James B. McLachlan, Ph.D. Associate Professor Tulane University School of Medicine Department of Microbiology and Immunology Tel: (504) 988-3521 Fax: (504) 988-5144 email: jmclachl@tulane.edu webpage: http://www.tulane.edu/~jmclachLab/

Date/Place of Birth: December 18, 1970; Washington, D.C.

Education and Training

- 2004-2009 Postdoctoral Fellow, (mentor: Marc Jenkins, PhD), Center for Immunology, University of Minnesota, Minneapolis, MN (My project was to determine the role for antigen presentation to CD4 helper T cells in non-lymphoid tissue)
- 1998-2004 Ph.D. (mentor: Soman Abraham, PhD), Department of Pathology, Duke University, Durham, NC (My dissertation research was to understand the role for mast cells in initiating and sustaining an adaptive immune response)
- 1989-1993 B.A. Biology, Appalachian State University, Boone, NC (My senior research project was to use electron microscopy to visualize sensory receptors of the median ocular region of the scorpion Centruroides vittatus)

Professional Experience

- 2015- Associate Professor with tenure, Department of Microbiology and Immunology, Tulane University, New Orleans, Louisiana
- 2009- Assistant Professor, Department of Microbiology and Immunology, Tulane University, New Orleans, Louisiana
- 2004-2009 Postdoctoral Fellow, Center for Immunology, University of Minnesota, Minneapolis, Minnesota (Mentor: Marc K. Jenkins, Ph.D.)
- 1998-2004 Graduate Student, Department of Pathology, Duke University, Durham, North Carolina (Dissertation advisor: Soman N. Abraham, Ph.D.)
- 1994-1998 Research technician, Department of Toxicology, North Carolina State University, Raleigh, North Carolina (P.I.: Gerald LeBlanc, Ph.D.)
- 1994 Research technician, Department of Chemistry, Universität Kaiserslautern, Kaiserslautern, Germany (P.I.: Manfred Metzler, Ph.D.)
- 1993 Research technician, Department of Pediatrics and Infectious Diseases, University of North Carolina, Chapel Hill, North Carolina (P.I.: Johnny Carson, Ph.D.)

Professional Activities and Societies

2014-present	Grant Reviewer – NIH NIAID study section Topics in Bacterial
·	Pathogenesis - IDM-B (80)
2014-present	Editorial Board, Nature Scientific Reports
2014	Grant Reviewer – American Heart Association study section Immunology
	BSc3
2011-present	Member, American Society for Microbiology
2007-present	Member, The American Association of Immunologists
2010-present	Member, American Association for the Advancement of Science

2010-present

Ad hoc reviewer for: Journal of Immunology Immunology Letters PLoS One Mucosal Immunology PLoS Pathogens Journal of Leukocyte Biology Nature Scientific Reports

Awards/Honors

- 2015 AAI Student Travel Grant for doctoral student
- 2014 AAI Student Travel Grant for doctoral student
- 2013 AAI Early Career Faculty Travel Grant
- 2013 AAI Student Travel Grants for two doctoral students
- 2010 Nominated as Pew Scholar
- 2010 Nominated as Searle Scholar
- 2008 Best speaker award, UMN Center for Immunology retreat
- 2003 Keystone Symposia student travel scholarship
- 1989-1993 Chancellor's Full Scholarship, Appalachian State University, Boone, NC
- 1989-1993 Honors Program, Appalachian State University, Boone, NC
- 1991-1993 Beta Beta Beta, Biological Honor Society
- 1990-1992 The National Institute of Environmental Health Sciences, Summers of Discovery student research program

