

Associate Professor with tenure 2003-2008
 Department of Surgery
 University of Maryland School of Medicine

Professor with tenure 2008-present
 Department of Surgery: Primary appointment
 Department of Microbiology and Immunology: Secondary appointment
 University of Maryland School of Medicine

Professional Memberships

American Association of Immunologists 1995-present
 American Society of Transplantation 2005-present
 American Association for the Advancement of Science 1993-present
 Clinical Immunology Society 2006-present

Honors and Awards:

Alumni Fellowship, University of Michigan, Ann Arbor 1982
 Elected to Phi Beta Kappa 1985
 Kirin Graduate Fellowship, University of California 1985-1986
 Regents Fellowship, University of California 1989
 Dean's Graduate Speaker Award , University of California 1990
 European Molecular Biology Organization (EMBO) fellowship,
 for postdoctoral research at The Pasteur Institute 1993-1994
 AAI Junior Faculty Travel award 2001
 FASEB mentor and minority trainee award 2005, 06, 07
 Elected to Henry Kunkel Society 2006-pres.
 Mary Jane Kugel Award, JDRF 2007

Administrative Service

Institutional Service (UMB)

Graduate Admissions Committee,
 Dept. of Microbiology and Immunology 2000-pres.
 Graduate Recruitment Committee for the Molecular and
 Cell Biology Graduate Program 2002-05
 Surgery Department Representative to Medical School Council 2005-6
 Reviewer for Intramural Grant Awards 2002-pres.
 Co-organizer , Transplantation Immunology seminar series 2001-06
 Graduate Curriculum committee, Microbiology and Immunology 2007-pres.
 Qualifying exam committee, Microbiology and Immunology 2007

Graduate Dissertation committees:

Sayed Abdel Wahab 2000-2002
 Riham Al-Assady 2000-2004

Haifeng Song	2000-2003
Aaron Ahearn	2001-2004.
Andrew Hebbler	2003-2006
Zachary Roberts	2004-2007
Deepa Rajagopal	2007-2009
Mohammed Hossain	2006-pres.

National and International Service

National Institutes of Health

Special Emphasis Review Panel: Program Project for Biodefense	2002-3
Fellowship Review Special Emphasis panel ZRG1 F07	2001-2003
Temporary member: Immunobiology (IMB) Study section;	2003-04
Cellular/Molecular Immunology (CMI-B) study section	2004-05
Regular Member: CMI-B study section	2005-2009
Special Emphasis Panel:Cooperative Centers for Translational Research on Human Immunology and Biodefense	2004
Special Emphasis Panel: Autoimmunity Program Project Grants	2005

National Science Foundation

Ad hoc reviewer for Merit Awards	2002-present
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American Association of Immunologists (AAI)

Member, AAI Committee on the Status of Women	2003-06
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American Society of Transplantation (AST)

Member, Public Policy committee (3 yr term)	2008-present
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Editorial Boards

Section Editor, <i>Clinical Immunology</i>	2004-2008
Associate Editor, <i>Journal of Immunology</i>	1999-2003
<i>Clinical and Vaccine Immunology</i>	2002-2007
Section Editor, <i>The Journal of Immunology</i> (term to begin July, 2009)	2009-present

The Juvenile Diabetes Research Foundation

Immunology & Genetics Study Section (invited for second 3-year term, beginning Fall 2007)	2004-pres.
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The Arthritis Foundation

Molecular Immunology Study Section	1999-2003
Target Identification in Lupus study section	2002

Misc. Reviewing activities

Ad Hoc Reviewer for VA Merit awards, <i>Journal of Immunology, Journal of Experimental Medicine, Amer. J. Transplant</i>	1998-present
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Nature Immunology, Cellular Immunology, Clinical Immunology, J. Immunol. Methods, Blood, Gastroenterology, Nature Medicine, Clinical and Experimental Immunology, Molecular and Cell Biology, J. Leukocyte Biology
 Abstract reviewer for World Transplant Congress (WTC2006), American Transplant Congress (ATC;2007-pres.), Federation of Clinical Immunology Societies (FOCIS; 2007-8).

Consultant

Immunology advisor for Abatacept (CTLA4Ig), 2004-present
 Bristol-Myers Squibb
 Genzyme Advisory board for Transplantation 2006

Conference Organizer

2006-present
 Organized and raised \$50,000 in corporate and foundation support for
 The “Third international Conference on Autoimmunity: novel mechanisms
 and treatments”, Rhodes, Greece, Oct. 2007

Co-organizer, “Fourth International Conference on Autoimmunity: novel
 mechanisms and treatments”, Crete, Greece, Oct. 2009

Teaching Responsibilities**Instruction**

Lecturer, MMIC 520, “Host Defense and Infectious Diseases” 2002-06
 Small Group Leader for Host Defense and Infectious Diseases 2001-06
 Lecturer, MMIC 702, “Cellular and Molecular Immunology” 2001-present

Course Director, Undergraduate Immunology (UMCP) 1997-2000
 4 semesters; 100 students/semester

Course Director, Graduate Immunology (UMCP) 1999
 15 students/group

Course Director, Signal Transduction Graduate Course(UMCP) 1998

Supervision of Graduate Research

Sakina Farzana Hussain; Ph.D. granted 2001 1997-2001
 (currently staff scientist, CDC, Atlanta, GA)

Mojgan Ahmadzadeh; Ph.D. granted 2002 1997-2002
 (currently postdoctoral fellow, National Cancer Institute)

Krishnan Sandeep; Ph.D. granted 2002 1997-2002
 (currently Resident, Internal Medicine, George Washington Hospital, Washington, D.C.)

