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Department of Microbiology and Immunology
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CURRENT POSITION

- Assistant Professor, Cornell University, College of Veterinary Medicine, Baker Institute for Animal Health, Department of Microbiology and Immunology, Ithaca, NY. Dissecting the contribution of innate immune cells, prostaglandins, and epithelial cell-derived cytokines to T helper type 2 cytokine-mediated inflammation at mucosal sites. January 2015 to present.

EDUCATION

- Ph.D., University of Pennsylvania, Philadelphia, PA. Biomedical Graduate Studies, Cell and Molecular Biology Graduate Group, Microbiology, Virology, and Parasitology Program. January 2011.
- B.A., Drew University, Madison, NJ. Biology major. GPA 3.931 overall, major 3.945, graduation with honors. May 2005.
- Graduated Stamford Central School, Stamford, NY. New York State Regents diploma with honors. June 2001.

RESEARCH EXPERIENCE

- Postdoctoral Fellow, University of Pennsylvania, Philadelphia, PA and Weill Cornell Medical College, Cornell University, New York, NY. Laboratory of David Artis, Ph.D. June 2011 to December 2014.
- Postdoctoral Fellow, University of Pennsylvania, Philadelphia, PA. Laboratory of Christopher Hunter, Ph.D. January 2011 to June 2011.
- Ph.D. Student, University of Pennsylvania, Philadelphia, PA. Laboratory of Christopher Hunter, Ph.D. Immune responses during infection with *Toxoplasma gondii* and the function of IL-27 during *Toxoplasma gondii* infection and in T regulatory cell homeostasis. September 2005 to December 2010.
- Student Researcher, Drew University, Madison, NJ. Drug resistance in parasitic nematodes. William Campbell, Ph.D, advisor. January 2004 to May 2005.
- Intern, Woods Hole Oceanographic Institution, Woods Hole, MA. Ascidian commensal flora. Stefan Sievert, Ph.D., advisor. June 2004 to August 2004.

FUNDING

- NRSA Postdoctoral Fellowship F32 Award, "Cytokine regulation of human basophil responses," July 2012 to June 2014.

- Appointment to University of Pennsylvania T32 NIH training grant, “Microbial Pathogenesis and Genomics,” July 2011 to June 2012.
- Appointment to University of Pennsylvania T32 NIH training grant, “Parasitology, Modern Approaches,” January 2008 to December 2010.

HONORS AND AWARDS

- American Association of Immunologists, Early Career Faculty Travel Grant, May 2015.
- Woods Hole Immunoparasitology Conference, *Parasite Immunology* Woods Hole Immunoparasitology Poster Prize, April 2015.
- American Association of Immunologists, Trainee Abstract Award, May 2014.
- International Cytokine and Interferon Society Postdoctoral Investigator Award, First Place, September 2013.
- Novartis Award in Biology, Spring 2005.
- Beta Beta Beta Convention Brooks Award, Spring 2005.
- Phi Beta Kappa, inducted Spring 2004.
- Drew Scholars Award, Fall 2001.

INVITED LECTURES

- Lecturer, eBioscience Exhibitor Workshop, American Association of Immunologists Conference, New Orleans, LA. Employing new approaches to investigate human and mouse group 2 innate lymphoid cell responses. May 9, 2015.
- Speaker, Baker Institute Advisory Council Meeting, Cornell Club, New York, NY. Research in immunology and inflammation to improve human and animal health. May 1, 2015.
- Speaker, Baker Institute Lecture Series, Cornell University College of Veterinary Medicine, Ithaca, NY. Prostaglandin regulation of innate immune responses during helminth infection. April 7, 2015.
- Speaker, Infection and Pathobiology Symposium, Cornell University College of Veterinary Medicine, Ithaca, NY. Prostaglandin regulation of innate immune responses during helminth infection. March 6, 2015.
- Speaker, Children’s Hospital of Philadelphia Research Institute Scientific Symposium, Children’s Hospital of Philadelphia, Philadelphia, PA. Deciphering the mysteries of eosinophilic esophagitis: It takes a village. May 8, 2014.
- Speaker, Allergy and Immunology Conference, University of Pennsylvania and Children’s Hospital of Philadelphia, Philadelphia, PA. Role of the cytokine thymic stromal lymphopoietin and basophils in eosinophilic esophagitis. December 6, 2013.
- Speaker, Eosinophilic Esophagitis: Bench to Bedside, Children’s Hospital of Philadelphia, Philadelphia, PA. Clinician education on the role of the cytokine thymic stromal lymphopoietin and basophils in eosinophilic esophagitis. June 28, 2013.
- Speaker, Food Allergy Day, Children’s Hospital of Philadelphia, Philadelphia, PA. Food protein-induced enterocolitis. May 5, 2012.
- Speaker, Drew Biology Department Alumni Symposium in Honor of William Campbell, Ph.D., Drew University, Madison, NJ. Immune responses to parasites. November 19, 2011.

