

CURRICULUM VITAE

EILEEN JOAN MCMAHON

PERSONAL

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EDUCATION/TRAINING

1992 - 1996 B.S., Marine Biology, Eckerd College, St. Petersburg, Florida
1996 - 2001 Ph.D., Department of Microbiology and Immunology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina (advisor: Glenn K. Matsushima; dissertation title: *Macrophage/microglial recruitment and chemokine function in CNS demyelination*)
2002 - 2004 Postdoctoral Research Fellow, Northwestern University, Chicago, IL (advisor: Stephen D. Miller)

ACADEMIC POSITIONS

2002 **Instructorship**, Westmont College, Santa Barbara, California.
2004-present **Assistant Professor**, Westmont College, Santa Barbara, California.

HONORS AND AWARDS:

1998-2001 University of North Carolina-Chapel Hill Graduate NIH Training Grant
2002-2003 Northwestern University Postdoctoral NIH Training Grant
Summer, 2005 Westmont College Professional Development Grant
Summer, 2007 Westmont College Professional Development Grant
Spring, 2008 Westmont College Wandering Scholar Grant

PUBLICATIONS

- 1.) Wu, Y.P., **McMahon, E.J.**, Kraine, M.R., Tisch, R., Meyers, A., Frelinger, J., Matsushima, G.K., Suzuki, K. (2000) Distribution and characterization of GFP(+) donor hematogenous cells in twitcher mice after bone marrow transplantation. *American Journal of Pathology* 156(6):1849-54.
- 2.) Serody, J.S., Burkett, S.E., Panoskaltsis-Mortari, A., Ng-Cashin, J., **McMahon, E.J.**, Matsushima, G.K., Lira, S.A., Cook, D.N., Blazar, B.R. (2000) T-lymphocyte production of macrophage inflammatory protein-1alpha is critical to the recruitment of CD8 (+) T cells to the liver, lung, and spleen during graft-versus-host disease. *Blood* 96(9):2973-80.

- 3.) Scott, R.S., **McMahon, E.J.**, Pop, S.M., Carrichio, R., Reap, E.A., Cohen, P.J., Earp, H.S., Matsushima, G.K. (2001) Phagocytosis and clearance of apoptotic cells is mediated by Mer. *Nature* 411:207-211.
- 4.) **McMahon, E.J.**, Cook, D.N., Suzuki, K., Matsushima, G.K. (2001) Absence of macrophage inflammatory protein-1 α delays CNS demyelination in the presence of an intact blood-brain barrier. *Journal of Immunology*, 167 (5): 2964-2971.
- 5.) Wu, Y.P., **McMahon, E.J.**, Matsuda, J., Suzuki, K., Matsushima, G.K., Suzuki, K. (2001) Expression of immune-related molecules is downregulated in twitcher mice following bone marrow transplantation. *Journal of Neuropathology and Experimental Neurology*, 60: 1062-1074.
- 6.) **McMahon, E.J.**, Suzuki, K., Matsushima, G.K. (2002) Peripheral macrophage are recruited across an intact blood-brain barrier during primary CNS demyelination. *Journal of Neuroimmunology*, 130: 32-45.
- 7.) Yagi T., **McMahon E.J.**, Takikita S., Mohri I., Matsushima G.K., Suzuki K. (2004) Fate of donor hematopoietic cells in demyelinating mutant mouse, twitcher, following transplantation of GFP+ bone marrow cells. *Neurobiology of Disease*, 16(1): 98-109.
- 8.) **McMahon, E.J.**, Bailey, S.L., Castenada, C.V., Waldner, H., Miller, S.D. (2005) Epitope spreading initiates in the CNS in two mouse models of multiple sclerosis. *Nature Medicine*, 11(3):335-339.
- 9.) **McMahon, E.J.**, Smith-Begolka, W., Miller, S.D. (2005) Cytokines and Immune Regulation in the Nervous System. In R. Ransahoff, and E. Benveniste (eds), *Cytokines in the CNS, 2nd Edition*. (pp137-162). Boca Raton: Taylor and Francis.
- 10.) Plant, S.R., Wang, Y., Vasseur, S., Thrash, J.C., **McMahon, E.J.**, Bergstralh, D.T., Arnett, H.A., Miller, S.D., Carson, M.J., Iovanna, J.L., Ting, J.P. (2005) Upregulation of the stress-associated gene p8 in mouse models of demyelination and in multiple sclerosis tissues. *Glia* 53(5): 529-537.
- 11.) Bailey, S.L., Carpentier, P.A., **McMahon, E.J.**, Begolka, W.S., Miller, S.D. (2006) Innate and adaptive immune responses of the central nervous system. *Critical Reviews in Immunology*, 26(2): 149-188.
- 12.) **McMahon, E.J.**, Bailey, S.L., Miller, S.D. (2006) CNS dendritic cells: Critical participants in CNS inflammation? *Neurochemistry International*, 49(2): 195-203.
- 13.) Bailey, S.L., Schreiner, B., **McMahon, E.J.**, Miller, S.D. (2007) CNS myeloid DCs presenting endogenous myelin peptides “preferentially” polarize CD4⁺ T_h17 cells in relapsing EAE. *Nature Immunology*, 8(2): 172-180
- 14.) Balabanov, R., Strand, K., Goswami, R., **McMahon, E.J.**, Begolka, W., Miller, S.D., and Popko, B. Interferon-gamma-oligodendrocyte interactions in the regulation of experimental autoimmune encephalomyelitis. *Journal of Neuroscience*, in press.
- 15.) Miller, S.D., **McMahon, E.J.**, Schreiner, B., and Bailey, S.L. Antigen Presentation in the CNS by myeloid dendritic cells drives progression of relapsing-remitting experimental autoimmune encephalomyelitis. *Annals of the New York Academy of Sciences*, in press.

