

## **NAOMI SUSAN MORRISSETTE**

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### **EDUCATION:**

University of Pennsylvania, Philadelphia, PA: Ph.D. May 1995:  
Thesis advisor: Dr. David Roos.  
Thesis Committee: John Murray, Harvey Rubin, Phil Scott, Lewis Tilney, Sally Zigmond.  
Marine Biological Laboratory, Woods Hole, MA: Summer 1988:  
Physiology: Cell and Molecular Biology Course.  
Smith College, Northampton, MA: B.A. (Biochemistry) *cum laude*, 1987.

### **PROFESSIONAL EXPERIENCE:**

Assistant Professor, Department of Molecular Biology and Biochemistry, University of California-Irvine, Irvine, CA, April 2004-present: Characterization of tubulin and microtubules in apicomplexan parasites.  
Senior Fellow, Laboratory of Dr. David Sibley, Department of Molecular Microbiology, Washington University, St. Louis MO, September 1999-present: Regulation of microtubules and microtubule associated proteins of *Toxoplasma gondii*.  
Senior Fellow, Laboratory of Dr. Alan Aderem, Department of Immunology, University of Washington, Seattle, WA, April 1996-August 1999: Identification of proteins associated with macrophage phagocytosis.  
Post-doctoral Fellow, Laboratory of Dr. Alan Aderem, Rockefeller University, New York, NY, June 1995-March 1996: Identification of proteins associated with phagocytosis.  
Doctoral Research, Laboratory of Dr. David Roos, Department of Biology, University of Pennsylvania, Philadelphia, PA, June 1990-May 1995: Characterization of the apical cytoskeleton of *Toxoplasma gondii*.  
Research Assistant, Beckman Center for the History of Chemistry, June 1989-June 1990:  
Conducted interviews for an oral history of the Pew Scholars in the Biomedical Sciences.  
Research Assistant for Dr. David Bickar, Smith College Chemistry Department, Summer 1987: Isolation of cytochrome oxidase from *Crithidia fasciculata*.  
Research Assistant for Dr. Robert Merritt, Smith College Biology Department, Summer 1986: Electrophoresis of marker enzymes for a population study of *Castanea dentata*.  
Research Assistant for Dr. Jeanne Powell, Smith College Biology Department, 1983-1986:  
Tissue culture and maintenance of muscular dysgenic mouse colony.

### **TEACHING EXPERIENCE:**

Teaching Assistant, Biology of Parasitism Course, Marine Biological Laboratory, June 8-24, 2000:  
Cell biology techniques for studying *Toxoplasma*.  
Teaching Assistant, Hughes Scholars Program, University of Pennsylvania, Fall 1992:  
Science enrichment program for gifted inner-city high school seniors.  
Teaching Assistant, University of Pennsylvania Biology Department, Academic years 1987-1989:  
Instructor for Introductory Biology Labs and Recitation Leader for Genetics.  
Teaching Assistant, Cell and Molecular Biology Lab, Smith College, Spring semester, 1986, 1987  
Laboratory instruction for second year cell biology course.

## **GRANTS AND AWARDS:**

K22 AI055790-01 NIH Career Development Award, “Dissection of Dinitroaniline Specificity for Tubulin” Transition award for the first two years as an assistant professor.  
F32 GM20484-01A1 NIH National Research Service Award “*Toxoplasma* and *Plasmodium* Resistance to Dinitroanilines” May 2001-November 2002.  
Post-doctoral Fellow, NIH Infectious Disease Training Grant, Washington University, 1999-2000.  
Heiser Program for Research in Leprosy and Tuberculosis Fellowship, June 1996-1998.  
Winston Post-doctoral Fellowship, Rockefeller University, July 1995-March 1996.  
Pre-doctoral Fellow, NIH Immunology Training Grant, University of Pennsylvania 1990-93.  
Nancy K. Holmes Memorial Fellowship, Smith College, Summer 1987.  
Initiated into Sigma Xi (scientific honor society), 1987.  
MacFarland Prize for Women's Studies, Smith College, 1986.  
Colonial Dames of America Scholarship, 1983-1987.

## **SEMINAR PRESENTATIONS:**

“The Plant-Protozoan Connection: What Herbicides Tell Us About Parasite Microtubules.”  
Department of Molecular Biology and Biochemistry, University of California at Irvine,  
Irvine CA, December 2003.

“Genetic Dissection of  $\alpha$ -tubulin Function in a Unicellular Eukaryote.” Molecular Genetics  
Department, Ohio State University, Columbus OH, September 2003.

“Dinitroaniline Resistance Mutations Identify a Plant and Protozoan-Specific Cavity in  $\alpha$ -tubulin.”  
The 7<sup>th</sup> International *Toxoplasma* Meeting, Tarrytown, NY May 2003.

“The Plant-Protozoan Connection: What Herbicides Tell Us About Parasite Microtubules.”  
Center for Microbial Interface Biology, Ohio State University, Columbus OH, May 2003.

“The Plant-Protozoan Connection: What Herbicides Tell Us About Parasite Microtubules.”  
Department of Biomedical Sciences, Tufts University School of Veterinary Medicine,  
North Grafton MA, April 2003.

“The Plant-Protozoan Connection: What Herbicides Tell Us About Parasite Microtubules.”  
Department of Microbiology and Immunology, Dartmouth Medical School, Hanover NH,  
February 2003.