Vishal Warke; Ph.D. granted 2002 1998-2002
 (currently Director of R&D, cell biology and immunology,
 Himedia Laboratories, Mumbai, India)

Vashali Mane (UMB) Ph.D granted 2006 2002-06
 (winner of outstanding graduate student award, 2006;
 currently postdoctoral fellow, Harvard University)

Francesca Okoye (UMB), MD/Ph.D. student 2002-07

(supported by NIH predoctoral F31AI58924-01; currently completing MD portion, UMB)	
Modesta Ndejemi (UMB), Ph.D. granted 2006 (postdoctoral scientist, Tanzania)	2004-06
Nicholas Bushar (UMB), Ph.D. candidate (supported by NIH training grant)	2004-2009
Smita Chandran (UMB), Ph.D. candidate	2005-present
John Teijaro (UMB), Ph.D. candidate (supported by NIH minority supplement)	2005-present
Carly Page (UMB), Ph.D. Candidate	2008-present
<i>Graduate Rotation students</i>	
Charles Anderson (UMCP)	1996-2000
Calvin Williams	2001
Dana Hartzman	2002
Leann Massey	2002
Chelsea Lane	2002
Shailesh Satpute	2003
Lani Lorenzo	2005
Preeta Dasgupta	2006
Melissa Hayes	2007
Sunil Shreshtha	2007
Vidhya Vijayakumar	2009
<u>Supervision of Undergraduate Research</u>	
Amena Husain, Howard Hughes Undergraduate Fellow (currently in graduate program in immunology, Emory University)	1996-1999
Shannon Chilcoate (currently patent lawyer)	1997- 1998
Ariel Abraham, Howard Hughes Undergraduate Fellow	1999-2001
Gabrielle McRae, MARC program, UMBC	2007-8
<u>Mentor for Postdoctoral Fellows/Senior Scientists</u>	
Uma Basavanna, Ph.D.	2001-2003
Deepa Patke, Ph.D. (supported by AHA postdoctoral fellowship)	2002-06
Adam Bingaman, M.D., Ph.D. (currently transplant surgeon, San Antonio, TX)	2002-2004
Meena Chandok, Ph.D.	2004-2007
Anita Tang, M.D. (currently resident, UMMC)	2004-2007
David Verhoeven, Ph.D. (supported by pharmacology T32)	2007-pres.
Jason Lees, Ph.D.	2008-pres.
Alp Sener, M.D. (supported by ASTS fellowship)	2008-pres.

Grant Support:**ACTIVE:**

1U19AI083022-01 (Wherry, Project Director) 4/1/2009-3/31/2014

NIH/NIAID

“Shaping Anti-viral immunity by the inflammatory, regulatory and tissue environment”

D.L.Farber, Principal Investigator Project 3, 25% effort

“Regulation and compartmentalization of anti-viral CD4 T cell memory”

NIH R21AI077029-01

D.L. Farber, Principal Investigator, 15% effort

9/1/07-8/31/09

“Memory CD4 T cell-mediated immunopathology in influenza infection”

Principal Investigator, 10% effort

9/1/07-8/31/09

“CTLA4Ig-mediated modulation of immunopathology in secondary immune responses to influenza virus infection”

Bristol-Myers Squibb

Principal Investigator, 10% effort

2/1/08-1/31/09

“Alloreactive memory CD4 T cells in transplantation”

Roche Organ Transplant Research Foundation

Principal Investigator, 10% effort

3/1/08-2/28/11

“Generation and regulation of islet-reactive memory CD4 T cells in T1DM”

Juvenile Diabetes Research Foundation (JDRF)

Co-PI, 10% effort; Stephen T. Bartlett, Co-PI

2/1/08-1/31/11

“Mechanisms of abrogation of recurrent autoimmunity in an islet graft model”

Juvenile Diabetes Research Foundation (JDRF)

Collaborator, 5% effort

12/1/05-11/30/10

“Mechanisms of B-cell delivered tolerance in diabetes”

P.I. David W. Scott

NIH RO1 DK068343-01A2

PREVIOUS:

Principal Investigator

8/1/2001-6/30/2002

UMB Intramural Grant

The role of the FcR γ signaling subunit in human effector T cell signaling and function

Total costs: \$15,000

Principal Investigator

12/1/97-9/30/2003

Biochemical Analysis of Immunological Memory. NIAID

R29 AI 42092-05.