Original Research Articles

- 1) Goggins, J.A., Kurtz J.R., Frederick D.R., J.B. McLachlan. (2017). Recent thymic emigrants dictate the balance of immunity during persistent bacterial infection. **In preparation.**
- 2) Frederick D.R., Kurtz J.R., Freytag L.C., Cunningham D., J.B. McLachlan. (2017). Parenteral immunization with double-mutant heat labile toxin engages CD103+ dermal dendritic cells and redirects CD4 T cell immunity to the gut mucosa. **In preparation.**
- 3) Kurtz J.R., Israel, K., Frederick D.R., Morici L.A., J.B. McLachlan. (2017). Liver Induced Immunotolerance by *Salmonella*-specific CD4 T cells During Chronic Infection. **In preparation.**
- Spanier, J.A., Frederick, D.R., Taylor, J.J., Heffernan, J.R., Kotov, D.I., Martinov, T., Osum, K.C., Ruggiero, J.L., Rust, B.J., Landry, S.J., Jenkins, M.K., McLachlan, J.B^{*}., Fife, B.T.*, 2016. Efficient generation of monoclonal antibodies against peptide in the context of MHCII using magnetic enrichment. *Nat Comm* 7, 11804.
 *authors contributed equally
- Ise W., Inoue T., McLachlan J.B., Kometani K., Kubo M., Okada T., Kurosaki T. (2014). Memory B cells contribute to rapid Bcl6 expression by memory follicular helper T cells. *PNAS*, 111(32), 11792–11797.
- 6) Li T., Steede N.K., Nguyen H-N.P., Freytag L.C., McLachlan J.B., Mettu R.R., Robinson J.E., Landry S.J. (2014). Comprehensive analysis of contributions from protein conformational stability and major histocompatibility complex class II-peptide binding affinity

to CD4+ epitope immunogenicity in HIV-1 envelope glycoprotein. *J Virol*, *88*(17), 9605–9615.

- 7) Kurtz J.R., Petersen H.E., Frederick D.R., Morici L.A., McLachlan J.B. (2014). Vaccination with a single CD4 T cell peptide epitope from a Salmonella Type III-secreted effector protein provides protection against lethal infection. *Infect Immun*, 82(6), 2424-2433.
- Frazier T.P., McLachlan J.B., Gimble J.M., Tucker H.A., Rowan B.G. (2014). Human Adipose-Derived Stromal/Stem Cells Induce Functional CD4(+)CD25(+)FoxP3(+)CD127(-) Regulatory T Cells Under Low Oxygen Culture Conditions. *Stem Cells Dev*, 23(9), 968-977.
- 9) Dutta, N. K. *, McLachlan, J. *, Mehra, S., & Kaushal, D. (2014). Humoral and lung immune responses to Mycobacterium tuberculosis infection in a primate model of protection. *Trials in Vaccinology*, 3, 47–51. *authors contributed equally
- 10)Nelson R.W.*, McLachlan J.B. *, Kurtz J.R, Jenkins M.K. (2013). CD4+ T cell persistence and function after infection are maintained by low-level peptide:MHC class II presentation. J Immunol, 190(6), 2828–2834. *authors contributed equally
- 11)Lee, S-J*, McLachlan, J.B.*, Kurtz, J.R., Fan, D., Winter, S. E., Bäumler, A.J., Jenkins, M.K., and McSorley, S.J. (2012). Temporal expression of bacterial proteins instructs host CD4 T cell expansion and Th17 development. *PLoS Pathog*, 8(1):e1002499. *authors contributed equally
- 12)Nieves, W., Asakrah, S., Qazi, O., Brown, K.A., Kurtz, J., Aucoin, D.P., McLachlan, J.B., Roy, C.J., and Morici, L.A. (2011). A naturally derived outer-membrane vesicle vaccine protects against lethal pulmonary Burkholderia pseudomallei infection. *Vaccine* 29, 8381– 8389.
- 13) Tubo, N.J., **McLachlan, J.B.**, and Campbell. J.J. (2011). Chemokine Receptor Requirements for Epidermal T Cell Trafficking. *Am J Path* 178:2496–2503
- 14)Shelburne, C.P., Nakano, H., St John, A.L., Chan, C., McLachlan, J.B., Gunn, M.D., Staats, H.F., and Abraham, S.N. (2009). Mast cells augment adaptive immunity by orchestrating dendritic cell trafficking through infected tissues. *Cell Host Microbe* 6, 331-342.
- 15)McLachlan, J.B., Catron, D.M., Moon, J.J., and Jenkins, M.K. (2009). Dendritic cell antigen presentation drives simultaneous cytokine production by effector and regulatory T cells in inflamed skin. *Immunity* 30, 277-288. (For further information, see <u>Nature Reviews</u> <u>Immunology</u>)
- 16)Ertelt, J.M., Rowe, J.H., Johanns, T.M., Lai, J.C., McLachlan, J.B., and Way, S.S. (2009). Selective priming and expansion of antigen-specific Foxp3- CD4+ T cells during Listeria monocytogenes infection. *J Immunol* 182, 3032-3038.
- 17)**McLachlan, J.B.***, Shelburne, C.P.*, Hart, J.P., Pizzo, S.V., Goyal, R., Brooking-Dixon, R., Staats, H.F., and Abraham, S.N. (2008). Mast cell activators: a new class of highly effective

vaccine adjuvants. *Nat Med* 14, 536-541. (For further information, <u>Nature Medicine News</u> and <u>Views</u>) *authors contributed equally