TEACHING EXPERIENCE

- Faculty Lecturer, CAMB 696 Advanced Parasitology, University of Pennsylvania, Philadelphia, PA. Immunity to helminth parasites. April 24, 2012.
- Faculty Lecturer, CAMB 617 Emerging Infectious Diseases, University of Pennsylvania, Philadelphia, PA. *Toxoplasma gondii* epidemiology, biology, and immune response to the parasite. October 26, 2011; September 22, 2014.
- Teaching Assistant, Marine Biological Laboratory Biology of Parasitism course, Woods Hole, MA. Immune responses to parasitic infection. Yasmine Belkaid, Ph.D., Judith Allen, Ph.D., Christian Engwerda, Ph.D., and Andrew MacDonald, Ph.D., faculty members. July 2008; July 2009; July 2012.
- Tutor and Lab Assistant, Drew University, Madison, NJ. Biology and Chemistry courses. September 2002 to May 2005.

RELATED EXPERIENCE AND PROFESSIONAL DEVELOPMENT

- Co-organizer and Participant, New Faculty Information and Networking Series, Cornell University College of Veterinary Medicine, Ithaca, NY. May 2015.
- Participant, Provost's Office of Faculty Development and Diversity Workshop series. How to Write a Successful NIH R01 Grant: Tips for Grant Writing and Understanding the Review Process. Cornell University College of Veterinary Medicine, Ithaca, NY. March 2015.
- Participant, Provost's Office of Faculty Development and Diversity Workshop series. Reappointment and Tenure: A Panel Discussion Addressing 3rd Year Reappointment and the Tenure Process. Cornell University College of Veterinary Medicine, Ithaca, NY. February 2015.
- Participant, Children's Hospital of Philadelphia Pediatric Translational Research Workshop for Basic Scientists, Philadelphia, PA. October 2013.
- Student, Marine Biological Laboratory Biology of Parasitism course, Woods Hole, MA. June 2007 to August 2007.
- Student, Ohio University Tropical Disease Biology Workshop, Ecuador. Mario Grijalva, Ph.D. and William Romoser, Ph.D., faculty members. August 2006; August 2008.

TECHNICAL SKILLS

Care and handling of experimental rodents, handling of human tissue samples, enzyme-linked immunosorbent assay, histopathology of murine and human tissues, immunofluorescent imaging, *in vitro* culture of *Toxoplasma gondii*, *in vivo* life-cycle of *Trichuris muris*, *Nippostrongylus brasiliensis*, *Trichinella spiralis*, and *Citrobacter rodentium*, murine models of pulmonary inflammation and allergic disease, multi-color flow cytometry, fluorescence-activated cell sorting, polymerase chain reaction, real-time polymerase chain reaction, Western blot, electron microscopic imaging, profiling of bioactive lipids.

MEMBERSHIPS AND SERVICE

- Participant, American Association of Immunologists Membership Focus Group. May 2015.
- Primary Member, Cornell University College of Veterinary Medicine Graduate Field of Immunology and Infectious Disease. April 2015.
- Member, Cornell University College of Veterinary Medicine Graduate Field of Comparative Biomedical Sciences. April 2015. Reviewer, *Infection and Immunity*, April 2015.

