Curriculum Vitae

Mark A Wallet
1395 Center Drive, Box 100275, Gainesville, FL 32610
Phone: (352)273-8164 email: mawallet@pathology.ufl.edu

▪ EDUCATION

B.S. Biology and Medical Technology 1998	Clarion University of Pennsylvania
Ph.D. Microbiology and Immunology 2006	University of North Carolina at Chapel Hill

▪ EMPLOYMENT / ACADEMIC APPOINTMENTS

1998-2000	Medical Technologist, Transfusion Services, Duke University Medical Center, Durham, NC
1998-1999	Medical Technologist, Durham County Health Department, Durham, NC
2000-2006	Predoctoral student, Department of Microbiology and Immunology, University of North Carolina at Chapel Hill
2006-2007	Postdoctoral scholar, Department of Microbiology and Immunology, University of North Carolina at Chapel Hill
2007-2011	Postdoctoral fellow, Department of Pathology, Immunology and Laboratory Medicine, University of Florida
2011-2012	Research Assistant Professor, Department of Pathology, Immunology and Laboratory Medicine, University of Florida
2012-pres	Assistant Professor, Department of Pathology, Immunology and Laboratory Medicine, University of Florida

▪ HONORS AND AWARDS

2005	G. Phillip Manire Graduate Student Excellence in Research Award University of North Carolina at Chapel Hill
2007-2010	T32 Postdoctoral Trainee Immunologic/Genetic Mechanisms in Rheumatic Diseases [PI: Westley Reeves, M.D.] University of Florida
2008-2013	Extramural Pediatric Research Loan Repayment Program Award National Institutes of Health (NIH)
2009	Young Investigator Award Reduced Pathogenesis by High Levels of Drug-resistant HIV Replication *in vivo* 16th Annual Conference of Retrovirology and Opportunistic Infections
2009	Experimental Pathology Innovative Grants Award University of Florida, Department of Experimental Pathology
2010-2011	Laura McClamma Fellow for Research in Pediatric Immune Deficiency University of Florida
2010	Experimental Pathology Innovative Grants Award University of Florida, Department of Experimental Pathology
2011	Young Investigator Award Nelfinavir Reduces HIV-1-Associated Innate Immune Activation 18th Annual Conference of Retrovirology and Opportunistic Infections

2011 Thomas H. Maren Junior Investigator Postdoctoral Award
University of Florida College of Medicine

2014 Superior Accomplishment Award
University of Florida, Division 5

▪ PROFESSIONAL MEMBERSHIPS AND CERTIFICATIONS

Member: American Association of Immunologists (AAI)
Member: Society for Leukocyte Biology
Member: NIH Loan Repayment Programs Ambassador Network

▪ JOURNALS (REVIEWER/EDITOR)

Cellular Immunology – Reviewer, 2009 - present
Journal of Leukocyte Biology – Reviewer, 2010 - present
BMC Immunology – Associate Editor, 2012 - present

▪ COMMITTEES, PROGRAMS AND CENTERS

National

2012 - pres NIH, Loan Repayment Program Special Emphasis Panel
2012 - pres Society for Leukocyte Biology, Professional Development Committee

University [Department, Centers, COM, Health Science Center]

2012 – pres Member, UF Cancer Center
2012 – pres Member, UF Center for Immunology and Transplantation [CIT]
2013 – pres Department of Pathology, Director of Postdoctoral Affairs

▪ PUBLICATIONS (peer reviewed)

P. Sen, S. Bhattacharyya, **M.A. Wallet**, C.P. Wong, B. Poligone, M. Sen, A.S. Baldwin Jr., R. Tisch. NF-kappa B hyperactivation has differential effects on the APC function of nonobese diabetic mouse macrophages. *J. Immunol.* 170(4), 1770-80. **2003.**

S. Bhattacharyya, P. Sen, **M.A. Wallet**, B. Long, A.S. Baldwin Jr., R. Tisch**.** Immunoregulation of dendritic cells by IL-10 is mediated through suppression of the PI3K/Akt pathway and of IkappaB kinase activity. *Blood.* 104(4), 1100-9. **2004.**

M.A. Wallet, P. Sen, R. Tisch. Immunoregulation of Dendritic Cells. *Clin. Med. Res.* 3(3), 166-75. **2005.**

M.A. Wallet, R. Tisch. Type 1 Diabetes, Inflammation and Dendritic Cells. *Drug Disc. Today*. 3(3), 373-379. **2006.**

