caleb Wheeler, MD
2007 - 2009	Aneesh Mehta, MD
2007 - 2009	Weston P. Miller, MD
2007 - 2009	Alexa Turner, MD
2005 - 2007	Alan Anderson, MD
2004 - 2007	Virginia Oliva, MD
2004 - 2007	Kenneth Cardona, MD
2004 - 2005	Vandad Raofi, MD
2003 - 2005	Zvonimir Milas, MD
2002 - 2005	David Tong, MD
2002 - 2006	Eun D. Lee, PhD
1998 - 2000	Megan Durham, MD, Emory University School of Medicine, Pediatric Surgery
1997 - 1999	Angello Lin, MD, Medical University of South Carolina
1996 - 1999	Adam W. Bingaman, MD, San Antonio Texas
1996 - 1998	Seung (Sunny) Yeun Rha-Waitze, MD Plastic Surgery,
1994 - 1996	Eric T. Elwood, MD, Assistant Professor of Surgery, Chief, Section of Plastic and Reconstructive Surgery and Chief, Pediatric Plastic Surgery, University of Illinois, College of Medicine, Peoria
1992 - 1996	Diane Z. Alexander, MD,
1992 - 1994	David A. Gerber, MD, University of North Carolina, Chapel Hill

International Post Doctoral Fellows

2000 - 2003	Nikos Emmanouilidis – Germany
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2000 - 2002	Sung-Joo Kim – Korea
1999 - 2003	Nozomu Shirasugi, MD – Japan
1998 - 2000	Jongwon Ha, MD - Korea
1995 - 1997	Hong Rae Cho, MD - Korea
1995 - 1996	Mohamed Dyaa Saleem, MD - Egypt

c. Residency Program

Surgical Resident Faculty Advisor

2004 -2006	Joy McCaffrey
2003	Jean-Claude Schwartz
2002 - 2006	Sumona Smith
1999	Matthew Toole
1999	Daniel Velez
1999	Russell Ronson
1999 - 2001	Adam Bingaman
1999	Malcolm McDonald

Student Training

Summer 2006	Saranya Selvaraj
Summer 2004	Justin S. Golub – Medical Student
Summer 1997	Faraz Kerendi – Medical Student
Summer 1994	David P. O'Brien – Medical Student
Summer 1993	Farzad Nahai – Medical Student
Summer 1992	Toby Matthews

International Student Training

Summer 2000	Martin Kriegel - Nuremberg, Germany
June - November 1998	Matthias Corbascio, Lund University, Sweden
1996 - 1997	Matthias Corbascio, Lund University, Sweden
Summer 1996	Matthias Corbascio, Lund University, Sweden

Other Activities:

Course Co-Director

“An Update in Transplantation.” A 8.0 CME course presented by the Emory University School of Medicine, Department of Surgery at the Mulberry in Savannah, Georgia, March 23 - 25, 2001.

“An Update on Transplantation.” A 8.0 CME course presented by the Emory University School of Medicine Department of Surgery at The Westin Savannah Harbor Resort, Savannah, Georgia, April 14 - 16, 2000.

“An Update on Transplantation”. A 7.5 CME course presented by the Emory University School of Medicine Department of Surgery at the Mulberry in Savannah, Georgia, March 19 - 21, 1999.

Lectureships, Seminar Invitations, and Visiting Professorships:

1. "Dendritic Cells in Transplantation: Friends or Foes?" Pittsburgh Transplantation Institute, University of Pittsburgh, Pittsburgh, Pennsylvania, April 20, 1995.
2. "Simultaneous Kidney-Pancreas Transplantation: The Right Therapy for ESRD Due to Type 1 Diabetes?" Pittsburgh Transplantation Institute, University of Pittsburgh, Pittsburgh, Pennsylvania, April 21, 1995.
3. "New Experimental Immunosuppressive Strategies." The Cleveland Clinic Foundation, Cleveland, Ohio, June 5, 1995.
4. "Simultaneous Kidney/Pancreas Transplantation: A Clinical Therapy Coming of Age." Surgical Grand Rounds, Georgia Baptist Hospital, Atlanta, Georgia, August 9, 1995.
5. "Update on Transplant Research at Emory." Local Nephrologists Meeting, Pricci's, Atlanta, Georgia, April, 1996.
6. "Synergistic Inhibition of Skin and Cardiac Allograft Rejection by Blockade of the CD40 and CD28 Pathways". National Symposium on Basic Aspects of Immunology, Bethesda, MD, May 1-3, 1996.
7. "How Do We Reject a Graft? Cells, Cytokines, and Effector Mechanisms of Rejection". Mini-Course: Transplantation Immunobiology for the Clinician. American Society of Transplant Physicians, Dallas, Texas, May 26, 1996.
8. "CD28/CD40 Pathways in Allograft Reject". Workshop on Tolerance Induction in Transplantation. Sandoz Pharma Ltd, Basel, Switzerland, September 16-17, 1996.
9. "Current Status of the Kidney-Pancreas Transplant Procedure". Medicine Rounds, Southeast Georgia Regional Medical Center, Brunswick, Georgia, October 4, 1996.
10. Keynote Address, "Transplantation at Emory". Medical School Family Day, Emory University, Atlanta, Georgia, October 12, 1996.
11. "The CD40 Pathway in Transplantation". American Academy of Allergy, Asthma, and Immunology Meeting, San Francisco, CA, February 21-26, 1997.
12. "The CD40 Pathway in Transplantation". Joint ASTP/ASTS Satellite Basic Science Symposium and Postgraduate Course, Chicago, Illinois, May 14, 1997.
13. "The CD40 Pathway in Transplantation". Immunology Seminar, The Cleveland Clinic, Cleveland, Ohio, June 18, 1997.
14. "The CD40 Pathway in Transplantation". From the Laboratory to the Clinic, Trinity College, Oxford, United Kingdom, September 24 - 28, 1997.
15. "The Basic Science Mechanisms: The Need to Learn More to Design Better Strategies". American Society of Transplant Physicians and American Society of Transplant Surgeons TASK FORCE on Transplantation Tolerance, Chicago, Illinois, October 23-24, 1997.

16. "Costimulatory Pathways, Allograft Rejection and Acceptance". Massachusetts General Hospital, Department of Surgery and Transplantation, Boston, MA, December 4, 1997.
17. "Costimulatory Pathways, Allograft Rejection and Acceptance". University of Miami, Department of Surgery and Transplantation, Miami, FL, February 23, 1998.
18. "CD40 Biology, Allograft Rejection and Acceptance". Luncheon Workshop - Role of CD40 Ligand/CD40 System in Immunobiology in Transplantation. 1998 American Society of Transplant Physicians Scientific Session, Chicago, Illinois, May 10, 1998.
19. "Organ Transplantation without Immunosuppressive Drugs". Emory University Board of Visitors, Winship Ballroom, Emory University, Atlanta, Georgia, October 14, 1998.
20. "Costimulatory Pathways in Allograft Rejection". Imperial College of Transplantation Symposium, London, United Kingdom, November 19-20, 1998.
21. "The CD40 Pathway in Transplantation". 5th International Conference on Tolerance Induction, Breckenridge, Colorado, January 24 -27, 1999.
22. "Costimulation Blockade: Progress Toward Clinical Application." The Canadian Society of Transplantation Annual Scientific Meeting, Mont Tremblant, Quebec, March 3-4, 2000.
23. "Costimulation Blockade and Transplantation Tolerance". Molecular and Cellular Biology of Transplantation (D3), Keystone Symposium, Lake Tahoe, Nevada, March 21-26, 1999.
24. "Analysis of the CD40 and CD28 T cell costimulatory pathways in allograft rejection mediated by CD4 and CD8 T cell subsets." American Society of Transplantation Annual Meeting, Chicago, Illinois, May 15-19, 1999.
25. "Transplantation of the bone marrow microenvironment leads to hematopoietic chimerism and shapes the T cell repertoire without cytoreductive conditioning." American Society of Transplantation Annual Meeting, Chicago, Illinois, May 15-19, 1999.
26. "Manipulation of B7/CD28-CTLA4 in primates." Nantes/Actualities/Transplantation (N.A.T.), Nantes, France, June 9-10, 1999.
27. "Current Status in Pancreas Transplantation." Summer Transplant Symposium, St. Simons Island, Georgia, June 18-20, 1999.
28. "Lymphocyte Costimulation Pathways." The American Society of Nephrology, Miami Beach, Florida, November 5-8, 1999.
29. "T Cell Costimulation in Transplant Rejection and Acceptance: Is Costimulation Blockade Resistant Rejection a Concern?", University of Florida, San Francisco, California, November 30, 1999.
30. "The Critical Role of Early Events After Transplantation: Injury and Immune Recognition," American Society of Transplantation Winter Symposium, Las Croabas, Puerto Rico, January 13 -17, 2000.