Principal Investigator 5/15/2002-4/30/2003
 Heterogeneous Subsets of Memory CD4 T cells, NIAID
 NIH R21-AI50632-01

Co-Principal Investigator 7/1/2002-6/30/2005
 Co-Investigator: Stephen T. Bartlett
 Recurrent autoimmunity and immune memory in Type I diabetes,
 Harry and Jeanette Weinberg Foundation Grant

Principal Investigator, 5% effort 7/1/04-12/31/06
 "Modulation of Memory CD4 T cell function by CTLA4Ig"
 Bristol-Myers Squibb

Principal Investigator, 15% effort 7/1/2005-6/30/2008
 "The role of Toll-like receptors in T cell memory", NIAID
 NIH R21-AI065950-02

Principal Investigator, 5% effort 10/1/03-1/31/2009
 "Biochemical Analysis of Immunological Memory", NIAID
 NIH R01 AI42092-10.

Principal Investigator, 5% effort 2/1/2003-1/31-2009
 "Heterogeneous Subsets of Memory CD4 T cells", NIAID
 NIH R01-AI50632-05

Patents, Inventions, and copyrights

1. "Modulating the memory immune response" Patent serial number 11/824,093
 Full application filed June 2007. Status: Pending
2. "ZAP-70 as a predictor and modulator of T cell Effector Function "
 US provisional patent application serial number 60/971,441

PUBLICATIONS:

Peer-reviewed articles

1. Sears, D.W., Parker, S.E. and Zeger, D.* (1987) Analysis of anti-reovirus cytotoxic T lymphocytes (CTL) using the H-2^{dm1} mutant. In: *H-2 Antigens. Genes, Molecules, Function*. C.S. David, ed. Plenum Publishing Corp., New York, pp. 671-679.
 2. Zeger, D.L.* , Osman, N., Hennings, M., McKenzie, I.F.C., Sears, D.W., and Hogarth, P.M. (1990) Molecular cloning of $\beta^{\text{mac-1}}$ subunit (CD18) cDNA for the murine complement receptor 3 (CR3) macrophage differentiation antigen (Mac-1). *Immunogenetics* **31**: 191-197.
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3. Zeger, D.L.* Hogarth, P.M., and Sears, D.W. (1990) Characterization and expression of an Fc γ receptor cDNA cloned from rat Natural Killer cells. *Proc Natl. Acad. Sci. U.S.A.* **87**: 3425-3429.
4. Farber, D.L. and Sears, D.W. (1991) Rat CD16 is defined by a family of class III Fc γ receptors requiring co-expression of heteroprotein subunits. *J. Immunol.* **146**:4352-4361.
5. Farber, D.L. and Sears, D.W. (1991) Functional activities of Fc receptors on NK cells. In: *NK Cell Mediated Cytotoxicity: Receptors, Signalling, and Mechanisms*. E. Lotzova and R.B. Herberman, eds. CRC Press. 207-229.
6. Farber, D.L., Giordio, R., Nettleton, M., Trucco, M., Kochan, J., and Sears, D.W. (1993) Rat class III receptor isoforms differ in IgG subclass specificity and fail to associate productively with rat CD3 ζ . *J. Immunol.* **150**: 4364.
7. Novak, T.J., Farber, D.L., Leitenberg, D., Hong, S-C., Johnson, P., and Bottomly, K. (1994). Isoforms of the transmembrane tyrosine phosphatase CD45 differentially affect T cell recognition. *Immunity.* **1**:109-119.
8. Farber, D.L., Luqman, M., Acuto, O., and Bottomly, K. (1995) Control of Memory T cell activation: MHC class II molecules on antigen presenting cells and CD4 ligation inhibit memory but not naive CD4 T cells. *Immunity.* **2**: 249-259.
9. Leitenberg, D., Novak, T.J., Farber, D.L., and Bottomly, K. (1995). The extracellular domain of CD45 controls association with the CD4/T cell receptor complex and the response to antigen-specific stimulation. *J.Exp. Med.* **183**: 249-259.
10. Lorenzo, H.K., Farber, D., Germain, V., Acuto, O. and Alzari, P.(1997) The MBP-fusion protein restores the activity of the first phosphatase domain of CD45. *FEBS Letters.* **411**:231-235
11. Farber, D.L., Acuto, O., and Bottomly, K. (1997) Differential TCR-mediated signaling in naive and memory CD4 T cells. *Eur. J. Immunol.* **27**:2094-2101.
12. Metz, D., Farber, D.L., Brian, A.A., and Bottomly, K. (1997) Regulation of memory CD4⁺ T cell adhesion by CD4-MHC class II interaction. *J. Immunol.* **159**:2567-2573.
13. Farber, D.L. (1998) Commentary: Differential TCR signaling and the generation of memory T cells. *J. Immunol.* **160**: 535-539.
14. Metz, D.P., Farber, D.L., Taylor, T., and Bottomly, K. (1998) Differential role of CTLA-4 in regulation of resting memory versus naive CD4 T cell activation. *J.Immunol.***161**:5855-5861.
15. Ahmadzadeh, M., Hussain, S.F., and Farber, D.L. (1999) Effector CD4 T cells are biochemically distinct from the memory subset: evidence for long-term persistence of effectors *in vivo*. *J. Immunol.*, **163**:3053-3063.
16. Farber, D.L., (2000) T cell memory: heterogeneity and mechanisms. *Clinical Immunology*:

*previous name

95:173-181.