P. Sen, **M.A. Wallet**, Z. Yi, Y. Huang, M. Henderson, C.E. Mathews, H.S. Earp, G.K. Matsushima, A.S. Baldwin, R. Tisch. Apoptotic cells induce Mer tyrosine kinase-dependent blockade of NF-κB activation in dendritic cells. *Blood.* 109(2), 653-60. **2007.**

S.M. Pop, C.P. Wong, Q. He, Y. Wang, **M.A. Wallet**, K.S. Goudy, R. Tisch. The type and frequency of immunoregulatory CD4+ T cells govern the efficacy of antigen-specific immunotherapy in diabetic NOD mice. *Diabetes*. 56(5), 1395-402. **2007.**

C.P. Wong, R. Stevens, B. Long, L. Li, Y. Wang, **M.A. Wallet**, K.S. Goudy, J.A. Frelinger, R. Tisch. Identical β cell-specific CD8+ T cell clonotypes typically reside in both peripheral blood lymphocyte and pancreatic islets. *J. Immunol.* 178(3), 1388-95. **2007.**

M.A. Wallet, P. Sen, R. Flores, Y. Wang, Z. Yi, Y. Huang, C.E. Mathews, H. Shelton Earp, G.K. Matsushima, B. Wang, R. Tisch. MerTK is required for apoptotic cell-induced T cell tolerance. *J Exp Med*. 205(1), 219-32. **2008.**

M.A. Wallet, Flores RR, Wang Y, Huang Y, Yi Z, Goudy KS, Wong CP, Mathews CE, Earp HS, Matsushima GK, Wang B, Tisch RM. MerTK regulates thymic selection of autoreactive T cells. *Proc Natl Acad Sci USA.* 106(12), 4810-5. **2009.**

Brown, J., **M.A. Wallet**, B. Krastins, D. Sarracino, and M.M. Goodenow. Proteome bioprofiles distinguish between M1 priming and activation states in human macrophages. *J Leukoc Biol*. 87(4), 655-62. **2010**.

M.A. Wallet, S.M. Wallet, G. Guiulfo, J.W. Sleasman, and M.M. Goodenow. IFNγ primes macrophages for inflammatory activation by high molecular weight hyaluronan. *Cell. Immunol*. 262(2), 84-8. **2010**.

M.A. Wallet, C.A. Rodriguez, L. Yin, , S. Saporta, S. Chinratanapisit, W. Hou, J.W. Sleasman, and M.M. Goodenow. Microbial translocation induces persistent macrophage activation unrelated to HIV-1 levels or T cell activation following therapy. *AIDS*. 24(9), 1281-90. **2010**.

M.J. Delano, T. Thayer, S. Gabrilovich, K. Kelly-Scumpia, R. Winfield, P. Scumpia, A. Cuneca, E. Warner, S.M. Wallet, **M.A. Wallet**, K. O'Malley, R. Ramphal, M. Clare-Salzler, P. Efron, C.E. Mathews, L.L. Moldawer. Sepsis-induced alterations in innate immunity that impact mortality to secondary infection. *J. Immunol*. 186(1), 195-202. **2011.**

M.M Norstrom, M. Buggert, J. Taurianen, W. Hartogensis, M.C. Prosperi, **M.A. Wallet**, F.M. Hecht, M. Salemi, A.C. Karlsson. Combination of immune and viral factors distinguish low-risk versus high-risk HIV-1 disease progression in HLA-B*5701 subjects. *J Virol*. Epub, July 3, **2012.**

M.A. Wallet, S. Appelberg, C. Reist, G.L. Guiulfo, J.W. Sleasman, M.M. Goodenow. The HIV-1 protease inhibitor nelfinavir activates PP2 and inhibits MAPK signaling in macrophages: a pathway to reduce inflammation. *J Leukocyte Biol.* Epub, July 11, **2012.**

M.A. Wallet, N.L. Calderon, C.S. Choe, D.L. Catalfamo, C.J. Lalane, K.G. Neiva, F. Panagakos, S.M. Wallet. Triclosan promotes anti-microbial activity of oral epithelial cells while reducing pathogenic inflammation. *Oral Dis.* 19(3), 296-302. **2013**.