31. "Transplantation Tolerance: From Bench to Bedside," An Update on Transplantation Symposium, Savannah, Georgia, April 14 -16, 2000.
32. "Progress Towards tolerance Trial in Clinical Transplantation." Meeting of the NNAIDC, NIAID, Bethesda, Maryland, June 15 -16, 2000.
33. "Surprise: Transplantation," Microbiology and Immunology Course MEDI-605, Emory University School of Medicine, August 18, 2000.
34. "Targeting CD80 and CD86," XVIII Congress of the Transplantation Society, Rome, Italy, August 27-September 1, 2000.
35. "Progress Towards Transplant Tolerance," Duke University Medical Center, Durham, North Carolina, March 2, 2001.
36. "Progress Towards Clinical Transplantation Tolerance," American Academy of Allergy, Asthma and Immunology Annual Meeting, New Orleans, Louisiana, March 18 - 19, 2001.
37. "Progress Towards Clinical Transplantation Tolerance," An Update On Transplantation Annual Meeting, Savannah, Georgia, March 23 - 25, 2001.
38. "Progress Towards Clinical Transplantation Tolerance," University of Minnesota, Minneapolis, Minnesota, June 27, 2001.
39. "Co-stimulation Blockade—A Route to Tolerance?" Festschrift for Professor Sir Peter Morris, University of Oxford, England, September 7, 2001.
40. "Progress Towards Clinical Islet Transplantation for Type I Diabetes: Rejection, Acceptance and Tolerance," Gwinnett Health System Diabetes Information Fair, Atlanta, Georgia, October 16, 2001.
41. "Islet Cell Transplants—A Hope for a Cure," Diabetes Association of Atlanta, Atlanta, Georgia, November 3, 2001.
42. "Transplantation: Fit for the 21st Century," BSHI Symposium, British Society for Immunology Annual Meeting, Harrogate, England, December 6, 2001.
43. "Rejection, Acceptance, and Tolerance: Progress Toward Islet Transplantation for Diabetes," Great Teacher Lecture Series, Emory University, Atlanta, Georgia, March 7, 2002.
44. "Immunomodulation Strategies," GTEC Immunology for Tissue Engineering Course, Georgia Tech, Atlanta, GA, March 12, 2002.
45. "Rejection, Acceptance, and Tolerance: Progress Toward Islet Transplantation for Diabetes," Atlanta Medical Center, Atlanta, Georgia, March 27, 2002.

46. "Rejection, Acceptance, and Tolerance: Progress Toward Islet Transplantation for Diabetes," Winship Cancer Center, Emory University, Atlanta, Georgia, March 28, 2002.
47. "Rejection, Acceptance and Tolerance: Progress Toward Islet Transplantation for Diabetes," Floyd Medical Center, Rome, Georgia, April 16, 2002.
48. "Transplant Tolerance: Interactions with Protective Immunity," Yerkes Primate Research Center, Atlanta, Georgia, May 3, 2002.
49. "Approaches to Clinical Tolerance Induction," Federation of American Societies for Experimental Biology (FASEB) Saxtons River, Vermont, June 19, 2002.
50. "Transplant Tolerance: Interactions with Protective Immunity," Annual Meeting of the Federation of Clinical Immunology Societies (FOCIS), San Francisco, California, June 30, 2002.
51. "Costimulation Blockade," UCSF, San Francisco, California, July 9 -10, 2002.
52. "Blockade of CD28 Costimulation: Progress Toward Clinical Application, Transplantation Society Meeting, Miami, Florida, August 29, 2002.
53. "Engineering Immune Acceptance" Smith & Nephew Symposium, Georgia Institute of Technology, Atlanta, GA, October 15, 2002.
54. "Engineering Strategies for Immunosuppressive and Transplantation Tolerance", Islet Transplantation 2002 and Beyond: 2nd Annual Symposium, Annenberg Center for Health Sciences, Rancho Mirage, CA, December 5-7, 2002.
55. "Islet Transplantation for Type I Diabetes," JDRF International Board of Directors Meeting, Atlanta, Georgia, January 23, 2003.
56. "The Timeline for Success in Academic Transplant Surgery: How to Get on Track and Stay on Track," ASTS Vanguard Committee Career Development Mini-Symposium, Miami Beach, Florida January 25, 2003.
57. "Islet Transplantation for Type 1 Diabetes: Progress toward Clinical Application," Emory Transplant Center Noon Conference Symposium, Emory University, Atlanta, Georgia, February 26, 2003.
58. "Costimulation Blockade Transplant Tolerance – Progress Towards Clinical Application," Immunobiology and Transplantation Biology Seminar Series, University of Maryland, Baltimore, Maryland, March 13-14, 2003.
59. "Islet Transplantation for Type 1 Diabetes," Mini-Medical School, Emory University, Atlanta, Georgia, April 8, 2003.
60. "Heterologous Immunity: A Barrier to Transplantation Tolerance," Yale University, New Haven, Connecticut, April 14, 2003.