- 18)McLachlan, J.B., Hart, J.P., Pizzo, S.V., Shelburne, C.P., Staats, H.F., Gunn, M.D., and Abraham, S.N. (2003). Mast cell-derived tumor necrosis factor induces hypertrophy of draining lymph nodes during infection. *Nat Immunol* 4, 1199-1205. (For further information: Nature, Nature Reviews Immunology, Nature Immunology News & Views)
- 19)LeBlanc, G.A., and McLachlan, J.B. (2000). Changes in the metabolic elimination profile of testosterone following exposure of the crustacean Daphnia magna to tributyltin. *Ecotoxicol Environ Saf* 45, 296-303.
- 20)Wilson, V.S., **McLachlan, J.B.**, Falls, J.G., and LeBlanc, G.A. (1999). Alteration in sexually dimorphic testosterone biotransformation profiles as a biomarker of chemically induced androgen disruption in mice. *Environ Health Perspect* 107, 377-384.
- 21)Bain, L.J., McLachlan, J.B., and LeBlanc, G.A. (1997). Structure-activity relationships for xenobiotic transport substrates and inhibitory ligands of P-glycoprotein. *Environ Health Perspect* 105, 812-818.
- 22)Carson, J.L., Collier, A.M., Hu, S.C., and McLachlan, J.B. (1995). Variability in distribution and populations of gap junctions in ferret trachea during postnatal development. *Am J Physiol* 268, L576-583.

Review and Method Articles

- 1) Kurtz J. R. and J. B. McLachlan. (2015). The role of adaptive immunity and organ specific responses during Salmonella infection. **In preparation.**
- Jenkins, M.K., Chu, H.H., McLachlan, J.B., and Moon, J.J. (2010). On the composition of the preimmune repertoire of T cells specific for peptide-major histocompatibility complex ligands. *Annu Rev Immunol* 28, 275-294.
- 3) Moon, J.J., Chu, H.H., Hataye, J., Pagan, A.J., Pepper, M., McLachlan, J.B., Zell, T., and Jenkins, M.K. (2009). Tracking epitope-specific T cells. *Nat. Protocols* 4, 565-581.
- 4) **McLachlan, J.B.**, and Jenkins, M.K. (2007). Migration and accumulation of effector CD4+ T cells in nonlymphoid tissues. *Proc Am Thorac Soc* 4, 439-442.
- 5) Shelburne, C.P., **McLachlan, J.B.**, and Abraham, S.N. (2006). In vivo models for studying mast cell-dependent responses to bacterial infection. *Methods Mol Biol* 315, 363-381.
- 6) **McLachlan, J.B.**, and Abraham, S.N. (2001). Studies of the multifaceted mast cell response to bacteria. *Curr Opin Microbiol* 4, 260-266.

Research Support

Ongoing Research Support1U01AI124289NIH/NIAID4/2016 – 3/2021Role: PITitle: Using combination adjuvants to direct and control immune responses at the intestinalMcLachlan, JB

mucosa

Goal: The goal of this project is to determine how certain adjuvant combinations can direct specific, protective immune responses to the intestinal mucosal tissue.

