

**TROY D. RANDALL****Curriculum Vitae****Business Address:**

Department of Medicine  
 Division of Allergy, Immunology and Rheumatology  
 University of Rochester  
 601 Elmwood Avenue, Box 695  
 Rochester, New York 14642  
 (585) 275-2891 phone  
 (585) 442-3214 fax

**Education:**

1987 B.S., Chemistry. University of Denver, Denver, CO  
 1992 Ph.D. Microbiology and Immunology. Duke University, Durham NC

**Professional Experience:**

09/87-04/92 Predoctoral Fellow with Dr. Ronald Corley, Duke University  
 04/92-11/92 Postdoctoral Fellow with Dr. Ronald Corley, Duke University  
 11/92-06/96 Postdoctoral Fellow with Dr. Irving Weissman, Stanford University  
 06/96-03/97 Visiting Scientist, DNAX Research Institute, Palo Alto, CA  
 04/97-04/01 Assistant Member, Trudeau Institute  
 04/01-04/07 Associate Member, Trudeau Institute  
 04/07-06/08 Member, Trudeau Institute  
 08/97-06/08 Supervisor, Flow Cytometry Facility, Trudeau Institute  
 05/98-06/08 Adjunct Assoc. Prof. of Microbiol, Immunol and Mol. Genetics, Albany Med. College  
 07/02-06/08 Adjunct Associate Professor of Medicine, University of Vermont  
 06/07-06/08 Chair, Center for Asthma, Allergy and Inflammation, Trudeau Institute  
 06/08-present Professor, Dept. of Medicine, University of Rochester, Rochester, NY  
 06/08-present Member, Center for Translational Immunology and Infectious Disease, U of Rochester  
 06/08-present Adjunct Member, Trudeau Institute

**Professional Societies:**

1998-present Member of American Society of Hematology  
 1998-present Member of American Association of Immunologists  
 1997-present Member of American Association for the Advancement of Science

**Fellowships:**

1987-1990 NIH predoctoral training fellowship in Genetics, Duke University,  
 1992-1993 NIH Postdoctoral Fellowship in Immunology, Stanford University,  
 1993-1996 Helen Hay Whitney Postdoctoral Fellowship, Stanford University,

**Postdoc Mentoring:**

1998-2005 Byung O. Lee, Ph.D. Assistant Professor at Vaccine Research Institute of San Diego  
 2002-2006 Juan E. Moyron-Quiroz, Ph.D. La Jolla Institute for Allergy and Immunology  
 2002-present Javier R. Moreno, Ph.D.  
 2004-present Damian Carragher, Ph.D.  
 2006-present Denise Kaminski, Ph.D  
 2008-present Andre Ballesteros-Tato

**Ad Hoc Reviewer:**

J. Immunol. J. Exp. Med. Int. Immunol. Am. J. Pathology. Blood. Nat. Med. Immunity.  
 J. Clin. Invest. Stem Cells. Cytometry, Nat Immunol. J. Leukocyte Biol., Virology,  
 Immunology,

**Review panels:**

2001 Louisiana Board of Reagents (ad hoc)  
 2002-07 American Heart Association  
 2002 Biomedical Research Council, Singapore (ad hoc)  
 2003, 05, 06, 08 NIH NCRR shared instrumentation (flow cytometry)

2006 NIH Topics in Virology (ad hoc)  
 2007 NIH Immune Mechanisms of Viral Control (ad hoc)  
 2007 Board of Scientific Counselors (ad hoc) for Laboratory of Respiratory Biology, NIEHS

**Conference organization:**

10-06 Co-organizer of "Rediscovering B cells: Protective and pathogenic roles in infectious and autoimmune diseases".  
 7-07 Organizer of Joint Pulmonary Symposia with Vermont Lung Center