- Reviewer, *Journal of Experimental Medicine*, April 2015.
- Regular Member, American Association of Immunologists. January 2015 to present.
- Member, International Cytokine and Interferon Society. May 2013 to present.

PUBLICATIONS

- Tait Wojno, E.D., L.A. Monticelli, S.V. Oberdorf, T. Alenghat, L.C. Osborne, J.J. Thome, A. Budelsky, D.L. Farber, and D. Artis. 2015. The prostaglandin D₂ receptor CRTH2 regulates accumulation of group 2 innate lymphoid cells in the inflamed lung. *Mucosal Immunology* advance online publication doi: 10.1038/mi.2015.21.
- Tait Wojno, E.D. Innate lymphoid cells: an emerging population in type 2 inflammation. In William C. Gause (Editor), *The Th2 Type Immune Response in Health and Disease*. New York, NY: Springer. In press.
- Kim, B.S., K. Wang, M.C. Siracusa, S.A. Saenz, J.R. Brestoff, L.A. Monticelli, M. Noti, E.D. Tait Wojno, T.C. Fung, M. Kubo, and D. Artis. 2014. Basophils promote innate lymphoid cell responses in inflamed skin. *Journal of Immunology* 193(7):3717-3725.
- Hill, D.A.*, M.C. Siracusa*, K.R. Ruymann, E.D. Tait Wojno, J.S. Spergel, and D. Artis. 2014. Omalizumab therapy is associated with reduced circulating basophil populations in asthmatic children. *Allergy* 69(5):674-677. * These authors contributed equally.
- Alex, A., M. Noti, E.D. Tait Wojno, D. Artis, and C. Zhou. 2014. Characterization of eosinophilic esophagitis murine models using optical coherence tomography. *Biomedical Optics Express* 5(2):609-620.
- Siracusa, M.C., S. Saenz, E.D. Tait Wojno, B.S. Kim, L.C. Osborne, C.G. Ziegler, A.J. Benitez, K.R. Ruymann, D.L. Farber, P.M. Sleiman, H. Hakonarson, A. Cianferoni, M.-L. Wang, J.M. Spergel, M.R. Comeau, and D. Artis. 2013. Thymic stromal-lymphopoietin-mediated extramedullary hematopoiesis promotes allergic inflammation. *Immunity* 39(6):1158-1170.
- Tait Wojno, E.D.*, B.S. Kim*, and D. Artis. 2013. Innate lymphoid cells and allergic inflammation. *Current Opinion in Immunology* 25(6):738-744. * These authors contributed equally.
- Tait Wojno, E.D.*, M. Noti*, B.S. Kim, M.C. Siracusa, P.R. Giacomini, M.G. Nair, A.J. Benitez, K.R. Ruymann, A.B. Muir, D.A. Hill, K.R. Chikwava, A.E. Moghaddam, Q.J. Sattentau, A. Alex, C. Zhou, J.H. Yearley, P. Menard-Katcher, M. Kubo, K. Obata-Ninomiya, H. Karasuyama, M.R. Comeau, T. Brown-Whitehorn, R. de Waal Malefyt, P.M. Sleiman, H. Hakonarson, A. Cianferoni, G.W. Falk, M.-L. Wang, J.M. Spergel, and D. Artis. 2013. TSLP-elicited basophil responses promote eosinophilic esophagitis. *Nature Medicine* 19(8):1005-1013. * These authors contributed equally.
- Gregg, B., B.C. Taylor, B. John, E.D. Tait Wojno, N.M. Girgis, N. Miller, S. Wagage, D.S. Roos, and C.A. Hunter. 2013. Replication and distribution of *Toxoplasma gondii* in the small intestine after oral infection with tissue cysts. *Infection and Immunity* 81(5):1635-1643.
- Tait Wojno, E.D. and D. Artis. 2012. Innate lymphoid cells: balancing immunity, inflammation, and tissue repair in the intestine. *Cell Host and Microbe* 12(4):445-457.
- Siracusa, M.C., E.D. Tait Wojno, and D. Artis. 2012. Functional heterogeneity in the basophil cell lineage. *Advances in Immunology* 115:141-159.
- Hall, A.O., D.P. Beiting, C. Tato, B. John, G. Oldenhove, C.G. Lombana, G.H. Pritchard, J.S. Silver, N. Bouladoux, J.S. Stumhofer, T.H. Harris, J. Grainger, E.D. Tait Wojno, S. Wagage, D.S. Roos, P. Scott, L.A. Turka, S. Cherry, S.L. Reiner, D. Cua, Y. Belkaid, M.M. Elloso, and C.A. Hunter. 2012. The cytokines interleukin 27 and interferon- γ promote distinct Treg cell populations required to limit infection-induced pathology. *Immunity* 37(3):511-23.