17. Ahmadzadeh, M., Hussain, S.F. and Farber, D.L. (2001) Heterogeneity of the memory CD4 T cell response: persisting effectors and resting memory T cells. *J. Immunol.* **166:**926-935.
18. Warke, V., Krishnan, S., Farber, D.L., Tsokos, G.C., and Wong, H.K. (2001) Identification of differentially expressed genes in human memory and naive CD4 T cells. *Immunological Investigations.* **30:** 87-101.
19. Krishnan, S., Warke, V., Wong, H., Tsokos, G., and Farber, D.L. (2001) Generation and Biochemical Analysis of human effector CD4 T cells: alterations in tyrosine phosphorylation and loss of CD3 ζ expression. *Blood.* **97:** 3851-3859.
20. Farber, D.L. and Ahmadzadeh, M. (2002) Dissecting the complexity of the Memory CD4 T cell response. *Immunologic Research.* **25:** 247-59.
21. Hussain, S.F., Anderson, C.A. and Farber, D.L. (2002) Differential SLP-76 expression and TCR-mediated signaling in Effector and Memory CD4 T cells. *J. Immunol.* **168:**1557-1565.
22. Ahmadzadeh, M. and Farber, D.L. (2002) Functional Plasticity of an antigen-specific memory CD4 T cell population.. *Proc. Nat'l. Acad. Of Science, U.S.A.* **99:**11802-807.
23. Feng, Y., Wang, D, Yuan, R., Farber, D.L. and Hadley, G.A. (2002). CD103 expression is required for destruction of pancreatic islet allografts by CD8 T cells. *J. Exp. Med.* **196:**877-886. Commentary in *J. Exp. Med.* **196:**873-875.
24. Warke, V.G., Nambiar, M.P., Krishnan, S., Geller, D.A., Atkins, J.L., Farber, D.L., and Tsokos, G.C. (2003) Transcriptional activation of the human inducible nitric oxide synthase (iNOS) promoter by Kruppel-like factor 6. *J. Biol. Chem.* **278:**14812-9.
25. Krishnan, S., Warke, V, Nambiar, M.P., Tsokos, G.C., and Farber, D.L. (2003) The Fc γ subunit and Syk kinase replace CD3 ζ and ZAP-70 in the TCR/CD3 signaling complex of human effector CD4 T cells. *J. Immunol.***170:** 4189-4195.
26. Farber, D.L. (2003) Remembrance of Antigens Past: New Insights on Memory T cells. *Scan. J. Immunol.* **58:** 145-54.
27. Krishnan, S., Farber, D.L., and Tsokos, G.C. (2003) T cell rewiring in differentiation and disease. *J. Immunol.* **171:** 3325-3331.
28. Lai, W., Chang, C.-H., and Farber, D.L. (2003) Gene transfection and expression in resting and activated subsets of murine CD4 T cells. *J. Immunol. Meth.* **282:** 93-102.
29. Wang, D., Feng, Y., El-Asady, R., Yuan, R., Farber, D.L., Gress, R.E., Lucus, P.J., and Hadley, G.A. (2004) Regulation of CD103 expression by CD8⁺ T cells responding