**Invited Presentations:**

1-98 Arrest of B lymphocyte terminal differentiation by CD40: a mechanism for the lack of antibody secreting cells in the germinal center. Anergex, Redwood City, CA  
 2-98 Consequences of CD40 signaling in the B cell immune response. W. Alton Jones Cell Science Center, Lake Placid, NY  
 4-98 Consequences of CD40 activation for germinal center B cells. UNYIC, Garnet Hill, NY  
 2-99 Role of CD40 signaling in B cell differentiation and antibody secretion. Keystone symposium. B lymphocyte biology and disease.  
 4-00 B cell responses to influenza develop more rapidly in the lung than in systemic sites. AAI:  
 11-00 CD40 signaling in B cell responses. University of Kentucky, Lexington  
 6-01 Role of CD38 in adaptive immunity. International congress: ADPR 2001. New York, New York.  
 7-01 Duration of CD40 signaling controls B cell responsiveness. Int Congress of Immunol, Stockholm, Sweden  
 10-01 CD40 signaling and the B cell response. Loyola Medical school, Maywood, IL  
 11-01 Local and systemic responses in respiratory immunity: what good are lymph nodes anyway? UNYIC. Bolton Landing, NY  
 11-01 Local and systemic responses in respiratory immunity: what good are lymph nodes anyway? CINVESTAV, Mexico City, Mexico  
 11-01 Duration of CD40 signaling controls the B cell response. National Institute of Biological Sciences, Mexico City, Mexico  
 9-02 The role of lymph nodes in the immune response to influenza. Immunity to viral infections workshop. Trudeau Institute, Saranac Lake, NY  
 10-02 Proliferation, V region mutation and affinity selection outside the germinal center in a novel population of B cells responding to influenza. UNYIC, Bolton Landing, NY  
 10-02 Role of lymph nodes in immune responses. Boston University Medical School, Boston, MA  
 11-02 Role of organized lymphoid tissues and chemokines in the immune response to influenza. Chemocentrix, Redwood City, CA.  
 2-04 Role of lymph nodes in immune responses. Montana State University, Bozeman MT  
 3-04 Unique aspects of respiratory immunity in the absence of lymphoid tissues. National Heart, Lung and Blood Institute. Bethesda, MD  
 4-04 The development and function of lymphoid organs in the respiratory tract. Major Symposium AAI, Washington, DC  
 5-04 The role of local lymphoid tissues in respiratory immune responses. Mount Sinai Medical Center, NY  
 11-04 Development and function of lymphoid tissues in the respiratory tract. Major Symposium. Autumn Immunology Conference. Chicago.

June 26, 2008

Randall CV

- 12-04 Development and function of lymphoid tissues in the respiratory tract. Symposium to honor Dr. Dennis Barrett. Bodega Bay, Ca
- 12-04 Development and function of lymphoid tissues in the respiratory tract. Albany Medical College.
- 5-05 BALT, the hygiene hypothesis and the development of asthma. Sandler annual meeting. San Francisco.
- 10-05 Role of lymphoid organs in mucosal immunity. Aegean Conference on Innate and adaptive immunity. Rhodes Greece.
- 3-06 Role of local lymphoid tissues in respiratory immune responses. Columbus Children's Hospital, Columbus OH
- 3-06 The development and function of local lymphoid tissues in the respiratory tract. University of Connecticut Health Center, Farmington CT.
- 3-06 Role of lung lymphoid structures in the immune response to influenza virus. Major Symposium. Keystone symposium on "Viral immunity / Advances in influenza research"
- 5-06 BALT, the hygiene hypothesis and the development of asthma. Sandler annual meeting. San Francisco.
- 5-06 Unique genesis of NALT: Implications for vaccine development. AAI Immunology 2006:SMI Symposium on Mucosal Immunity and Vaccines. Boston MA
- 5-06 iBALT in the lung: Necessity is the mother of induction. Symposium on respiratory immune responses: knowing when to pull the trigger. American Thoracic Society. San Diego, CA
- 8-06 The role of local lymphoid tissues in respiratory immune responses. University of Alabama. Birmingham Alabama
- 9-06 The role of unconventional lymphoid tissues in local immune responses. Symposia on the development and function of secondary and tertiary lymphoid tissues. Paris, France.
- 9-06 The role of local lymphoid tissues in respiratory immune responses. Max Planck Institute of infection biology. Berlin Germany
- 9-06 The role chemokines in the development and function of lymphoid tissues in the respiratory tract. Gordon conference on chemotactic cytokines. Aussois, France.
- 12-06 The role of local lymphoid tissues in respiratory immunity. University of Texas Medical Branch. Galveston, TX.
- 1-07 Neonatal inflammation and immunity. TransAtlantic Airway Conference. Lucerne Switzerland.
- 2-07 Role of B cells in heterosubtypic immunity to influenza. Keystone conference on B cells in health and disease. Banff, Canada.
- 3-07 The role of local lymphoid tissues in respiratory immunity. University of Rochester, Rochester NY.
- 3-07 The role of local lymphoid tissues in respiratory immunity. Wake Forest University, Winston-Salem, NC.
- 4-07 Structure and function of local lymphoid tissues. Boston University, Boston, MA
- 5-07 Structure and function of inducible Bronchus Associated Lymphoid Tissue (iBALT). Biogen-IDEC, Boston, MA
- 5-07 iBALT, the hygiene hypothesis and the development of asthma. Sandler Program for Asthma Research annual meeting. San Francisco, CA
- 5-07 The role of inducible BALT in respiratory immunity. AAI 2007 SMI symposium: NALT horizons. Miami Beach, FL.
- 5-07 Local lymphoid tissues in the respiratory tract. Drexel University, Philadelphia, PA.
- 6-07 Role of iBALT in resistance to influenza. Gordon Conference: Viruses and Cells. Tilton, NH
- 7-07 Local Immunity to influenza. University of Rochester, Rochester, NY