R01AI103343 7/2013-6/2017 NIH/NIAID Role: PI Title: Organ-specific CD4 T cell responses regulate Salmonella persistence Goal: Define the role of different organs in regulating Salmonella-specific CD4 T cell immunity R21AI122197 NIH/NIAID 1/2016-1/2018 Role: PI Title: Mast cell control of endogenous, antigen-specific CD4 T cell immunity Goal: Test the hypothesis that mast cells regulate CD4 T cell function and memory. HDTRA1-14-C-0035 (PI: Lisa Morici - Tulane) 7/2014-7/2017 Defense Threat Reduction Agency/Office of Naval Research Role: Co-investigator Title: A broad spectrum OMV vaccine against aerosolized B. pseudomallei and B. mallei. Goal: To develop a vaccine against inhalational melioidosis and glanders Completed Research Support R21AI117365 (PI: Igor Brodsky - UPenn) NIH/NIAID 1/2015-12/2016 Role: Co-investigator Title: Harnessing inflammasome activation to enhance efficacy of Salmonella vaccines Goal: Test whether enabling inflammasome activation during immunization will enhance vaccine immunogenicity and induction of protective immune responses. (LEQSF(2012-15)-RD-A-24) Louisiana Board of Regents Research Competitiveness Contract 6/2012-6/2014 Role: PI Title: Defining the Role of Anatomical Environments in Shaping CD4 T Cell Responses to Persistent Salmonella Infection Goal: Define the role of different organs in regulating Salmonella-specific CD4 T cell immunity HDTRA1-13-C-0002 (PI: Lisa Morici - Tulane) 12/2012-03/2014 Defense Threat Reduction Agency/Office of Naval Research Role: Co-investigator Title: Outer membrane vesicle vaccine-mediated protection against aerosolized B. pseudomallei Goal: Optimize a B. pseudomallei OMV vaccine by rigorous evaluation of OMV dose, route of delivery, and adjuvant combinations. Tulane School of Medicine Pilot Grant 4/2013 - 3/2014 Role: PI Title: Defining the anatomically distinct molecular signature of Salmonella-specific CD4 T cells during persistent infection Goal: Assess the molecular genetic signature imparted on Salmonella-specific CD4 T cells in lymphoid versus non-lymphoid organs during persistent Salmonella infection 4/2013 - 3/2014 Tulane School of Medicine Bridge Funding Role: PI

Goal: Competitive internal funding from the medical school to obtain data for use in federally funded proposals

Patents

Pizzo, S.V., J.P. Hart, **J.B. McLachlan**, H.F. Staats, and S.N. Abraham (2005). Novel adjuvant capable of specifically activating the adaptive immune response U.S.P. Office, ed. (USA).

Institutional Service/Membership

2013-2014	Research Committee for the Tulane School of Medicine Strategic Planning
	(Vision 2020)
2013-2014	Tulane Department of Microbiology and Immunology Masters student
	admissions committee
2013-present	Tulane University Faculty Grievance Committee
2013-present	Tulane School of Medicine Admissions Committee
2013	LSU veterinary school Phi Zeta Research Day judge
2011-2012	Tulane School of Medicine Medical Student Affairs Committee
2010-present	Tulane School of Medicine Year 2 Curriculum Committee
2010-present	Faculty Interviewer – Basic Medical Sciences Graduate Program Admissions
2010-present	Faculty Interviewer – Medical School Admissions, Tulane SOM
2010-present	Judge, Tulane Health Science Research Days
2006	Organizing committee, University of Minnesota, Center for Immunology Retreat
2001	Organizing committee, Graduate Student Symposium, Duke University

Mentoring Experience

Doctoral students under my supervision

Current

2017- David Bauer, Tulane University (Project: Determine how vaccine adjuvants can be combined to affect gut immunity)

Graduated

2014-2017-	Alan Goggins, Tulane University (Project: Assess the contribution of new,
	thymically derived CD4 T cells during persistent Salmonella infection)
2011-2015	Daniel Frederick, Tulane University (Project: Determine how vaccine
	adjuvants can retarget immune cells from the skin to the gut)
2010-2014	Jonathan Kurtz, Tulane University (Project: Define the role of liver CD4 T
	cells during chronic Salmonella infection)

Dissertation/Thesis committee member

Current

Alan Goggins - Ph.D. Biomedical Sciences (Chair) Daniel Frederick - Ph.D. Biomedical Sciences (Chair) Bonnie Phillips - Ph.D. Biomedical Sciences Hailey Petersen – Ph.D. Biomedical Sciences Nicole Kikendall – Ph.D. Biomedical Sciences Sarah Baker – M.D., Ph.D., Physician Scientist Program Yue Sun – Ph.D. Biomedical Sciences Grace Jairo - Ph.D. Biomedical Sciences Jessica Hartnett - Ph.D. Biomedical Sciences Blake Rust - Ph.D. Biomedical Sciences