61. "Islet Transplantation: Progress Toward Clinical Application," Clinical Transplant Seminar Series, Yale University, New Haven, Connecticut, April 15, 2003.
62. "Costimulation Blockade: Transition from Bench to Bedside," Immunogenetics Course, American Transplant Congress, Washington, DC, May 30, 2003.
63. "Costimulatory Blockade: Progress Toward Clinical Application," The World Congress of Nephrology 2003, Berlin, June 8 - 12, 2003.
64. "Costimulatory Blockade: Progress Toward Clinical Tolerance," the 9th Congress of the International Pancreas of Islet Transplant Association, Dublin, Ireland, July 8 - 11, 2003.
65. "Early Experience with Islet Cell Transplantation in Georgia," Georgia Chapter of AACE, Atlanta, Georgia, July 30, 2003.
66. "Islet Transplantation for Type 1 Diabetes," Endocrinology Group, Piedmont Hospital, Atlanta, Georgia, September 3, 2003.
67. "Costimulatory Blockade: Progress toward clinical application," 2003 Nephrology Update Conference, National Kidney Foundation, Sea Island, Georgia, September 7, 2003.
68. "Costimulation Blockade, Chimerism and Tolerance," Annual Keystone Symposium, Keystone, Colorado, September 6, 2003.
69. "Islet Transplantation for Type 1 Diabetes," XXVIII Annual Meeting of the American Society for Histocompatibility and Immunogenetics (ASHI), Miami, Florida, October 30, 2003.
70. "Immunology of Transplantation," Immunology Update for Pre-Med Students, Georgia State University, Atlanta, Georgia, November 11, 2003.
71. "Novel Immunomodulatory Approaches," The Clinical and Basic Science of Islet Transplantation, Annenberg Winter Symposium 2003.
72. "Costimulation Blockade: Lessons Learned from Non-Human Primates," AST Winter Symposium 2004, Scottsdale, Arizona, January 18, 2004.
73. "Costimulation Blockade a novel class of Immunosuppressive agents: Contributions of the Emory Transplant Center," Emory Transplant Center Noon Symposium, Emory University, Atlanta, Georgia, January 28, 2004.
74. "Islet Transplantation Type 1 Diabetes 2004," Georgia Issues in Pediatric Diabetes Management Workshop, Atlanta, Georgia, January 31, 2004.
75. "Costimulation Blockade, Chimerism and Tolerance," University of Alabama, Division of Transplant Immunology, Birmingham, Alabama, February 12, 2004.