- 7-07 Role of iBALT in respiratory immune responses (influenza, asthma and RA). National Jewish Center, Denver, CO.
- 8-07 Role of iBALT in respiratory immune responses (influenza, asthma and RA). University of Georgia, Athens, GA.
- 9-07 Role of iBALT in respiratory immune responses (influenza, asthma and RA). University of Birmingham, Birmingham UK
- 9-07 Role of iBALT in respiratory immune responses (influenza, asthma and RA). International Symposia: Immune reactions in the lung in infection and allergy. Hannover, Germany
- 10-07 Local lymphoid tissues in the respiratory tract. MedImmune. Gaithersburg, MD
- 10-07 The role of local lymphoid tissues in respiratory immunity. University of Vermont, Burlington VT.
- 3-08 The role of iBALT in respiratory immunity. University of Iowa, Iowa City, IA.
- 4-08 The development and function of unusual lymphoid tissues. University of Maryland, Baltimore, MA
- 5-08 The role of local lymphoid tissues in respiratory immunity. UC Davis, Davis, CA

### **Patents:**

1. **Randall, T.D.**, D.M. Gorman and A Zlotnik. 2000. Mammalian cell surface antigens; related reagents. #6111090.
2. Lund, F.E., **T.D. Randall** and S. Partida-Sanchez. 2000. Modulators of inflammation; methods and compositions. #6955884.