PRESENTATIONS (undergraduate co-authors underlined)

- 1995 **Eleventh Biennial Conference on the Biology of Marine Mammals**, Orlando, Florida. Characterization and expression of the interleukin-2 gene from the Florida manatee, *Trichechus manatus latirostris*. E.J. McMahon, M.A. King, T.L. Ness, M.E. Cashman, W.G. Bradley, J.E. Reynolds, and W.B. Roess. (Poster presentation)
- 1999 **Keystone Symposia: Effectors of Inflammation in the CNS**, Taos, NM. Macrophage inflammatory protein-1 α is a mediator of macrophage/microglia accumulation and histopathology in cuprizone-induced demyelination. E.J. McMahon, K. Suzuki, D.N. Cook, and G.K. Matsushima. (Poster presentation)
- 2000 **Midwinter Conference of Immunologists**, Asilomar, CA. Chemokines and chemokine receptors in cuprizone-induced demyelination. E.J. McMahon, K. Suzuki, D.N. Cook, N. Maeda, J.S. Serody, and G.K. Matsushima. (Poster presentation)

- 2001 **International Neuroimmunology Symposium**, Edinburgh, U.K. Peripheral macrophage recruitment during CNS demyelination in the context of an intact blood-brain barrier. E.J. McMahon (Invited oral presentation)
- 2002 **Westmont College NBS Seminar Series**. Santa Barbara, CA. Leukocyte recruitment and chemokine function in two murine models of CNS demyelination. (Oral presentation)
- 2002 **FASEB Summer Conference on Autoimmunity**, Saxons River, VT. Tracking Myelin-specific T cells during epitope spreading in murine models of multiple sclerosis. E.J. McMahon and S.D. Miller (Poster presentation)
- 2003 **Autumn Immunology Conference**, Chicago, IL. Epitope spreading occurs in the CNS and not in the periphery in 2 murine models of multiple sclerosis. E.J. McMahon, G. Hoffmann, and S.D. Miller (Oral and Poster presentation)
- 2004 **4th Annual Conference of FOCIS**, Montreal, Canada. Epitope spreading occurs in the CNS and not in the periphery in 2 murine models of multiple sclerosis. (Poster and invited oral presentation)
- 2004 **UCSB Molecular and Cellular Biology Program Research Seminar**. Epitope Spreading in Murine Models of Multiple Sclerosis: Is the brain just one big lymph node? (Oral Presentation)
- 2005 **FASEB Summer Conference on Autoimmunity**, Saxons River, VT. Characterization of a novel mouse strain that spontaneously develops arthritis: a potentially new model of rheumatoid arthritis. J.F. Morrow, J.T. Wilcox, H.L. Parrish, W. Iba, S.D. Miller, E.J. McMahon (Poster presentation)
- 2007 **Midwinter Conference of Immunologists**, Asilomar, CA. Characterization of a potentially new murine model of spontaneous, immune-mediated arthritis. J. Wilcox, C. King, J. Mayer, K. Holshausen, S.D. Miller, and E.J. McMahon (Poster presentation)