76. "Costimulation Blockade A Novel Class of Immunosuppressive Agents: Contributions of the Emory Transplant Center," Emory Surgical Grand Rounds, Atlanta, Georgia, March 11, 2004.
77. "Costimulation Blockade: A Novel Class of Immunosuppressive Agents," Resident Research Symposium, University of California San Francisco, March 19, 2004.
78. "Costimulation Blockade a Novel Class of Immunosuppressive Agents", IDS Conference Cambridge – Lunch Presentation, Cambridge, England, March 30. 2004.
79. "Clinical Trials of Transplantation Tolerance," IDS 7 Conference Cambridge – Satellite Symposium on Transplantation, Cambridge, England, March 31, 2004.
80. "Costimulation Blockade: The development of a class of immunosuppressive drugs," Transplant Conference, University of Wisconsin, Madison, WI, April 19, 2004.
81. "Costimulation Blockade: Progress Towards Clinical Application," British Transplantation Society, 7th Annual Congress, Birmingham, England, April 29, 2004.
82. "Interactions of Viral Infection, Protective Immunity and Transplantation Tolerance," Basic Science Symposium, British Transplantation Society, 7th Annual Congress, Birmingham, England, April 30, 2004.
83. "Islet Transplantation for Type 1 Diabetes," Decatur Rotary Club, Atlanta, GA, May 25, 2004.
84. "Preventing Rejection, Promoting Tolerance for Transplantation," Yerkes Research Center, Atlanta, GA June 26, 2004.
85. "Costimulation Blockade: Development of a New Class of Immunosuppressive Drugs," Genentech, April, 2004.
86. "Visualizing rejection," State-of-the-art symposium: Cell trafficking and its control, XX International Congress of the Transplantation Society, Vienna, Austria, September 5 -10, 2004.
87. "Interactions Between Protective Immunity and Transplantation Tolerance," The University of Chicago Biomedical Sciences Cluster Committee on Immunology Seminar Series, The University of Chicago, Chicago, IL, October 25, 2004.
88. "Mechanisms and Protocols of Experimental Tolerance," Plenary Session: Strategies for Induction of Tolerance: Successes and Failures, 3rd International Congress on Immunosuppression, San Diego, California, December 8 - 11, 2004.
89. "Therapeutic Targeting of CD40/CD154 in Transplantation," ASTS Fifth Annual Winter Symposium, Miami Beach, Florida, January 21 - 23, 2005.
90. "Costimulation Blockade: Progress Toward Clinical Application in Transplantation," Wyeth, February 7, 2005.

91. "Islet Transplantation at Emory 2005," Endocrinology Group, Columbus, GA, February 25, 2005.
92. "Costimulation Blockade: Progress toward clinical application in Transplantation." Renal Grand Rounds, The Medical College of Wisconsin, March 28, 2005.
93. "Costimulation Blockade: Progress toward clinical application I Transplantation," (ISHLT) International Society for Heart and Lung Transplantation Annual Meeting, Philadelphia, PA, April 6-9, 2005.
94. "Costimulation Blockade: Progress toward clinical application in Transplantation," (IPITA) 10th Congress of the International Pancreas and Islet Transplant Association, Geneva, Switzerland, May 4-7, 2005.
95. "Calcineurin Inhibitor-Free Immunosuppression with Belatacept (LEA29Y) in Renal Transplant: 12 Month Results of a Phase II Study," American Transplant Congress, Seattle, Washington, May 21, 2005.
96. "New Strategies to Prevent Transplant Rejection: From Molecules, To Mice, To Man" The Edelstone-Bendix Residents, Department of Surgery, Northwestern University, Chicago, Illinois, June 10, 2005.
97. "New Strategies to Prevent Transplant Rejection: From Molecules to Mice, to Monkeys, to Man," University of Alberta, Edmonton, Canada, October 26, 2005.
98. "New Therapeutics in Transplantation – Bench to Bedside," Georgia Tech – Institute for Bioengineering and Biosciences, Atlanta, Georgia, November 7, 2005.
99. "Resistance to Tolerance in Primate Models," American Society of Nephrology, Philadelphia, PA, November 10, 2005.
100. "Protective Immunity in Immunocompromised Populations," NIH Annual Meeting, Bethesda, MD, November 2005.
101. "Tolerance and Protective Immunity: From to Mice, to Monkeys and Back," Mexican Transplant Society, Puerto Vallarta, Mexico, December 3, 2005.
102. "New Strategies to Prevent Transplant Rejection: From Molecules, to Mice, to Monkeys, to Man," Mexican Transplant Society, Puerto Vallarta, Mexico, December 3, 2005.
103. "Efalizumab: A New Class of Immunosuppressive Drug for Transplantation?" Clinical Research Meeting, Emory University, Atlanta, Georgia, January 18, 2006.
104. "Transplantation Tolerance: The Challenges Ahead" Thomas E. Starzl Transplantation Institute, University of Pittsburgh Medical Center, Pittsburgh, MA, March 11, 2006.
105. "New Strategies to Prevent Transplant Rejection: From molecules, to mice, to monkeys, to man" TSANZ 24th Annual Scientific Meeting, Canberra, Australia, March 29-21, 2006.