Graduated

Jonathan Kurtz - Ph.D. Biomedical Sciences (Chair, 2014) Kate Israel - Ph.D. Biomedical Sciences (Chair - left program 2015) Kristen Merino - Ph.D. Biomedical Sciences (2014) John Caskey - Ph.D. Biomedical Sciences (2014) Hongnam Nguyen - Ph.D. Biomedical Sciences (2014) Tysheena Charles - Ph.D. Biomedical Sciences (2014) Trivia Frazier - Ph.D. Biomedical Sciences (2013) Lindsey Bazzone – M.D., Ph.D., Physician Scientist Program Mallory Agard - M.S. Biomedical Sciences (2013) Wildaliz Nieves - Ph.D. Biomedical Sciences (2013) Saja Asakrah - Ph.D. Biomedical Sciences (2012) Gregor Manukian - M.D., Ph.D., Physician Scientist Program (2012) Lisa Read - Ph.D. Biomedical Sciences (2012) Julie Heang - Ph.D., Biomedical Sciences (left program 2011) Christina Pettus - Ph.D, Biomedical Sciences (left program 2011) Scott Melton - Ph.D, Biomedical Sciences (2010)

Other Student Researchers under my supervision

2015	Tim Prior, Rotation Student, MD/PhD program, Tulane University
2014-present	Leila Sabbagh, Undergraduate Student researcher, Tulane University
2014	Nancy Magee, Rotation Student, Tulane University
2013	Kate Israel, Rotation Student, Tulane University
2012	Sora Ely, Medical Student researcher, Tulane University
2011	Daniel Frederick, Rotation Student, Tulane University
2011	Bonnie Phillips, Rotation Student, Tulane University
2011	Amanda McGillivray, Rotation Student, Tulane University
2011	Hailey Petersen, Rotation Student, Tulane University
2010	Meredith Sosulski, Rotation Student, Tulane University
2010	Wildaliz Nieves, Rotation Student, Tulane University
2010	Jonathan Kurtz, Rotation Student, Tulane University
2010	Kristen Merino, Rotation Student, Tulane University
2010	Zhu Hanqing, Rotation Student, Tulane University
2010-11	Tichelle Carol-Denise Porch, HS Summer Student, Tulane University

Supervised Student Awards

2015 – AAI general meeting travel award (Frederick)

- 2015 NIAID Intramural Research Opportunities (INRO) program (Goggins)
- 2014 ASM Robert D. Watkins Graduate Fellowship (Goggins)
- 2014 ASM Science Teaching Fellows program (Goggins)
- 2014 AAI Young Investigator Award Autumn Immunology Conference (Kurtz)
- 2014 BMS Retreat Best Speaker (Kurtz)
- 2014 Tulane Research Days Best Overall Poster (Kurtz)
- 2014 AAI general meeting travel award (Frederick)
- 2013 AAI general meeting travel award (Kurtz)
- 2013 AAI general meeting travel award (Frederick)

Teaching Experience

Course Directorships

2015 – present	Graduate Immunology (MIIM-7600) Tulane University School of Medicine Role: Course Director Responsibilities: Develop course format and content. Lecturing, leading student discussions and providing the fundamental building blocks of immunology.
2013 – present	HEAL-X Immunology (Fundamentals Block) Tulane University School of Medicine Role: Course Director Responsibilities: Develop course format and content. Use active learning techniques to teach HEAL-X medical students about the fundamentals of immunology.
2012 – present	Advanced Immunology (MIIM-7620) Tulane University School of Medicine Role: Course Director Responsibilities: Develop course format and content. Lecturing, leading student discussions and student critiques of research journal articles.
2011 – present	Medical Immunology (MIIM-2001) Tulane University School of Medicine Role: Course Director Responsibilities: Develop course format and content. Lecturing and leading class discussion for the Tulane Medical School year 1 class.
2011 – present	Introductory Immunology (MIIM-7600) Tulane University School of Medicine Role: Course Director Responsibilities: Develop course format and content. Lecturing and leading class discussion for introductory immunology for graduate students.
Formal Course Res 2013 – present	sponsibilities HEAL-X Immunology (Pulmonary Block) Tulane University School of Medicine Role: Lecturer Responsibilities: Review lecture on immunology
2013	Basic Immunology (MICRO295) LSU Health Sciences Center Responsibilities: "Antigen presentation" invited lecture Contact hours: 2
2010 - present	Medical Microbiology/Intro to Infectious Disease (MICR 2000) Tulane University School of Medicine Responsibilities: Lectures on Innate and Adaptive Immunity Contact hours: 3