- to renal allografts. *J. Immunol.* **172**:214-221.
30. Bingaman, A.W. and Farber, D.L. (2004) Memory T cells in Transplantation: Generation, function and potential role in rejection. *Am. J. Transplantation.* **4**:846-852.
 31. Shi, Q., Wang, D.-W., Hadley, G.A., Bingaman, A.W., Bartlett, S.T, and Farber, D.L. (2004) Long-term islet graft survival in NOD mice by abrogation of recurrent autoimmunity. *Diabetes.* **53**:2338-45.
 32. Chandok, M. and Farber, D.L. (2004) Signaling Control of Memory T cell generation and function. *Seminars in Immunology.* **16**:285-93.
 33. Farber, D.L. (2005) Control of Adaptive Immunity: From Naive to Memory. *J. Ped. Gastroent. and Nutrition.* Suppl 1:S17-9
 34. Patke, D.S. and Farber, D.L. (2005) Modulation of memory CD4 T cell function and survival potential by altering the strength of the recall stimulus. *J. Immunol.* **174**:5433-5443.
 35. Bingaman, A.W., Patke, D.S., Mane, V., Bartlett, S.T., and Farber, D.L. (2005) Novel phenotypes and migration properties distinguish memory CD4 T cell subsets in lymphoid and lung tissue. *Eur. J. Immunol.***35**:3173-86. Highlighted In this Issue **35**:3085-6.
 36. Patke, D., Ahmadzadeh, M, Bingaman, A.W. and Farber, D.L. (2005) Anti-CD3 priming generates heterogeneous antigen-specific memory CD4 T cells . *Clinical Immunology.* **117**:125-32. (commentary in same issue by Milone, M.C. and June, C.H.. "Adoptive immunotherapy: new ways to skin the cat?" pp.101-103.)
 37. Tang, A.L., Bingaman, A.W., Kadavil, E.A., Leeser, D.B., and Farber, D.L. (2006) Generation and functional capacity of polyclonal alloantigen-specific memory CD4 T cells. *Am. J. Transplant.* **6**:1275-1284. (editorial in the same issue by Fairchild, R., "Developing models to study the memory T cell barrier in transplantation", **6**:1246-7)
 38. Moulton, V., Bushar, N.D., Leeser, D., Patke, D.S. and Farber, D.L. (2006) Divergent generation of heterogeneous memory CD4 T cells. *J. Immunol.* **177**: 869-876.
 39. Moulton, V. and Farber, D.L. (2006) Committed to memory: lineage choices for T cells. *Trends Immunol.* **27**: 261-67.
 40. Ndejemi, M.P., Patke, D.S., Bingaman, A.W., Chandok, M.R., Azimzadeh, A., Nadler, S.G., and Farber, D.L. (2006) Control of Memory CD4 T cell recall by the CD28 costimulatory pathway. *J. Immunol.* **177**: 7698-7706.
 41. Zhang, X., Dong H., Lin. W., Voss, S., Hinkley, L., Westergren, M., Berry, D., Lewellen, D., Vile, R. Chen, L., Farber, D.L., and Strome, S.E. (2006) Human Bone Marrow: a reservoir for enhanced effector-memory CD8 T Cells with potent recall function. *J. Immunol.* **177**: 6730-7.

42. Shi, Q., Wang, D., Hadley, G.A., Farber, D.L. and Bartlett, S.T. (2006) Abrogation of recurrent autoimmunity in the NOD mouse: a critical role for IL-4. *Surgery*. **140**:281-288.
43. Ndejemi, M.P., Tang, A.L. and Farber, D.L. (2007) Reshaping the Past: strategies for modulation of T cell memory. *Clinical Immunology*. **122**:1-12.
44. Zhang, X., Moche, J.A., Farber, D.L. and Strome, S.E. (2007) Vaccine Based Approaches to Squamous Cell Carcinoma of the Head and Neck. *Oral Diseases*. 13:17-22.
45. Tang, A.L. and Farber, D.L. (2007) Generation, homeostasis, and regulation of memory T cells in Transplantation. *Current Opinion in Organ Transplantation*. 12:23-29.
46. Chandok, M.R., Okoye, F.I., Ndejemi, M.P. and Farber, D.L. (2007) A biochemical signature for rapid recall by memory CD4 T cells. *J. Immunol.* **179**:3689-98.
47. Okoye, F.I., Krishnan, S., Chandok, M.R., Tsokos, G.C., and Farber, D.L. (2007) Proximal Signaling control of human CD4 T cell function. *Clin. Immunol.* **125**:5-15.
48. Wood, A.H.D., Zhang, X., Farber, D.L., and Strome, S.E. (2007) CD8⁺ Memory T Lymphocytes from Bone Marrow – Immune Function and Therapeutic Potential. *Critical Reviews in Immunology*. **27**: 527-537.
49. Tang, A.L., Njau, M.N., Teijaro, J.R., Azimzadeh, A., Nadler, S.G. and Farber, D.L. (2008) CTLA4 expression is an indicator and regulator of CD4⁺FoxP3⁺ T cell homeostasis. *J. Immunol.* **181**:1806-13.
50. Lin, M., Zhang, N, Teijaro, J. R., Stoica, C., Bona, C., McEvoy, R., Bromberg, J., Farber, D.L., Casares, S., and Brumeanu, T.-D. (2008) A peptide-MHC II chimera favors survival of pancreatic islets grafted in type 1 diabetic mice. *Transplantation*. **85**:1717-1725.
51. Verhoeven, D., Teijaro, J.R., and Farber, D.L. (2008) Heterogeneous memory T cells in antiviral immunity and immunopathology. *Viral Immunology*. **21**:99-113.
52. Bushar, N.D. and Farber, D.L. (2008) Recalling the Year in Memory T cells. *Annals of the NY Acad. Sci.* 1143: 212-225.
53. Farber, D.L. (2009) Biochemical signaling pathways for memory T cell recall. *Sem. Immunol.* **21**: 84-91.
54. Teijaro, J.R., Njau, M.P., Verhoeven, D., Chandran, S., Nadler, S.G., Hasday, J, and Farber, D.L. (2009) Costimulation modulation uncouples protection from immunopathology in memory T cell responses to influenza virus. *J. Immunol.* **182**: In Press.