106. "Protective Immunity and Transplantation Tolerance" TSANZ 24th Annual Scientific Meeting, Canberra, Australia, March 29-21, 2006.
107. "Non-Human Primate Transplant Models," NIH Non-Human Primate Genetics Workshop, Bethesda, MD, April 2006.
108. "Visualizing Cell Migration in Allograft Rejection", 2006 FASEB Summer Research Conference in Transplant Immunology, Snowmass Village, Colorado, June 3, 2006.
109. "Costimulation Blockade, Transplantation Tolerance and Protective Immunity", 12th Annual Nantes Actualities Transplantation, Nantes, France, June 14, 2006.
110. "Therapeutic Targeting of Costimulation Pathways: A Tortuous Path to the Clinic," World Transplant Congress Annual Meeting, July 5, 2007.
111. "Costimulation: The Science and the Future," World Transplant Congress, Costimulation Symposium, July 5, 2006.
112. "Innovations in Transplantation," Atlanta Surgical Society, Atlanta, Georgia, September 2006.
113. "The Quest for a Cure for Type I Diabetes: Problems, Progress and Prospects," Board of Visitors, Transplantation for Type I Diabetes, Emory University, Atlanta, Georgia, December 6, 2006.
114. "Therapeutic Targeting of Costimulation Pathways: A Tortuous Path to the Clinic," Johns Hopkins Hospital, Baltimore, Maryland, February 23, 2007.
115. "Studies on Transplantation Tolerance and Islet Transplantation at Emory," Nuffield Department of Surgery, John Radcliffe Hospital, Oxford, England, February 26, 2007.
116. "In Pursuit of Tolerance," Thomas E. Starzl Transplantation Institute, University of Pittsburgh Medical Center, Pittsburgh, PA, April 20, 2007.
117. "Therapeutic Targeting of Costimulation Pathways: A Tortuous Path to the Clinic," World Transplant Congress Annual Meeting, San Francisco, California, May 5, 2007.
118. "Translation of Tolerance to the Clinic," The Transplantation Society in collaboration with The Canadian Society of Transplantation, The Basic Science Symposium, Halifax, Nova Scotia, Canada, September 5-7, 2007.
119. "Immune Function and Protective Immunity in Kidney Transplant Recipients and Immunosuppressed Rhesus Macaques," Immune Function and Biodefense in Children, Elderly, and Immunocompromised Populations Annual Meeting, Rockville, MD, September 19-20, 2007.
120. "Determinants of Transplantation Tolerance Induction," Tolerance in Transplantation and Autoimmunity, Keystone Symposia (A8), Keystone, CO, January 29 – February 3, 2008.

121. "Costimulation Blockade and Chimerism Strategies for Organ Transplant Tolerance," 2008 BMT Tandem Meetings, San Diego, CA, February 13-17, 2008.
122. "Costimulatory Pathway Based Clinical Trials," 2008 Keystone Symposia – Islet and Beta Cell Development and Transplantation, Snowbird, UT, April 6-11, 2008.
123. "Memory T Cell Responses," 2008 American Transplant Congress, Toronto, Ontario, Canada, May 31 – June 4, 2008.
124. Immune Function and Protective Immunity in Kidney Transplant Recipients and Immunosuppressed Rhesus Macaques," Immune Function and Biodefense in Children, Elderly, and Immunocompromised Populations Annual Meeting, Seattle, WA, October 6–7, 2008.

Bibliography

a. Published and Accepted Articles in Referenced Journals:

1. Bloom, R.J., C.P. **Larsen**, R. Watt, and H.A. Oberhelman, Jr. 1986. A reappraisal of the Kock continent ileostomy in patients with Crohn's disease. *Surgery, Gynecology & Obstetrics* 162:105-108.
2. Dallman, M.J., A.C. Porter, C.P. **Larsen**, and P.J. Morris. 1989. Lymphokine production in allografts--analysis of RNA by northern blotting. *Transplantation Proceedings* 21:296-298.
3. Austyn, J.M., and C.P. **Larsen**. 1990. Migration patterns of dendritic leukocytes. Implications for transplantation. *Transplantation* 49:1-7.
4. **Larsen**, C.P., J.M. Austyn, and P.J. Morris. 1990. The role of graft-derived dendritic leukocytes in the rejection of vascularized organ allografts. Recent findings on the migration and function of dendritic leukocytes after transplantation. *Annals of Surgery* 212:308-315; discussion 316-307.
5. **Larsen**, C.P., H. Barker, P.J. Morris, and J.M. Austyn. 1990. Failure of mature dendritic cells of the host to migrate from the blood into cardiac or skin allografts. *Transplantation* 50:294-301.
6. **Larsen**, C.P., P.J. Morris, and J.M. Austyn. 1990. Donor dendritic leukocytes migrate from cardiac allografts into recipients' spleens. *Transplantation Proceedings* 22:1943-1944.
7. **Larsen**, C.P., P.J. Morris, and J.M. Austyn. 1990. Migration of dendritic leukocytes from cardiac allografts into host spleens. A novel pathway for initiation of rejection. *The Journal of Experimental Medicine* 171:307-314.
8. **Larsen**, C.P., R.M. Steinman, M. Witmer-Pack, D.F. Hankins, P.J. Morris, and J.M. Austyn. 1990. Migration and maturation of Langerhans cells in skin transplants and explants. *The Journal of Experimental Medicine* 172:1483-1493.
9. Brown, P.F., 3rd, C.P. **Larsen**, and P.N. Symbas. 1991. Management of the asymptomatic patient with a stab wound to the chest. *Southern Medical Journal* 84:591-593.
10. Dallman, M.J., C.P. **Larsen**, and P.J. Morris. 1991. Cytokine gene transcription in vascularized organ grafts: analysis using semi quantitative polymerase chain reaction. *The Journal of Experimental Medicine* 174:493-496.
11. Dallman, M.J., R.A. Montgomery, C.P. **Larsen**, A. Wanders, and A.F. Wells. 1991. Cytokine gene expression: analysis using northern blotting, polymerase chain reaction and in situ hybridization.

Immunological Reviews 119:163-179.