- Harris, T.H.* , E.J. Banigan*, D.A. Christian, C. Konradt, E.D. Tait Wojno, K. Norose, E.H. Wilson, B. John, W. Weninger, A.D. Luster, A.J. Liu, and C.A. Hunter. 2012. Generalized Lévy walks and the role of chemokines in migration of effector CD8⁺ T cells. *Nature* 486(7404):545-548. * These authors contributed equally.
- John, B., B. Rickart, E.D. Tait Wojno, T.H. Harris, L.M. Randall, D.A. Christian, B. Gregg, D.M. Almeida, W. Weninger, D.A. Hammer, and C.A. Hunter. 2011. Analysis of behavior and trafficking of dendritic cells within the brain during toxoplasmic encephalitis. *PLoS Pathogens* 7(9):e1002246.
- Tait Wojno, E.D. and C.A. Hunter. 2012. New directions in the basic and translational biology of interleukin-27. *Trends in Immunology* 33(2):91-97.
- Jensen, K.D.C., Y. Wang, E.D. Tait Wojno, A.J. Shastri, K. Hu, L. Cornel, E. Boedec, Y.-C. Ong, Y.H. Chien, C.A. Hunter, J.C. Boothroyd, and J.P.J. Saeij. 2011. *Toxoplasma* polymorphic effectors determine macrophage polarization and intestinal inflammation. *Cell Host and Microbe* 9(6):472-483.
- Gregg, B., F. Dzierzinski, E.D. Tait, K. Jordan, C.A. Hunter, and D.S. Roos. 2011. Subcellular antigen location influences T-cell activation during activation infection with *Toxoplasma gondii*. *PLoS One* 6(7):e22936.
- Tait Wojno, E.D., N. Hosken, J.S. Stumhofer, A.C. O'Hara, E. Mauldin, Q. Fang, L.A. Turka, S.D. Levin, and C.A. Hunter. 2011. A role for IL-27 in limiting T regulatory cell populations. *The Journal of Immunology* 187(1):266-273.
- Tait, E.D.*, J.S. Stumhofer*, W.J. Quinn III*, N. Hosken, B. Spudy, R. Goenka, C.A. Fielding, A.C. O'Hara, Y. Chen, M.L. Jones, C.J. Saris, S. Rose-John, D.J. Cua, S.A. Jones, M.M. Elloso, J. Grötzinger, M.P. Cancro, S.D. Levin, and C.A. Hunter. 2010. A role for IL-27p28 as an antagonist of gp130-mediated signaling. *Nature Immunology* 11(12):1119-1126. * These authors contributed equally.
- Jordan, K.A., C.D. Dupont, E.D. Tait, H.C. Liou, and C.A. Hunter. 2010. Role of the NF- κ B transcription factor c-Rel in the generation of CD8⁺ T-cell responses to *Toxoplasma gondii*. *International Immunology* 22(11):851-861.
- Harris, T.H., E.H. Wilson, E.D. Tait, M. Buckley, S. Shapira, J. Caamano, D. Artis, and C.A. Hunter. 2010. NF- κ B1 contributes to T cell-mediated control of *Toxoplasma gondii* in the CNS. *Journal of Neuroimmunology* 222(1-2):19-28.
- Tait, E.D., K.A. Jordan, T.H. Harris, B. Gregg, C.D. Dupont, E.H. Wilson, M. Pepper, F. Dzierzinski, D.S. Roos, and C.A. Hunter. 2010. Virulence of *Toxoplasma gondii* is associated with distinct dendritic cell responses and reduced numbers of activated CD8⁺ T cells. *The Journal of Immunology* 185(3):1502-1512.
- John, B., T.H. Harris, E.D. Tait, E.H. Wilson, B. Gregg, L.G. Ng, P. Mrass, D.S. Roos, F. Dzierzinski, W. Weninger, and C.A. Hunter. 2009. Dynamic imaging of CD8⁺ T cell and dendritic cells during infection with *Toxoplasma gondii*. *PLoS Pathogens* 5(7):e1000505.
- Tait, E.D. and C.A. Hunter. 2009. Advances in understanding immunity to *Toxoplasma gondii*. *Memórias do Instituto Oswaldo Cruz* 104(2):201-210.
- Jordan, K.A., E.H. Wilson, E.D. Tait, B.A. Fox, D.S. Roos, D.J. Bzik, F. Dzierzinski, and C.A. Hunter. 2009. Kinetics and phenotype of vaccine-induced CD8⁺ T cell responses to *Toxoplasma gondii*. *Infection and Immunity* 77(9):3894-3901.
- Tait, E.D. and C.A. Hunter. 2009. The Foxo and the hound: chasing the *in vivo* regulation of T cell populations during infection. *Nature Immunology* 10(5):457-458.
- Wilson, E.H., T.H. Harris, P. Mrass, B. John, E.D. Tait, G.F. Wu, M. Pepper, E.J. Wherry, F. Dzierzinski, D. Roos, P.G. Haydon, and C.A. Hunter. 2009. Behavior of parasite-specific effector CD8⁺ T cells in the brain and visualization of kinesis-associated system of reticular fibers. *Immunity* 30(2):300-311.