L. Yin, W. Hou, L. Liu, Y. Cai, Y. Sun, **M.A. Wallet**, B.P. Gardner, A.C. Lowe, C.A. Rodriguez, P. Sriraroon, W.G. Farmerie, J.W. Sleasman and M.M. Goodenow. IgM repertoire biodiversity is reduced in HIV-1 infection and systemic lupus erythematosus. *Front Immunol*. **In Press 2013.**

M.A. Wallet, T.W. Buford, A.M. Joseph, M. Sankuratri, C. Leeuwenburgh, M. Pahor, T. Manini, J.W. Sleasman, M.M. Goodenow. Increased inflammation but similar physical function in older-aged, HIV-infected subjects. *J Exp Geront*. **Submitted, in revision 2014.**

M.A. Wallet, J.C. Williams, and M.M. Goodenow. HIV primes macrophages for hyper-activation in response to endotoxin. *J Interf and Cytokine Res.* **In preparation for submission in 2014.**

▪ MEETING PRESENTATIONS

M.A. Wallet, P. Sen, C. E. Mathews, H. S. Earp, G. Matsushima, A. S. Baldwin, Jr., R. Tisch. MerTK mediates immunoregulation of dendritic cells. Poster Presentation. University Research Day. University of North Carolina. Chapel Hill, NC. March 31, 2005.

M.A. Wallet, P. Sen, C. E. Mathews, H. S. Earp, G. Matsushima, A. S. Baldwin, Jr., R. Tisch. Investigating the Role of MerTK Tyrosine Kinase Receptor In Type 1 Diabetes. Poster Presentation. UNC Lineberger Comprehensive Cancer Center Annual Retreat. Chapel Hill, NC. March 21, 2005.

M.A. Wallet, P. Sen, C. E. Mathews, R. Tisch. MerTK is Required for Development of Type 1 Diabetes. Poster Presentation. American Diabetes Association 65th Annual Scientific Sessions. San Diego, CA. June 10-14, 2005.

M.A. Wallet, S. Saporta, J.W. Sleasman, M.M. Goodenow. Reduced Pathogenesis by High Levels of Drug-resistant HIV Replication *in vivo*. Poster presentation. Second Annual University of Florida Emerging Pathogens Institute Research Day. Gainesville, FL. February 5, 2009.

M.A. Wallet, S. Saporta, J.W. Sleasman, M.M. Goodenow. Reduced Pathogenesis by High Levels of Drug-resistant HIV Replication *in vivo*. Poster Presentaion. 16TH Conference on Retroviruses and Opportunistic Infections [CROI]. Montreal, Canada. February 8-11, 2009.

M.A. Wallet, B.M. Looney, J. Gollwitzer, F.F. Panagakos, S.M. Wallet. Triclosan affects TLR-induced activation of cells within the peridontium. Published abstract. International Association of Dental Research General Session. Barcelona, Spain. July 14-17, 2010.

L. Yin, L. Liu, Y. Cai, W. Hou, **M.A. Wallet**, B.P. Gardener, A.C. Lowe, Y. Sun, P. Sriraroon, E.E. Perez, C.A. Rodriguez, J.W. Sleasman, M.M. Goodenow. Mapping defects in IgM+ B cell repertoire in HIV-infected individuals by 454-pyrosequencing. Published abstract. AIDS Vaccine 2010. Atlanta, GA. September 28 – October 1, 2010.

L. Yin, L. Liu, W. Hou, Y. Cai, M.A. Wallet, B.P. Gardner, A.C. Lowe, C.A. Rodriguez, J.W. Sleasman and M.M. Goodenow. Prolonged Suppressive Antiretroviral Therapy Failed to Correct HIV-1-mediated Defects in Naïve and IgM^+ Memory B Cell Transcriptome Repertoires. Poster Presentation. 18th Conference on Retroviruses and Opportunistic Infections [CROI]. Boston, MA. February 27 – March 2, 2011.

M.A. Wallet, S.K. Appelberg, C. Reist, G.L. Guiulfo, J.W. Sleasman, M.M. Goodenow. Nelfinavir reduces HIV-1-associated innate immune activation. Poster Presentation. 18th Conference on Retroviruses and Opportunistic Infections [CROI]. Boston, MA. February 27 – March 2, 2011.

M.A. Wallet, T. Buford, A.M. Joseph, M. Sankuratri, C. Leeuwenburgh, T. Manini, and M.M. Goodenow. Persistent innate immune activation in older HIV-1-infected individuals undergoing suppressive antiretroviral therapy. 2nd Annual Spotlight on Research in Aging. University of Florida Pepper Center. Gainesville, FL. April 15, 2011.

M.A. Wallet, S.K. Appelberg, C. Reist, G.L. Guiulfo, J.W. Sleasman, M.M. Goodenow. Reduction of HIV-1 innate immune activation by protease inhibitors. Poster presentation. Immunology 2011, 98th Annual Meeting of The American Association of Immunologists. San Francisco, CA. May 13-17, 2011.