55. Verhoeven, D. and Farber, D.L. (2009) Pulse-oximetry accurately predicts lung pathology and the immune response during influenza infection. *Virology*. In Press
56. Sener, A., Tang, A.L. and Farber, D.L. (submitted) Memory T cell predominance following T cell depletion therapy derives from homeostatic expansion of naive T cells.
57. Bushar, N.D., Schmidt, M., Maltzman, J., and Farber, D.L. (submitted) TCR signals perpetuate the survival and homeostasis of memory CD4 T cells via cross-regulation with γ c cytokine signaling pathways.

Commentaries, conference reports

1. Farber, D.L. (2002) "Return of the Ts cell". *Trends in Molecular Medicine*. 8: 261.
2. Farber, D.L. (2002) "Programmed Contraction of CD8 T cells". *Trends in Molecular Medicine*. 8:367-8.
3. Farber, D.L. (2002) "Where do memory T cells come from?" *Trends in Immunology*. 23: 521
4. Mamula, M., Farber, D.L. and Tsokos, G.C. (2006) Autoimmune Odyssey on the Aegean Sea: Report on the Second Aegean Conference on Autoimmunity: Mechanisms and Novel Treatments". *Nature Immunology*, 7:219-21.

Web-based Journal articles

Chandran, S. and Farber, D.L. (2007) The role of Toll-like receptors in T cell memory. *Cell Science Reviews* 3: 236-249 (<http://www.cellscience.com/journal/reviewsmain11.html>)

Book Chapters

1. Okoye, F.I., Bushar, N.D. and Farber, D.L. (2007) "Signal Transduction" Chapter 12 in *Rheumatology*, fourth edition, M. Hochberg, J. Smolen, A. Silman, M. Weinblatt, eds.
2. Farber, D.L., Sleasman, J.W. and Virella, G. (2007) "Immune response: Antigens, Lymphocytes and Accessory Cells" (Chapter 14) and Farber, D.L. and Virella, G. (2007) "Cell-mediated Immunity" (Chapter 11) in *Medical Immunology*, sixth edition Virella, G., ed. Informa healthcare, NY.
3. Farber, D.L. (2008) "T lymphocytes" (Chapter 6), to appear in *Immunology* revised edition, J. Bellanti, G. Tsokos, Eds.

Articles in Preparation

- Teijaro, J.R., Verhoeven, D., LeFrancois, L. and Farber, D.L. Tissue-retentive lung memory CD4 T cells mediate optimal protective responses to influenza
- Lai, W., Verhoeven, D., and Farber, D.L. Transcriptional control of rapid recall in Memory CD4 T cells.

Chandran, S., Verhoeven, D., Teijaro, J.R., Fenton, M. and Farber, D.L. TLR2 engagement primes for highly expansive memory CD4 T cells through early effects on DC activation

Abstracts

1. Sears, D.W., Farber, D.L., Giordia, R., Trucco, M., Nettleton, M.Y., and Kochan, J. (1992) Rat class III Fc γ receptor isoforms differ in IgG subclass specificity and fail to associate productively with rat CD3 ζ in FASEB Abstracts, Anaheim, CA.
2. Farber, D.L., Luqman, M., and Bottomly, K. (1994) Memory CD4 T cell activation is inhibited by MHC class II-mediated CD4 crosslinking in the absence of co-stimulatory activity. in *J. of Cell. Biochem.*, Keystone Symposia on Lymphocyte activation. Keystone, CO.
3. Leitenberg, D., Novak, T., Farber, D., Smith, B.R., and Bottomly, K. (1994) CD45 and CD4 regulation of Ca²⁺ flux in individual T cells following stimulation through the T cell receptor. in *J. of Cell. Biochem.*, Keystone Symposia on lymphocyte activation. Keystone, CO.
4. Farber, D.L., Bottomly, K., and Acuto, O. (1995) Differential kinase activation in subsets of CD4 T cells. in *J. of Cell. Biochem.*, Keystone symposia on Control and manipulation of the immune response, Taos, NM. Also presented at *Ninth International Congress of Immunology*, San Francisco, CA, July 1995.
5. Metz, D.P., Farber, D., and Bottomly, K. (1995) Negative Signalling via CD4 in CD45RBlo CD4⁺ T cells. in *J. of Cell. Biochem.*, Keystone symposium on Control and manipulation of the immune response, Taos, NM.
6. Farber, D.L. and Bottomly, K. (1996) Differential Costimulatory Requirements of naive and memory CD4 T cells. Keystone symposium on Lymphocyte Activation, Hilton Head, SC.
7. Anderson, C.F., Rudd, C.E. and Farber, D.L. (1999) Differential Signaling Pathways in Memory and Naive CD4 T Lymphocytes, American Association of Immunologists (AAI) Meeting, Washington, D.C.
8. Hussain, S.F., Abraham, K.A., and Farber, D.L. (1999) Signaling through the p59^{Fyn} kinase differs in memory versus naive CD4 T cell subsets, AAI Meeting, Washington, D.C.
9. Farber, D.L., Stein, D.C., and Chilcoate, S.M. (1999) Immunostimulatory Properties of *Neisseria gonorrhoeae* Lipooligosaccharide (LOS) variants, AAI Meeting, Washington, D.C.
10. Sandeep, K., Wong, H.K., Tsokos, G.C., and Farber, D.L. (1999) Dissecting biochemical differences between human naive and memory CD4 T cells, AAI Meeting, Washington, D.C.
11. Hussain, S.F., Anderson, C.F., and Farber, D.L. (2001) Biochemical Characterization of Murine effector CD4 T cells, in *Experimental Biology*, 2001, Orlando, FL.