“The Plant-Protozoan Connection: What Herbicides Tell Us About Parasite Microtubules.”  
Department of Microbiology and Molecular Genetics, University of Texas Health Science  
Center, Houston TX, January 2003.

Co-organizer ASCB Meeting Special Interest Subgroup: “Building the Cell II: Building Complex  
Structures in Simple Cells,” ASCB Meeting, San Francisco CA, December 2002.

“Determination of Cell Shape,” ASCB Meeting Special Interest Subgroup: “Building the Cell,”  
ASCB Meeting, Washington DC, December 2001.

“Identification of Novel Proteins Associated with Macrophage Phagocytosis.” Washington  
University, Department of Molecular Microbiology, St Louis MO: January 1999.

“Two Sides of Host-Pathogen Interactions: the Apical Cytoskeleton of *Toxoplasma gondii* and  
Identification of Novel Proteins Associated with Macrophage Phagocytosis.”  
Rocky Mountain Laboratory, NIH, Hamilton, MT: June 1998.

“Two Sides of Host-Pathogen Interactions: the Apical Cytoskeleton of *Toxoplasma gondii* and  
Identification of Novel Proteins Associated with Macrophage Phagocytosis.”  
National Institute for Medical Research, MRC, London UK: February 1998.

- “Two Sides of Host-Pathogen Interactions: the Apical Cytoskeleton of *Toxoplasma gondii* and Identification of Novel Proteins Associated with Macrophage Phagocytosis.”  
Institute for Molecular Medicine, Oxford University, Oxford UK: February 1998.
- “Two Sides of Host-Pathogen Interactions: the Apical Cytoskeleton of *Toxoplasma gondii* and Identification of Novel Proteins Associated with Macrophage Phagocytosis.”  
Laboratory of Parasitic Disease, NIAID, NIH: Bethesda MD: June 1997.
- “The Apical Cytoskeleton of *Toxoplasma gondii*,” Worcester Foundation for Experimental Biology, Shrewsbury, MA: November 1994.

## **PUBLICATIONS:**

- N. S. Morrissette, A. Mitra, D. Sept and L. D. Sibley. (2004) “Dinitroanilines Bind  $\alpha$ -tubulin and Disrupt Microtubules,” *Molecular Biology of the Cell* 15:1960-68.
- S.K. Dutcher, N. S. Morrissette, A. M. Preeble, C. Rackley and J. Stanga. (2002) “ $\epsilon$ -tubulin Is An Essential Component of the Centriole,” *Molecular Biology of the Cell* 13:3859-69.
- N. S. Morrissette and D. Sibley. (2002) “Disruption of Microtubules Uncouples Budding and Nuclear Division in *Toxoplasma gondii*,” *Journal of Cell Science*, 115: 1017-1025.
- N. S. Morrissette and D. Sibley. (2002) “Cytoskeleton of Apicomplexan Parasites,” *Molecular Biology and Microbiology Reviews*, 66:21-38.
- E. S. Gold, N. S. Morrissette, D. M. Underhill, J. Guo, M. Bassetti and A. Aderem. (2000) “Amphiphysin II-M, a Novel Amphiphysin Isoform, is Required for Macrophage Phagocytosis,” *Immunity* 12:285-92.
- E. S. Gold, D. Underhill, N. S. Morrissette, J. Guo and A. Aderem. (1999) “Dynamin 2 Is Critical For Macrophage Phagocytosis,” *Journal of Experimental Medicine* 190:1849-56.
- N. S. Morrissette, E. S. Gold, J. Guo, J. A. Hamerman, A. Ozinsky, V. Bedian and A. Aderem. (1999) “Isolation and Characterization of Monoclonal Antibodies Directed Against Novel Components of Macrophage Phagosomes,” *Journal of Cell Science* 112:4705-4713.
- N. Morrissette, E. Gold and A. Aderem. (1999) “The macrophage – a cell for all seasons,” *Trends in Cell Biology* 9: 199-201.
- N. S. Morrissette and D. S. Roos. (1998) “*Toxoplasma gondii*: A Family of Apical Antigens Associated with the Cytoskeleton,” *Experimental Parasitology*, 89 296-303.
- N. S. Morrissette, J. M. Murray and D. S. Roos. (1997) “Subpellicular Microtubules Associate with an Intramembranous Particle Lattice in the Protozoan Parasite *Toxoplasma gondii*,” *Journal of Cell Science* 110:35-42.
- T. J. W. Stokkermans, J. D. Schwartzman, K. Keenan, N. S. Morrissette, L. G. Tilney and D. S. Roos. (1996) “Inhibition of *Toxoplasma gondii* replication by dinitroaniline herbicides,” *Experimental Parasitology* 84:355-370.
- D. S. Roos, R. G. K. Donald, N. S. Morrissette and A. L. C. Moulton. (1994) “Molecular Tools for Genetic Dissection of the Protozoan Parasite *Toxoplasma gondii*,” *Methods in Cell Biology* 45:27-63.
- N. S. Morrissette, V. Bedian, P. Webster and D. S. Roos. (1994) “Characterization of Extreme Apical Antigens from *Toxoplasma gondii*,” *Experimental Parasitology* 79:445-459.