M.A. Wallet, W. Hou, J.L. Jiang-Liang, K. Muller, M.M. Goodenow. Activation of human macrophages by the endogenous toll-like receptor 4 ligand high molecular weight hyaluronan. Poster presentation. Immunology 2011, 98th Annual Meeting of The American Association of Immunologists. San Francisco, CA. May 13-17, 2011.

M.A. Wallet. HIV and Aging: Effects on Inflammation. Invited speaker. UF/VA Institute on Aging, Clinical Translational Aging Research Series. Gainesville, FL. October 3, 2011.

M.A. Wallet J.L. Li, N. Rutherford, J.C. Williams, M.M. Goodenow. Molecular Phenotype of HIV-1-induced macrophage priming: A role for guanylate binding proteins. Society for Leukocyte Biology Annual Meeting. October 28-30, 2012. Maui, HI.

J.P. Taylor, M.M. Goodenow, **M.A. Wallet**. HIV infection induces polyfunctional activation of macrophages. Society for Leukocyte Biology Annual Meeting. October 19-22, 2013. Newport, RI

M.A. Wallet, T. Manini, T. Buford, M.M. Goodenow. Heterogeneous inflammation in middle- and older-aged HIV-infected subjects. Society for Leukocyte Biology Annual Meeting. October 19-22, 2013. Newport, RI

▪ CURRENT RESEARCH SUPPORT

▪ PENDING RESEARCH SUPPORT

1R01AI108434-01A1 (Wallet, P.I.) 07/01/2013 – 06/30/2018
NIAID $1,250,000
Elimination of persistently HIV-infected macrophages by targeting host factors
Role: PI, 6.0 CM
Selected for R56 bridge funding to be awarded at end of NIH fiscal year (Aug 2014).

1UC4DK104194-01 (Mathews, CE, PI) 12/01/2014 – 11/30/2019
NIDDK $3,176,430
Genetic regulation of human beta cell destruction
Role: Co-investigator, 2.4 CM

1R21AI116214-01 (Wallet, PI) 12/01/2014 – 11/30/2019
NIAID $1,175,000
Note: R21/R33 mechanism
Targeting USP18 to eliminate latently HIV-infected cells
Role: PI, 4.2 CM

1R0AI116339-01 (Wallet, PI) 12/01/2014 – 11/30/2019
NIAID $1,250,000
De-repression of host pathways to eliminate persistent HIV infection
Role: PI, 4.8 CM

▪ PAST RESEARCH SUPPORT

K22AI095015 Novel approach to suppress HIV-1 innate inflammation
PI: MA Wallet
NIH/NIAID
Period: 05/01/2012 – 04/30/2014
Total award: $250,000

Thomas H. Maren Junior Investigator Award
PI: **MA Wallet**
University of Florida College of Medicine
Period: 04/01/2011 – 03/31/2013
Total award: $50,000

R01DA031017 Substance use and immunity in HIV+ adolescents by systems biology
PI: MM Goodenow
Co-investigator: **MA Wallet**
NIH/NIDA
Period: 09/17/2010 – 06/30/2015
Total award: $4,700,000

University of Florida Foundation Stephany W. Holloway University Chair for AIDS Research
PI: MM Goodenow [PI]
Co-investigator: **MA Wallet**
Period: 12/01/2004 – present

T32-AR007603-07 Immunologic/Genetic Mechanisms in Rheumatic Diseases
PI: WH Reeves
Fellow: **MA Wallet**
NIH/NIAMS
Period: 02/01/2007 – 02/01/2010

R21 AI078450 Characterization of novel polyreactive anti-HIV antibodies in autoimmunity
PI: MM Goodenow
Co-investigator: **MA Wallet**
NIH/NIAID
Period: 04/01/2008 – 03/31/2011
Total award: $410,000

Development of Human Anti-HIV Antibodies as Novel Therapeutics
PI: M.M. Goodenow
Co-investigator: **MA Wallet**
University of Florida Office of the VP for Research
Period: 05/01/08 – 04/30/10
Total Award: $90,000

Experimental Pathology Innovative Grants, Investigation of hyaluronan-induced macrophage activation as a mechanism of rheumatoid arthritis inflammation using Ettan™ 2D-DIGE methods
PI: **MA Wallet**
University of Florida, Dept of Pathology
Period: 11/01/2009 – 06/30/2010
Total award: $5,000

Experimental Pathology Innovative Grants, Determination of mechanism by which nelfinavir inhibits LPS-induced macrophage activation
PI: **MA** Wallet
University of Florida, Dept of Pathology
Period: 11/01/2010 – 05/31/2011
Total award: $4000

Laura McClamma Research Fellowship Fund
Administrator: MM Goodenow
Fellow: **MA Wallet**