12. Krishnan, S., Warke, V.G., Nambiar, M.P., Wong, H.K., Tsokos, G.C. and Farber, D.L. Alterations in TCR/CD3-mediated signaling and upregulation of FcR γ expression in human effector CD4 T cells, in Experimental Biology 2001, Orlando, FL.
13. Farber, D.L., Ahmadzadeh, M.A., and Hussain, S.F. Heterogeneity of the memory immune response, in Experimental Biology 2001, Orlando, FL.
14. Farber, D.L. and Ahmadzadeh, M.A. Functional Plasticity of an Antigen-specific memory CD4 T cell population. Keystone Symposium on Immune Tolerance, 2003.
15. Bingaman, A.W., Patke, D., and Farber, D.L. (2003) ICOS expression and tissue distribution delineate subsets of memory T cells. Selected for oral Presentation, American Association of Immunologists Annual Meeting, Denver, CO.
16. Patke, D. and Farber, D.L. (2003) Functional regulation of the memory CD4 T cell response by altered peptide ligands. AAI meeting, Denver, CO.
17. Bingaman, A.W., Patke, D., and Farber, D.L. (2003) Memory T cells are functionally heterogeneous and exhibit variable sensitivity to costimulation blockade. Selected for oral presentation, American Transplant Congress, Washington, D.C.
- 2004:** 4 abstracts presented at Amer.Assoc. of Immunology meeting (AAI –FASEB); two selected for oral presentation (April 2004)
 3 abstracts presented at the American Transplant Congress (ATC), Boston, MA; two selected for oral presentation (May 2004)
 1 abstract presented at EULAR, Berlin, Germany (June 2004)
 1 abstracts presented at the International Immunology Congress, Montreal, Canada
- 2005:** 2 Abstracts selected for oral presentation and 1 abstract selected for poster presentation at AAI meeting, San Diego, CA, (May 2005)
 1 abstract presented at FOCIS, Boston, MA, (May 2005)
 1 abstract presented at Amer. College of Rheumatology, San Diego, CA, (Nov. 2005)
- 2006:** 2 abstracts presented at the Keystone Symposium on lymphocyte Activation and Signaling (one oral, one poster)
 3 abstracts at AAI meeting (one oral, 2 poster)
 2 Abstracts presented at World Transplant Congress (WTC)
- 2007:** 3 abstracts presented at the Keystone Symposium on Immune Memory (one oral, two poster)
 2 abstracts presented at the American Transplant Congress
 2 abstracts presented at the AAI meeting (one oral, one poster)
 1 abstract selected for oral presentation at FOCIS
- 2008:** 1 abstract presented at the Keystone Symposium on Viral Immunology
 3 abstracts presented at the AAI meeting (2 oral, 3 poster)