### **Publications:**

- 1 **Randall, T.D.**, L.B. King, and R.B. Corley. 1990. The biological effects of IgM hexamer formation. *Eur. J. Immunol.* 20:1971-1979.
- 2 **Randall, T.D.**, R.M.E. Parkhouse, and R.B. Corley. 1992. J chain synthesis and secretion of hexameric IgM is differentially regulated by LPS and IL-5. *Proc. Natl. Acad. Sci. (USA)*. 89:962-966.
- 3 Corley, R.B., F.E. Lund, **T.D. Randall**, L.B. King, S. Doerre, and D.L. Woodland. 1992. Mouse mammary tumor proviral gene expression in cells of the B lineage. *Semin. Immunol.* 4:287-296.
- 4 **Randall, T.D.**, J.W. Brewer, and R.B. Corley. 1992. Direct evidence that J chain regulates the polymeric structure of IgM in antibody secreting B cells. *J. Biol. Chem.* 267:18002-18007.
- 5 Lund, F.E., **T.D. Randall**, D. Woodland, M.P. Happ, and R.B. Corley. 1993. MHC Class II limits the functional expression of endogenous superantigens in B cells. *J. Immunol.* 150:78-86.
- 6 **Randall, T.D.**, F.E. Lund, J.W. Brewer, C. Aldridge, R. Wall, and R.B. Corley. 1993. IL-5 and IL-6 define two molecularly distinct pathways of murine B cell differentiation. *Mol. Cell. Biol.* 13:3929-3936.
- 7 Brewer, J.W., **T.D. Randall**, R.M.E. Parkhouse, and R.B. Corley. 1994. IgM hexamers? *Immunol. Today* 15:165-168.
- 8 Brewer, J.W., **T.D. Randall**, R.M.E. Parkhouse, and R.B. Corley. 1994. Mechanism and subcellular localization of secretory IgM polymer assembly. *J. Biol. Chem.* 269:17338-17348.
- 9 **Randall, T.D.**, F.E. Lund, M.C. Howard, and I.L. Weissman. 1996. Expression of murine CD38 defines a population of long-term reconstituting hematopoietic stem cells. *Blood* 87:4057-4067.
- 10 **Randall, T.D.** and I.L. Weissman. 1997. Phenotypic and functional changes induced at the clonal level in hematopoietic stem cells after 5-FU treatment. *Blood* 89:3596-3606
- 11 **Randall T.D.** and I.L. Weissman. 1998 Characterization of a population of cells in the bone marrow that phenotypically mimics hematopoietic stem cells: resting stem cells or Mystery Population. *Stem Cells* 16:38-48.
- 12 Lund, F.E., D.A. Cockayne, **T.D. Randall**, N. Solvason and M.C. Howard. 1998. CD38, a new paradigm in lymphocyte activation and signal transduction. *Immunol. Rev.* 161:79-93.

