

Thandi M. Onami, Ph.D.

Assistant Professor, Department of Microbiology
University of Tennessee
Walters Life Sciences Bldg. Rm F407
Knoxville, TN 37996
Phone: (865) 974-6229
Fax: (865) 974-4007
Email: tonami@utk.edu

Education

Ph. D., Biology, University of California, San Diego, La Jolla, CA 1999
Dissertation title: *Investigations into Apoptotic Cell Recognition and Macrophage Mediated Deletion of Immature T cells*

A.B., Biology, Princeton University, Princeton, NJ 1992
Thesis title: *A New Technique for Examining DNA Polymorphism Demonstrated in Populations of Mytilus edulis.*

Research and Professional Appointments

Assistant Professor, Department of Microbiology, College of Arts and Sciences, University of Tennessee, Knoxville, TN 2005-

AAAS/NIH Science and Policy Fellow, Fogarty International Center, National Institutes of Health, Bethesda, MD *Mentor* Dr. Jeanne McDermott 2004-05

Postdoctoral Fellow, Emory Vaccine Center, Department of Microbiology and Immunology, Emory University School of Medicine, Atlanta, GA. *Advisor* Dr. Rafi Ahmed 1999-2004

Postdoctoral Fellow, University of California, San Diego, Department of Biology, La Jolla, CA. *Advisor* Dr. Stephen Hedrick. 1999

Graduate Student Researcher, University of California, San Diego, Department of Biology, La Jolla, CA. *Advisor* Dr. Stephen Hedrick. 1993-99

Visiting Research Fellow, Medical Genome Center, John Curtin School of Medical Research, Australian National University, Canberra, ACT. *Advisor* Dr. Christopher Goodnow. 1998

Graduate Student Researcher, Marine Biological Laboratory, Cellular & Molecular Physiology Course, Woods Hole, MA. *Director* Dr. Thomas Pollard. 1993

Graduate Student Researcher, University of California, San Diego Department of Scripps Institution of Oceanography, Marine Biology Division, La Jolla, CA. *Advisor* Dr. Victor Vacquier. 1992-93

Undergraduate Student Researcher, Princeton University, Department of Ecology and Evolutionary Biology, Princeton, NJ. *Advisor* Dr. Martin Kreitman. 1991-92

Teaching Appointments

Teaching Assistant, University of California, San Diego, Department of Biology, La Jolla, CA. *Introduction to Molecular Biology* 1995

Teaching Assistant, University of California, San Diego, Department of Biology, La Jolla, CA. *Cell Biology Lab* 1994

Awards and Honors

Gordon Research Conf., Underrepresented Minority Support Program	2003
American Association of Immunologists, Minority Scientist Travel Award	2002
National Institute of Health, NIAID RSUM Postdoctoral Fellowship	2000-02
National Institute of Health, NCI Pre-doctoral Trainee	1996-99
University of California, San Diego All Peoples Award	1997
Who's Who Among Students in American Colleges and Universities	1997
National Dean's List	1996
National Science Foundation Minority Fellowship	1993-96
American Society of Cell Biology Summer Research Fellowship	1993
San Diego Fellowship	1992-93
Ford/Mellon Summer Research Grant to UC Berkeley	1991
Princeton Club of Washington Scholarship	1988-92
National Achievement Scholarship	1988
National Academy of Sciences and Institute of Engineering Scholarship	1988
Valedictorian, Cardozo Sr. High School, Washington, DC	1988

Professional Memberships and Activities

American Association of Immunologists	2000-current
American Association for the Advancement of Science	2002-current
UCSD Black Graduate Student Association, President	1994-97
Graduate Student Association, Biology Representative	1996-97
Department of Biology Graduate Admissions Committee	1995