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Sigma Xi (1996-2004)
 American Association of Immunologists (2004-present)
 American Scientific Association (2004-present)

TEACHING EXPERIENCE

Non-Majors, Non-disciplinary courses:
 APP-090 Inoculum (Fall 2006)

Non-Majors, Disciplinary Courses:
 LS-012 Introduction to Life Science (Fall 2005)
 BIO-012 Human Physiology (Spring 2002)

Majors, Disciplinary Courses:
 BIO-110 Microbiology (Taught last quarter of lectures: Fall 2006)
 BIO-114 Genetics lecture and lab (Spring 2005, 2006, and 2007)
 BIO-130 Cell Biology lecture and lab (Spring 2002 and Fall 2005 and 2006)
 BIO-132 Molecular Biology lecture and lab (Fall 2004)
 BIO-162 Neuroscience (Half of lectures: Spring 2005)

Tutorials, Seminars, Research:
 BIO-194 Bioethics Tutorial on Embryonic Stem Cells (Spring 2005)
 BIO-195 Seminar in Biological Literature (Spring 2002, Fall 2004, Spring 2005, Fall 2005 and 2006)
 BIO-198 Research (Fall 2004, Spring 2005, Fall 2005, Fall 2006, Spring 2007)

UNDERGRADUATES SUPERVISED IN RESEARCH:

Julia Morrow (Fall 2004, Spring 2005): Major Honors
 Laurraine Gereige (Spring 2005)
 Joel Wilcox (Summer 2005, Fall 2006, Fall 2007)
 Heather Parris (Summer 2005)
 Kirsten Holshausen (Summer 2006, Fall 2006, Spring 2007): Major Honors
 Cody King (Fall 2006)

WESTMONT COLLEGE INSTITUTIONAL SERVICE

Committees

Chemistry Faculty Search Committee	2005-2006
Biology Faculty Search Committee	2005-2006
Institutional Review Board	2005-2006
Student Life Committee	2006-present

Departmental or divisional administrative service

Dept. Representative for Secondary Education Advisory Committee	2005-present
Department Assessment Coordinator	Fall 2006-present
Organizer, NBS Seminar Series	Fall 2006-present

Invited service

Preview Days Faculty Panel	2005, 2006
Panel Chair, Conference in the Liberal Arts, <i>Beyond Two Cultures: Science as Liberal Arts</i>	Spring, 2005
Faculty Panelist for Colloquy for Accepted Students	April 2005
Mini-class Parent's Weekend: <i>HIV/AIDS: The Science and Societal Impact</i>	April 2006
Faculty Participant in Search for Director of Leadership and Learning	June 2006
Faith-Learning Workshop Presenter: <i>When Science and Ethics Meet</i>	Oct 2006
Panelist for Faculty Exchange: <i>Survival, Sanity, and Success: "Getting a Life" at a Christian Liberal Arts College</i>	Oct 2006
Horizon Editorial on Embryonic Stem Cells	Nov 2006
Prayed in Chapel	Nov 2006

Volunteer service

Westmont in the Arts Faculty Sponsor	2004-2005
Tuesday with Morals Discussion Leader	Spring 2005, Fall 2006, Spring 2007
Attendant, Presidential Scholars Breakfast	Aug 2005
Perspective Session: Faculty Small Group Leader	July 2006
Co-hosted 1 st year Progressive Dessert	Aug 2006
Occasional Leader for Faculty Prayer Meeting	Fall 2006-present
Faculty participant in Intercultural Programs Department Audit	Jan 2007

Initiated projects

Co-organized Summer Research Friday Brownbag Lunches	Summer 2005, 2006
Co-organized women faculty gatherings/discussions	2006-present
Organized informal faculty discussion on diversity in faculty hiring	Fall 2006

CHURCH AND COMMUNITY SERVICE

Volunteer Nursery Worker	2004-present
2nd-grade Teaching Team Member, SB Community Church Retreat	April 2006
Pre-K Summer Sunday School Teacher	Summer 2006
United Way, <i>Day of Caring</i> , Volunteer Panelist, Science and Faith Panel, High School Youth Group, SB Community Church	Sept 2006
Panelist, God and Science Forum, 7-5-9 Series, SB Community Church	Oct 2006
Home Group Leader, SB Community Church	Nov 2006
	Jan 2007-present