- 13 Cockayne, D.A., T. Muchamuel, J.C. Grimaldi, H. Muller-Steffner, F.E. Lund, **T.D. Randall**, R. Murray, F. Schuber and M.C. Howard. 1998. Mice deficient for the ecto-NAD<sup>+</sup> glycohydrolase CD38 exhibit altered humoral immune responses. *Blood*. 92:1324-1333.
- 14 **Randall, T.D.**, A.W. Heath, L. Santos-Argumedo, M.C. Howard, I.L. Weissman and F.E. Lund. 1998. Arrest of B lymphocyte terminal differentiation by CD40 signaling: Mechanism for lack of antibody secreting cells in germinal centers. *Immunity*. 8:733-742.
- 15 Mebius, R.E., S. van Tuijl, I.L. Weissman and **T.D. Randall**. 1998. Transfer of primitive stem/progenitor BM cells from LTA<sup>-/-</sup> donors to wildtype hosts: implications for the generation of architectural events in lymphoid B cell domains. *J. Immunol*. 161:3836-3843.
- 16 Wright, DE, S.H. Cheshier, A.J. Wagers, **T.D. Randall**, J.L. Christensen and I.L. Weissman. 2001. Cyclophosphamide/Granulocyte Colony-Stimulating Factor causes selective mobilization of bone marrow hematopoietic stem cells into the blood after M-phase of the cell cycle. *Blood*. 97:2278-2285
- 17 Partida-Sanchez, S., Cockayne, D., Monard, S., Jacobson, E.L., Oppenheimer, N., Garvy, B.A., Kusser, K., Goodrich, S, Howard, M.C., Harmsen, A., **Randall, T.D.** and Lund, F.E. 2001. Cyclic ADP-ribose production by CD38 regulates intracellular calcium release, extracellular calcium influx and chemotaxis in neutrophils and is required for bacterial clearance in vivo. *Nature Medicine*, 7:1209-1216.
- 18 Harmsen, A., K. Kusser, L. Hartson, M. Tighe, M. J. Sunshine, J.D. Sedgwick, Y. Choi, D.R. Littman and **T.D. Randall**. 2002 Cutting edge: Organogenesis of Nasal Associated Lymphoid Tissue (NALT) occurs independently of lymphotoxin-a (LTA) and retinoic acid receptor-related orphan receptor-g, (RORg), but the organization of NALT is LTA-dependent. *J. Immunol*. 168:986-990.
- 19 Lund, F.E., **Randall, T.D.**, and Partida-Sanchez, S. 2002. Does neutrophil CD38 have a role in Ca<sup>++</sup> signaling triggered by b2 integrin? *Nature Medicine*. 8:307-308.
- 20 Lee, B.O., L. Haynes, S. Eaton, S.L. Swain and **T.D. Randall**. 2002. The biological outcome of CD40 signaling is dependent on the duration of CD40 ligand expression: reciprocal regulation by IL-4 and IL-12. *J. Exp. Med*. 196:693-704.
- 21 Lund, F.E., S. Partida-Sanchez, B.O. Lee, K.L. Kusser, L. Hartson, R.J. Hogan, D.L. Woodland and **T.D. Randall**. 2002. Lymphotoxin- $\alpha$ -deficient mice make delayed, but effective, T and B cell responses to influenza. *J. Immunol*. 169:5236-5243.
- 22 Lund, F.E., **T.D. Randall** and S. Partida-Sanchez. Regulation of immune responses by CD38 and cADPR. 2002. In *Cyclic ADP-ribose and NAADP: Structures, metabolism and function*. pp 217-240. H.C. Lee, ed. Kluwer Academic Publishers.
- 23 Kusser, K.L. and **T.D. Randall**. 2003. Simultaneous detection of EGFP and cell surface markers by fluorescence microscopy in lymphoid tissues. *J. Histochem. Cytochem*. 1:5-14
- 24 Partida-Sanchez, S., **T.D. Randall** and F.E. Lund. 2003. Innate immunity is regulated by CD38, an ectoenzyme with ADP-ribosyl cyclase activity. *Microbes and Infection*. 5:49-58.
- 25 Kim, I-J., E. Flano, D.L. Woodland, F.E. Lund, **T.D. Randall** and M.A. Blackman. 2003. Maintenance of g-herpesvirus B cell latency is dependent on CD40-mediated B cell differentiation into long-lived memory cells. *J. Immunol*. 171:886-892.
- 26 Lund, F.E., K. Schuer, M. Hollifield, **T.D. Randall** and B.A. Garvey. 2003. Clearance of *Pneumocystis carinii* in mice is dependent on B cells, but not on *P. carinii* specific antibody. *J. Immunol*. 171:1423-1430.
- 27 Haynes, L., S.M. Eaton, E.M. Burns, **T.D. Randall** and S.L. Swain. 2003. CD4 T cell memory derived from young naïve cells functions well into old age, but memory generated from aged naïve cells functions poorly. *Proc. Natl. Acad. Sci. (USA)*. 100:15053-15058.
- 28 Lee, B.O., J. Moyron-Quiroz, J. Rangel-Moreno, K.L. Kusser, L. Hartson, F. Sprague, F.E. Lund and **T.D. Randall**. 2003. CD40, but not CD154, expression on B cells is necessary for optimal primary B cell responses. *J. Immunol*. 171:5707-5717.
- 29 Lee, B.O., L. Hartson and **T.D. Randall**. 2003. Normal development and function of CD40-deficient, influenza-specific CD8 T cells in a CD40 sufficient environment. *J. Exp. Med*. 198:1759-1764.