- Pepper, M., F. Dzierszynski, E. Wilson, E. Tait, Q. Fang, F. Yarovinsky, T.M. Laufer, D. Roos, and C.A. Hunter. 2008. Plasmacytoid dendritic cells are activated by *Toxoplasma gondii* to present antigen and produce cytokines. *The Journal of Immunology* 180(9):6229-36.
- Tait, E., M. Carman, and S.M. Sievert. 2007. Phylogenetic diversity of bacteria associated with ascidians in Eel Pond (Woods Hole, Massachusetts, USA). *Journal of Experimental Marine Biology and Ecology* 342:138-146.

PRESENTATIONS

- Tait Wojno, E.D., L.A. Monticelli, S.V. Tran, T. Alenghat, L.C. Osborne, J.J. Thome, A. Budelsky, D.L. Farber, and D. Artis. The prostaglandin D₂ receptor CRTH2 regulates accumulation of group 2 innate lymphoid cells in the inflamed lung. Talk and poster at the American Association of Immunologists Conference, New Orleans, LA, May 2015.
- Tait Wojno, E.D. The prostaglandin D₂ receptor CRTH2 regulates accumulation of group 2 innate lymphoid cells in the inflamed lung. Poster at the Woods Hole Immunoparasitology Conference, Woods Hole, MA, April 2015.
- Tait Wojno, E.D., L.A. Monticelli, S.V. Tran, T. Alenghat, L.C. Osborne, J.J. Thome, A. Budelsky, D.L. Farber, and D. Artis. The prostaglandin D₂ receptor CRTH2 regulates accumulation of group 2 innate lymphoid cells in the inflamed lung. Poster at the Cell Symposia: Type 2 Immunity Conference, Brugge, Belgium, December 2014.
- Tait Wojno, E.D., L.A. Monticelli, S.V. Tran, T. Alenghat, L.C. Osborne, J.J. Thome, A. Budelsky, D.L. Farber, and D. Artis. The prostaglandin D₂ receptor CRTH2 regulates accumulation of group 2 innate lymphoid cells in the inflamed lung. Talk and poster at the Abcam Immunoregulatory Networks Conference, Seattle, WA, May 2014.
- Tait Wojno, E.D., M. Noti, B.S. Kim, M.C. Siracusa, P.R. Giacomini, M.G. Nair, A.J. Benitez, K.R. Ruymann, A.B. Muir, D.A. Hill, K.R. Chikwava, A.E. Moghaddam, Q.J. Sattentau, A. Alex, C. Zhou, P. Menard-Katcher, M. Kubo, K. Obata-Ninomiya, H. Karasuyama, M.R. Comeau, T. Brown-Whitehorn, P.M. Sleiman, H. Hakonarson, A. Cianferoni, G.W. Falk, M.-L. Wang, J.M. Spergel, and D. Artis. Dissecting mechanisms underlying the pathogenesis of eosinophilic esophagitis. Talk and poster at the American Association of Immunologists Conference, Pittsburgh, PA, May 2014.