2010 - present Graduate Medical Microbiology (MIIM 7500) **Tulane University School of Medicine** Responsibilities: Lectures on Innate and Adaptive Immunity Contact hours: 3 2010 – present Vaccine Biology (MIIM-7250) **Tulane University School of Medicine** Responsibilities: Lectures on Innate and Adaptive Immunity Contact hours: 3 2010 - present Advanced Research Methods (MIIM 7220) **Tulane University School of Medicine** Responsibilities: Develop and instruct on flow cytometry background and demonstrate use of machine in a wet lab setting Contact hours: 3 2010 - 2013Molecular Medicine **Tulane University School of Medicine** Responsibilities: Lecture on Overview of Immunity Contact hours: 2 2002 Teaching Assistant, Molecular Aspects of Disease, Duke University 1993-94 Teaching Assistant, Comparative Vertebrate Zoology, Appalachian State University

Invited seminars/Presentations

International

- 2010 RIKEN Institute, Tokyo Japan. McLachlan, J. B. "Visualizing antigen-specific helper T cell immunity: how, where, and when"
- 2010 Tokyo University of Science, Tokyo Japan. McLachlan, J. B. "Visualizing antigenspecific helper T cell immunity: how, where, and when"

<u>National</u>

- 2015 UC-Davis, Center for Comparative Medicine, Departmental seminar, Davis, CA. McLachlan, J. B. "Immunity to Persistent Salmonella Infection – Why Location Matters"
- 2013 LSUHSC, Microbiology, Immunology, and Parisitology, Departmental seminar, New Orleans, LA. McLachlan, J. B. "Immunity to persistent *Salmonella* Infection: Location, Location, Location"
- 2012 LSUHSC, Department of Physiology, Departmental seminar, New Orleans, LA. McLachlan, J. B. "Visualizing Antigen-specific CD4 T cell immunity to *Salmonella* infection: Why location matters"
- 2012 Loyola University, Department of Biology, Departmental seminar, New Orleans, LA. McLachlan, J. B. "Visualizing Antigen-specific CD4 T cell immunity to *Salmonella* infection: Why location matters"

- 2012 <u>Keynote Speaker</u>, Western Regional Center of Excellence for Biodefense and Emerging Infectious Diseases Research Vaccine Development for Diseases Caused by Intracellular Bacteria: Theme 3 Annual Retreat, New Orleans, LA. McLachlan, J. B. "Visualizing Antigen-specific CD4 T cell immunity to *Salmonella* infection: Why location matters"
- 2012 Duke University Department of Pathology retreat, Durham, NC. McLachlan, J. B. "Persistence pays off: What Salmonella can teach us about life"
- 2010 Louisiana State University Veterinary School, Baton Rouge, LA. McLachlan, J. B. "Visualizing antigen-specific helper T cell immunity: how, where, and when"
- 2010 Louisiana Vaccine Institute/South Louisiana Institute for Infectious Disease Research Seminar Series, New Orleans, LA. McLachlan, J. B. "Visualizing antigen-specific helper T cell immunity: how, where, and when"
- 2009 American Association of Immunologists Annual meeting, Block Symposia. Seattle, WA. McLachlan, J. B., Catron, D.M., Moon, J.J., and M. K. Jenkins. "Dendritic cell antigen presentation drives simultaneous cytokine production by effector and regulatory T cells in inflamed skin"
- 2009 University of Minnesota Center for Immunology Retreat. Otsego, MN. McLachlan, J. B. "News from the academic job circuit."
- 2009 Department of Molecular Genetics and Microbiology, University of New Mexico School of Medicine. Albuquerque, NM. McLachlan, J. B., Catron, D.M., Moon, J.J., and M. K. Jenkins. "Striking the balance: the role of antigen presentation in regulating CD4 T cell adaptive immunity"
- 2009 Department of Microbiology and Immunology, Wake Forest University School of Medicine. Winston Salem, NC. McLachlan, J. B., Catron, D.M., Moon, J.J., and M. K. Jenkins. "Dendritic cell antigen presentation drives simultaneous cytokine production by effector and regulatory T cells in inflamed skin."
- 2008 University of Minnesota Center for Immunology Retreat. Otsego, MN. McLachlan, J. B., Catron, D.M., Moon, J.J., and M. K. Jenkins. "Dendritic cell antigen presentation drives simultaneous cytokine production by effector and regulatory T cells in inflamed skin."
- 2006 Department of Microbiology/Immunology seminar series, Dartmouth Medical School. Hanover, NH. McLachlan, J. B., and M. K. Jenkins. "Antigen-presentation in non-lymphoid tissue is required for maintenance of effector CD4⁺ T cell function."
- 2003 Pathology Grand Rounds, Duke University. Durham, NC. McLachlan, J. B., J. P. Hart, S. V. Pizzo, C. P. Shelburne, H. F. Staats, M. D. Gunn and S. N. Abraham. "Mast cell-derived tumor necrosis factor induces hypertrophy of draining lymph nodes during infection."
- 2002 Graduate Student Symposium, Duke University. Durham, NC. McLachlan, J. B., J. P. Hart, S. V. Pizzo, H. F. Staats, M. D. Gunn and S. N. Abraham. "TNF-α from peripheral mast cells mediates hypertrophy of draining lymph nodes during infection."