2009: 2 abstract presented selected from oral presentation at ATC meeting

Major Invited Speeches

1. *Control of Memory CD4 T lymphocyte Activation mediated by the CD4/MHC class II Interaction*, Institut Curie, Paris France, 1994
2. *Characterization of Activation and Signaling Requirements of memory CD4 T cells*, National Institutes of Health Postdoctoral Seminar, 1995
3. *Biochemical Analysis of Immunological Memory*, Walter Reed Army Institute of Research, 1998
4. *Analysis of Immunological Memory*, Department of Microbiology and Immunology, University of Maryland, Baltimore, 1998
5. “A Biochemical approach toward dissecting the memory immune response” T cell subset Block Symposium Session Chair, Experimental Biology ‘99, Washington, D.C.
6. “Models and Mechanisms for the generation of T cell memory”, Johns Hopkins University School of Medicine, Immunology Council, 1999.
7. “Dissecting the Complexity of the Memory Immune Response”, Walter Reed Army Institute of Research Vaccine Seminar Series, May 2002
8. “T cell memory: Heterogeneity and Mechanism”s, University of Michigan Immunology Series, Dec. 2002.
9. “T cell memory, heterogeneity and Mechanisms”, University of Indiana School of Medicine, Dec. 2002.
10. “Signaling Pathways and Heterogeneity of Memory CD4 T cells”, University of Vermont, April 2003.
11. “Memory T cell Generation, Heterogeneity and Functional Plasticity”, Cleveland Clinic, March, 2003.
12. Keynote Speaker for the Scandanavian Society for Immunology, 34th Annual Meeting (Aug. 2003)
13. Invited Speaker for the Aegean Conference on Molecular Autoimmunity (Oct. 2003)
14. Invited Speaker for Basic Science symposium on “Immune Memory in Health and Disease,” the American College of Rheumatology Annual Meeting, Orlando, FL (Oct. 2003)
15. “Control of Adaptive Immunity”, First International Symposium on Pediatric Inflammatory Bowel Disease., Sept. 2003
16. “Memory CD4 T cells: signaling and heterogeneity”, Medical College of Georgia, Nov. 2003; State University of New York, Buffalo, Dec. 2003.
17. “Generation and Plasticity of lymphoid and non-lymphoid Memory CD4 T cells”. Yale University School of Medicine, Division of Pulmonary Medicine, March 2004.
18. Chair, Block Symposium on “Effector & Memory Cell Generation & Activation”, Experimental Biology, April 2004, Washington, D.C.
19. “Long-term islet graft survival by abrogation of recurrent autoimmunity”, invited Speaker for Johns Hopkins Autoimmunity Day, June 2004
20. Invited for curriculum development meeting, “Immunological Players in Rheumatoid Arthritis”
21. Speaker for Major symposium on Immune Memory and vaccine development, International Congress of Immunology (ICI/FOCIS), July 2004, Montreal, Canada.
22. Invited speaker to Argentinian Society of Immunology, Nov. 2004

23. Mexican Society for Rheumatology, invited speaker: "The role of T lymphocytes in the Pathogenesis of Rheumatoid Arthritis".
24. Invited speaker to La Jolla Institute of Allergy and Immunology, Jan. 2005; Blood Research Institute, Wisconsin, Oct. 2005; University of Western Ontario, Spring 2005
23. Block symposium Chair, "Mechanism/Biology of Immunological Memory, Aging, & Homeostasis", AAI 2005, San Diego, CA
24. Co-organizer, Aegean conference on "Autoimmunity: mechanisms and novel treatments", Santorini, Greece, Sept. 2005
25. Invited short talk for session on "Signaling in the Adaptive Immune response", for the Keystone Symposium on Lymphocyte activation and Signaling, Jan. 2006
26. AAI Block symposium co-chair on Signal Pathways in T cell Development, Regulation, and Activation, May 2006
27. Bernice Nobel Memorial Lecture, "Immunological Memory: Generation and Mechanisms", SUNY Buffalo, May 2006
28. Invited speaker/session chair for FASEB summer research conference on Transplantation Immunology, June 2006
29. Invited speaker: "Mechanisms for the generation of memory CD4 T cells". USUHS, Feb. 2006; NIH, March 2006.
30. Moderator, "Tolerance: New Pathways" for Concurrent Session at the World Transplant Congress, Boston, MA, July 2006
31. Invited speaker to University of Maryland, College Park (5/07), Johns Hopkins Immunology Council (5/07), Trudeau Institute, Saranac Lake, NY (9/07)
32. Organizer, speaker, and session chair, Aegean Conference on Autoimmunity, Oct.7-12 2007, Rhodes Greece
33. Invited Speaker, NIH/NIAID Symposium on "T cell memory in the development and progression of allergic diseases" at the European Academy of Allergy and Clinical Immunology; Göteborg, Sweden, June 9th – 13th 2007
34. Invited Speaker: Basic Science Symposium of the Transplantation Society, Halifax, Nova Scotia, Canada, September 2007
35. Invited speaker to University of Wisconsin Transplant Division Grand Rounds, Dec. 2007
36. Program Faculty and Invited speaker: Keystone Symposium on Viral Immunology, Keystone, CO, January, 2008
37. Major Symposium Session Chair and speaker for "Control of Effector and Memory T cell fate", AAI annual meeting, Experimental Biology, April 2008, San Diego, CA; also block symposium chair for "Innate Immunity" session
38. Co- Moderator for early morning workshop on "Memory T cells", American Transplant Congress, Toronto, June, 2008.
39. Session chair for "Fighting Pathogens" for Federation of Clinical Immunology Societies (FOCIS) annual meeting, June, 2008, Boston, MA
40. Invited speaker for "Excellence in Immunology" lecture series, University of Texas Southwestern Medical Center at Dallas, December, 2008
41. Program faculty and Invited speaker, Keystone Symposium on Immunological Memory, January, 2009.
42. Co-moderator, "Pathways in Acute Rejection", American Transplant Congress, June, 2009, Boston, MA