- Tait Wojno, E.D., M. Noti, B.S. Kim, M.C. Siracusa, P.R. Giacomini, M.G. Nair, A.J. Benitez, K.R. Ruymann, A.B. Muir, D.A. Hill, K.R. Chikwava, A.E. Moghaddam, Q.J. Sattentau, A. Alex, C. Zhou, P. Menard-Katcher, M. Kubo, K. Obata-Ninomiya, H. Karasuyama, M.R. Comeau, T. Brown-Whitehorn, P.M. Sleiman, H. Hakonarson, A. Cianferoni, G.W. Falk, M.-L. Wang, J.M. Spergel, and D. Artis. TSLP-elicited basophils mediate the pathogenesis of eosinophilic esophagitis. Talk and poster at the International Cytokine and Interferon Society Meeting, San Francisco, CA, October 2013.
- Tait Wojno, E.D., L.A. Monticelli, G.F. Sonnenberg, and D. Artis. Functional plasticity of innate lymphoid cells. Poster at the IL-17 and Related Cytokines: Basic Biology and Clinical Applications Conference in Dublin, Ireland, June 2012.
- Tait Wojno, E.D., L.A. Monticelli, G.F. Sonnenberg, and D. Artis. Functional plasticity of innate lymphoid cells. Poster at the Philadelphia Infection and Immunity Forum, Philadelphia, PA, June 2012.
- Tait, E.D., J. Burg, J.S. Stumhofer, A.C. O'Hara, N. Hosken, Q. Fang, A. Glatman Zaretsky, J.S. Silver, S.D. Levin, and C.A. Hunter. Mice that over-express the IL-27p28 subunit fail to develop germinal center reactions during *Toxoplasma gondii* infection. Poster at the Woods Hole Immunoparasitology Conference, Woods Hole, MA, April 2010.
- Tait, E.D., J.S. Stumhofer, N. Hosken, A.C. O'Hara, Q. Fang, J. Burg, J.S. Silver, S.D. Levin, and C.A. Hunter. A role for IL-27 in controlling T regulatory cell homeostasis. Talk and

poster at the Asilomar Midwinter Conference of Immunologists, Pacific Grove, CA, January 2010.

Tait, E., E. Wilson, T. Harris, K. Jordan, M. Pepper, F. Dzierszinski, D. Roos, and C.A. Hunter. Dendritic cell responses during acute infection and different strains of *Toxoplasma gondii* determine CD8⁺ T cell responses and parasite burden. Poster at the American Association of Immunologists Conference at Experimental Biology, San Diego, CA, April 2008.

Tait, E.D., E.H. Wilson, T.H. Harris, K.A. Jordan, Y.-C. Ong, M. Pepper, F. Dzierszinski, D. Roos, J.C. Boothroyd, J.P. Saeij, and C.A. Hunter. Antigen-presenting cell responses during acute infection and different strains of *Toxoplasma gondii* determine CD8⁺ T cell responses and parasite burden. Talk at the Woods Hole Immunoparasitology Conference, Woods Hole, MA, April 2008.

Tait, E., E.H. Wilson, T. Harris, K. Jordan, M.P. Pepper, F. Dzierszinski, D. Roos, and C.A. Hunter. Dendritic cell responses during acute infection and different strains of *Toxoplasma gondii* determine CD8⁺ T cell responses and parasite burden. Poster at the Woods Hole Immunoparasitology Conference, Woods Hole, MA, April 2007.