12. **Larsen, C.P.**, and J.M. Austyn. 1991. Langerhans cells migrate out of skin grafts and cultured skin: a model in which to study the mediators of dendritic leukocyte migration. *Transplantation Proceedings* 23:117-119.
13. **Larsen, C.P.**, S.C. Ritchie, T.C. Pearson, P.S. Linsley, and R.P. Lowry. 1992. Functional expression of the costimulatory molecule, B7/BB1, on murine dendritic cell populations. *The Journal of Experimental medicine* 176:1215-1220.
14. Pearson, T.C., J.C. Madsen, C.P. **Larsen**, P.J. Morris, and K.J. Wood. 1992. Induction of transplantation tolerance in adults using donor antigen and anti-CD4 monoclonal antibody. *Transplantation* 54:475-483.
15. Rao, A.S., J.A. Roake, C.P. **Larsen**, D.F. Hankins, P.J. Morris, and J.M. Austyn. 1993. Isolation of dendritic leukocytes from non-lymphoid organs. *Advances in Experimental Medicine and Biology* 329:507-512.
16. Roake, J.A., A.S. Rao, C.P. **Larsen**, D.F. Hankins, P.J. Morris, and J.M. Austyn. 1993. Cytokine mediators of non-lymphoid dendritic cell migration. *Advances in Experimental Medicine and Biology* 329:501-506.
17. Whelchel, J.D., J.F. Neylan, E.D. Frederickson, E.L. Hochgelerent, L.C. Hymes, C.P. **Larsen**, D.C. Lowance, R.P. Lowry, D.P. O'Brien, B.L. Warshaw, and et al. 1993. Racial issues in renal transplantation: the Emory University experience. *Clinical Transplants* 253-258.
18. Austyn, J.M., D.F. Hankins, C.P. **Larsen**, P.J. Morris, A.S. Rao, and J.A. Roake. 1994. Isolation and characterization of dendritic cells from mouse heart and kidney. *J Immunol* 152:2401-2410.
19. **Larsen, C.P.**, S.C. Ritchie, R. Hendrix, P.S. Linsley, K.S. Hathcock, R.J. Hodes, R.P. Lowry, and T.C. Pearson. 1994. Regulation of immunostimulatory function and costimulatory molecule (B7-1 and B7-2) expression on murine dendritic cells. *J Immunol* 152:5208-5219.
20. Pearson, T.C., D.Z. Alexander, K.J. Winn, P.S. Linsley, R.P. Lowry, and C.P. **Larsen**. 1994. Transplantation tolerance induced by CTLA4-Ig. *Transplantation* 57:1701-1706.
21. Gerber, D.A., C.W. Oettinger, M. D'Souza, G.V. Milton, C.P. **Larsen**, and T.C. Pearson. 1995. Prolongation of murine cardiac allograft survival by microspheres containing TNF alpha and IL1-beta neutralizing antibodies. *Journal of Drug Targeting* 3:311-315.
22. **Larsen, C.P.**, D.Z. Alexander, R. Hendrix, S.C. Ritchie, and T.C. Pearson. 1995. Fas-mediated cytotoxicity. An immunoeffector or immunoregulatory pathway in T cell-mediated immune responses? *Transplantation* 60:221-224.
23. Pearson, T.C., A.A. Futral, K.L. Routenberg, D.P. O'Brien, J.D. Whelchel, J.F. Neylan, and C.P. **Larsen**. 1995. Delayed urinary bladder leak after combined kidney-pancreas transplantation. Association with penile prosthesis implantation. *Transplantation* 60:624-626.
24. Roake, J.A., A.S. Rao, P.J. Morris, C.P. **Larsen**, D.F. Hankins, and J.M. Austyn. 1995. Dendritic cell loss from nonlymphoid tissues after systemic administration of lipopolysaccharide, tumor necrosis factor, and interleukin 1. *The Journal of Experimental Medicine* 181:2237-2247.
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26. Thomson, A.W., L. Lu, Y. Wan, S. Qian, C.P. **Larsen**, and T.E. Starzl. 1995. Identification of donor-derived dendritic cell progenitors in bone marrow of spontaneously tolerant liver allograft recipients. *Transplantation* 60:1555-1559.
27. Alexander, D.Z., T.C. Pearson, R. Hendrix, S.C. Ritchie, and C.P. **Larsen**. 1996. Analysis of effector mechanisms in murine cardiac allograft rejection. *Transplant Immunology* 4:46-48.
28. **Larsen**, C.P., D.Z. Alexander, D. Hollenbaugh, E.T. Elwood, S.C. Ritchie, A. Aruffo, R. Hendrix, and T.C. Pearson. 1996. CD40-gp39 interactions play a critical role during allograft rejection. Suppression of allograft rejection by blockade of the CD40-gp39 pathway. *Transplantation* 61:4-9.
29. **Larsen**, C.P., E.T. Elwood, D.Z. Alexander, S.C. Ritchie, R. Hendrix, C. Tucker-Burden, H.R. Cho, A. Aruffo, D. Hollenbaugh, P.S. Linsley, K.J. Winn, and T.C. Pearson. 1996. Long-term acceptance of skin and cardiac allografts after blocking CD40 and CD28 pathways. *Nature* 381:434-438.
30. Pearson, T.C., D.Z. Alexander, R. Hendrix, E.T. Elwood, P.S. Linsley, K.J. Winn, and C.P. **Larsen**. 1996. CTLA4-Ig plus bone marrow induces long-term allograft survival and donor specific unresponsiveness in the murine model. Evidence for hematopoietic chimerism. *Transplantation* 61:997-1004.
31. Weber, C.J., M.K. Hagler, J.T. Chrysochoos, C.P. **Larsen**, T.C. Pearson, P. Jensen, J.A. Kapp, and P.S. Linsley. 1996. CTLA4-Ig prolongs survival of microencapsulated rabbit islet xenografts in spontaneously diabetic Nod mice. *Transplantation Proceedings* 28:821-823.
32. Whelchel, J.D., L.C. Hymes, E.L. Hochgelerent, C.P. **Larsen**, D.C. Lowance, D.P. O'Brien, J.F. Neylan, T.C. Pearson, and B.L. Warshaw. 1996. Evolving strategies in immunosuppressive therapy: the Emory experience. *Clinical Transplants* 249-255.
33. Elwood, E.T., C.P. **Larsen**, D.H. Maurer, K.L. Routenberg, J.F. Neylan, J.D. Whelchel, D.P. O'Brien, and T.C. Pearson. 1997. Microchimerism and rejection in clinical transplantation. *Lancet* 349:1358-1360.
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35. **Larsen**, C.P., and T.C. Pearson. 1997. The CD40 pathway in allograft rejection, acceptance, and tolerance. *Current Opinion in Immunology* 9:641-647.
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