- 30 Partida-Sanchez, S., S. Goodrich, K. Kusser, N. Oppenheimer, **T.D. Randall** and F.E. Lund. 2004. Regulation of dendritic cell trafficking by the ADP-ribosyl cyclase CD38: Impact on the development of humoral immunity. *Immunity* 20:279-291.
- 31 Woodland, D.L. and **T.D. Randall**. 2004. Anatomical features of anti-viral immunity in the respiratory tract. *Semin. Immunol.* 16:163-170.
- 32 Moyron-Quiroz, JE, J Rangel-Moreno, K Kusser, L. Hartson, F. Sprague, S. Goodrich, D.L. Woodland, FE Lund and **T.D. Randall**. 2004. Role of inducible bronchus associated lymphoid tissue (iBALT) in respiratory immunity. *Nat. Med.* 10:927-934.
- 33 Lund, F.E., B.A. Garvy, **T.D. Randall** and D.P. Harris. 2005. Regulatory roles for cytokine-producing B cells in infection and autoimmune disease. *Curr. Dir. Autoimmun.* 8:25-54.
34. Cupedo, T., Lund, F. E., Ngo, V. N., **Randall, T. D.**, Jansen, W., Greuter, M. J., de Waal-Malefyt, R., Kraal, G., Cyster, J. G., and Mebius, R. E. 2004. Initiation of cellular organization in lymph nodes is regulated by non-B cell derived signals and is not dependent on CXCL13. *J. Immunol.* 173:4889-4896.
35. Eaton, S.M., E.M. Burns, K Kusser, **T.D. Randall** and L Haynes. 2004. Age-related defects in CD4 T cell cognate helper function lead to reductions in humoral responses. *J. Exp. Med.* 200:1613-1622.
- 36 Haynes, L., S.M. Eaton, E.M. Burns, **T.D. Randall** and S.L. Swain. 2005. Newly generated CD4 T cells in aged animals do not exhibit age-related defects in response to antigen. *J. Exp. Med.* 201:845-851.
- 37 Crowe, SR, SC Miller, DM Brown, PS Adams, RW Dutton, AG Harmsen, FE Lund, **TD Randall**, SL Swain and DL Woodland. 2006. Uneven distribution of MHC Class II epitopes within the Influenza virus. *Vaccine.* 24:457-467.
- 38, Goodrich SP, H Muller-Steffner, A Osman, M-J Moutin, K Kusser, A Roberts, DL Woodland, **TD Randall**, E Kellenberger, PT LoVerde, F Schuber and FE Lund 2005. Production of calcium-mobilizing metabolites by a novel member of the ADP-ribosyl cyclase family expressed in *Schistosoma mansoni*. *Biochem.* 44(33):11082-11097.
- 39 Rangel-Moreno, J, J.E. Moyron-Quiroz and **T.D. Randall**. 2005 The complex role of lymphotoxin in immunity. *Mod. Aspects Immunobiol. (MAI J).* 15:41-46.
40. Rangel-Moreno, J., J Moyron-Quiroz, K Kusser, L Hartson, H Nakano and **TD Randall**. 2005. Role of CXCL13, CCL19 and CCL21 in the organization and function of Nasal Associated Lymphoid Tissue (NALT). *J. Immunol.* 175:4904-4913.
41. Lee, BO, J Rangel-Moreno, JE. Moyron-Quiroz, L Hartson, F Sprague, FE. Lund and **TD Randall**. 2005. CD4 T cell-independent antibody response promotes resolution of primary influenza infection and helps to prevent reinfection. *J. Immunol.* 175:5827-5838.
42. Lund, FE, M Hollifield, K Schuer, JL Lines, **TD Randall** and BA Garvy. 2006. B cells are required for generation of protective effector and memory CD4 cells in response to *Pneumocystis* lung infection. *J. Immunol.* 176:6147-6154.
43. Johnson, J.D., Bernal-Mizrachi, E., Ford, E., Han, Z., Kusser, K., Luciani, D.S., Tran, H., **Randall, T.D.**, Lund, F.E., Polonsky, K.S. 2006. Suppressed insulin signaling and increased apoptosis in CD38 null islets. *Diabetes.* 55:2737-2746.
44. Moyron-Quiroz, JE, J. Rangel-Moreno, L. Hartson, K Kusser, M.P. Tighe, KD Klonowski, L Lefrancois, LS Cauley, A.G. Harmsen, F.E. Lund and **TD Randall**. 2006. Persistence and responsiveness of immunologic memory in the absence of secondary lymphoid organs. *Immunity.* 25:643-654
45. Rangel-Moreno J, L Hartson, C Navarro, M Gaxiola, M Selman and **TD Randall** 2006. Inducible Bronchus Associated Lymphoid Tissue (iBALT) in patients with pulmonary complications of rheumatoid arthritis. *J. Clin. Invest.* 116:3183-3194.
46. Moyron-Quiroz, J. Rangel-Moreno, D.M. Carragher and **TD Randall**. 2007. The function of local lymphoid tissues in pulmonary immune responses. *Adv. Exp. Med Biol.* 590:55-68.