Research Publications

1. Page, D.M., Kane, L.P., **Onami, T.M.** and Hedrick, SM (1996). Cellular and biochemical requirements for thymocyte negative selection. *Seminars in Immunology*, 8: 69-82
2. Jepsen, K., Hermanson, O., **Onami, T.M.**, Gleiberman, A.S., Lunyak V., McEvilly, R.J., Kurokawa R., Kumar, V., Liu, F., Seto, E., Hedrick S. M., Mandel G., Glass, C.K., Rose D.W., and Rosenfeld M. G. (2000). Combinatorial roles of the Nuclear Receptor Corepressor in transcription and development. *Cell* 102: 753-763
3. **Onami, T.M.**, Lin, M. Y., Varki, N., Page, D. M., Marth, J., Reynolds, S., Katayama, C. D., Irimura, T., Varki, A., and Hedrick S. M. (2002). The generation of mice deficient for the macrophage galactose and N-acetylgalactosamine specific lectin: limited role in lymphoid and erythroid homeostasis. *Molecular and Cellular Biology* 22 (14): 5173-5181

4. Tsuiji, M., Fujimori, M., Ohashi, Y., Higashi, N., **Onami, T. M.**, Hedrick, S. M., and Irimura, T. (2002). Molecular cloning and characterization of a novel mouse macrophage C-type lectin, mMGL2, which has a distinct carbohydrate specificity from mMGL1. *Journal of Biological Chemistry* 277 (32): 28892-28901
5. **Onami, T.M.**, Harrington, L.E., Williams, M.A., Galvan, M., Larsen, C. P., Pearson, T. C., Manjunath, N., Baum, L.D., Pearce, B.D., and Ahmed, R. (2002). Dynamic regulation of T cell immunity by CD43. *Journal of Immunology* 168 (12): 6022-6031
6. **Onami, T.M.***, Williams M.A.*, Adams, A.B., Durham, M.M., Pearson, T.C., Ahmed, R., and Larsen C.P. (2002). Persistent viral infection prevents tolerance induction and escapes immune control following CD28/CD40 blockade based regimen.(* co- first author) *Journal of Immunology* 169 (10) 5387-5391
7. Williams, M. A., Adams, A. B., Walsh, M. B., Shirasugi, N., **Onami, T. M.**, Pearson, T. C., Ahmed, R., and Larsen, C. P. (2003). Primary and secondary immunocompetence in mixed allogeneic chimeras. *Journal of Immunology*. 170 (5) 2382-2389
8. Kersh, E.N., Kaech, S.M, **Onami, T.M.**, Moran M., Wherry, E. J., Miceli M.C., and Ahmed, R. (2003). TCR signal transduction in antigen-specific memory CD8 T cells. *Journal of Immunology*. 170 (11) 5455-63
9. Adams, A. B., Williams, M. A., Jones, T. R., Shirasugi, N., Durham, M. M., Kaech, S. M., Wherry, E. J., **Onami, T.**, Lanier, J. G., Kokko, K. E., Pearson, T. C., Ahmed, R., and Larsen, C. P. (2003). Heterologous immunity provides a potent barrier to transplantation tolerance. *Journal of Clinical Investigations* 111: 1887-1895
10. Ford, M., **Onami, T. M.**, Sperling, A. I., Ahmed, R., and Evavold, B. (2003). CD43 Modulates Severity and Onset of Experimental Autoimmune Encephalomyelitis . *Journal of Immunology* 171: 6527-6533
11. Sato, K., Imai, Y., Higashi, N., Kumamoto, Y., **Onami, T. M.**, Hedrick, S. M., and Irimura, T. (2005). Lack of antigen-specific tissue remodeling in mice deficient in the macrophage galactose-type calcium-type lectin 1/CD301a. *Blood* 106 (1): 207-15
12. **Onami, T. M.**, Wrammert, J., Masopust, D. Hernandez, J. D., Ahmed, R., and Baum, L.G. Changes in sialyltransferase gene expression and cell surface sialylation during memory CD8 T cell differentiation. Manuscript in preparation.
13. **Onami, T. M.**, Barber D. L., Masopust D., Becker, T., and Ahmed, R. Memory CD8 T cell differentiation in CD43^{-/-} mice. Manuscript in preparation.

Research Support

ACTIVE

1-K22-AI057719

09/01/2005 – 08/31/07

100%

NIH (NIAID)

\$250,000

Glycosylation and memory T cell differentiation

The major goal of this project is to examine the role of glycosylation in memory T cell development and function.