47. Khader, SA, GK Bell, JE Pearl, JJ Fountain, J Rangel-Moreno, GE Cilley, F Shen, SM Eaton, SL Gaffen, SL Swain, RM Locksley, L Haynes, **TD Randall** and AM Cooper. 2007. IL-23 and IL-17 in establishment of protective pulmonary CD4<sup>+</sup> T cell responses upon vaccination and during *Mycobacterium tuberculosis* challenge. *Nat. Immunol.* 8:369-377.
48. Rangel-Moreno, J, J Moyron-Quiroz, L. Hartson, K Kusser and **TD Randall**. 2007. Pulmonary expression of CXCL13, CCL19 and CCL21 is essential for local immunity to influenza. *Proc. Natl. Acad. Sci (USA)* 104:10577-10582.
49. Rangel-Moreno, J, JE Moyron-Quiroz, D Carragher and **TD Randall** 2007. Role of lymphotoxin and homeostatic chemokines in the development and function of local lymphoid tissues in the respiratory tract. *Immunologia.* 26:13-28.
50. Rangel-Moreno J, DM Carragher, RS Misra, K Kusser, L Hartson, A Moquin, FE Lund and **TD Randall**. 2008. B cells promote resistance to heterosubtypic strains of influenza via multiple mechanisms. *J. Immunol.* 180:454-463.
51. Rangel-Moreno, J. and **TD Randall**. 2008. Rheumatoid lung disease. In the Encyclopedia of Molecular Mechanisms of Disease. Edited by F. Lang. In Press.
52. Carragher, DM, J Rangel-Moreno and **TD Randall**. 2008. Ectopic lymphoid tissues and local immunity. *Semin. Immunol.* 20:26-42.
53. **Randall, TD**, DM Carragher and J Rangel-Moreno. 2008. Development of secondary lymphoid organs. *Ann Rev Immunol.* 26: 627-650.
54. Yager, EJ, Ahmed, M, Lanzer, K, **Randall, TD**, Woodland, DL and Blackman, MA. 2008. Age-associated decline in CD8 T cell repertoire diversity leads to holes in the T cell repertoire and impaired immunity to influenza virus. *J. Exp. Med.*, 205:711-723.
55. Carragher, DM, DA Kaminski, A Moquin, L Hartson and **TD Randall**. 2008. A novel role for non-neutralizing antibodies against nucleoprotein in facilitating resistance to influenza. *J. Immunol.* In revision.
56. Wojciechowski, W, DP Harris, F Sprague, B Mousseau, M Makris, K Kusser, T Honjo, K Mohrs, M Mohrs, **TD Randall** and FE Lund. 2008. Regulation of type 2 immunity to H polygyrus by effector b cells: requirement for cytokine-producing B cells. Submitted.
57. Rangel-Moreno, J, J Moyron-Quiroz, RS Misra, DM Carragher, L Hartson, K Kusser, F Sprague, T Honjo, FE Lund and **TD Randall**. 2008 B cells must produce antibody to promote recovery from virulent influenza infection. Submitted.
58. Carragher, DM, L Hartson, K Kusser Y Yokota and **TD Randall**. 2008. Inducible Bronchus Associated Lymphoid Tissue (iBALT) is preferentially formed during a developmental window in neonates. Submitted.
59. Kaminski, D, BO Lee, L. Haynes, SM Eaton and **TD Randall**. 2008. CD28 and ICOS signaling can sustain CD154 expression on activated T cells. Submitted.
60. Khanna, KM, JE Moyron-Quiroz, **TD Randall**, L Lefrancois, LS Cauley. 2008. In situ visualization of CD8 T cell-DC interactions reveals distinct features of the early and late response to antigen after influenza virus infection. Submitted.
61. Moyron-Quiroz, JE, J Rangel-Moreno, DM Carragher, K Kusser, L Hartson, A Moquin, and **TD Randall**. 2008. Milky spots in the omentum develop independently of lymphoid tissue inducer cells and support T-dependent responses to peritoneal antigens. Submitted.
62. Khader, SA, A Solache, JE Pearl, JJ Fountain, C Martino, J Rangel-Moreno, **TD Randall** and AM Cooper. 2008. IL-27 limits the antigen-specific IL-17 cell population in tuberculosis. Submitted.