1993 Association of Southeastern Biologists, 54th annual meeting, Virginia Beach, VA McLachlan, J. B. and R. A. Dewel. "Sensory receptors of the median ocular region of the scorpion Centruroides vittatus."

Institutional

- 2012 Tulane University Medical School Department of Pharmacology, Departmental seminar, New Orleans, LA. McLachlan, J. B. "Visualizing Antigen-specific CD4 T cell immunity to *Salmonella* infection: Why location matters"
- 2009 Department of Microbiology and Immunology, Tulane University School of Medicine. New Orleans, LA. McLachlan, J. B., Catron, D.M., Moon, J.J., and M. K. Jenkins. "Striking the balance: the role of antigen presentation in regulating CD4 T cell adaptive immunity"

Posters/Abtracts

- 2015 Frederick, D. R., L. C. Freytag, D. Cunningham, and J. B. McLachlan. "Parenteral immunization with double-mutant heat labile toxin engages CD103+ dermal dendritic cells and redirects T cell immunity to the gut mucosa" American Association of Immunologists Annual Meeting Annual Meeting, New Orleans, LA
- 2015 Goggins, J. A., J. R. Kurtz, K. Israel and J. B. McLachlan. "Determining the contribution of antigen-specific, CD4+ recent thymic emigrants to *Salmonella* persistence *in vivo*" American Association of Immunologists Annual Meeting Annual Meeting, New Orleans, LA
- 2015 Frederick, D. R., L. C. Freytag, D. Cunningham, and J. B. McLachlan. "Parenteral immunization with double-mutant heat labile toxin engages CD103+ dermal dendritic cells and redirects T cell immunity to the gut mucosa" Keystone Symposia, T Cells: Regulation and Effector Function (D3), Snowbird, UT
- 2014 Kurtz, J. R. and J. B. McLachlan. "Liver Induced Immunotolerance by *Salmonella*specific CD4 T cells During Chronic Infection" Autumn Immunology Conf., Chicago, IL (selected for a short talk and travel award)
- 2014 Frederick, D. R., L. C. Freytag and J. B. McLachlan. "Parenteral immunization with double-mutant heat labile toxin engages CD103+ dermal dendritic cells and redirects T cell immunity to the gut mucosa" American Association of Immunologists Annual Meeting Annual Meeting, Pittsburgh, PA (selected for a short talk and travel award)
- 2013 Kurtz, J. R. and J. B. McLachlan. "Liver Induced Immunotolerance by Salmonellaspecific CD4 T cells During Chronic Infection" 4th ASM Conference on Salmonella: The Bacterium, the Host and the Environment, Boston, MA
- 2013 Kurtz, J. R. and J. B. McLachlan. "Liver Induced Immunotolerance by *Salmonella*specific CD4 T cells During Chronic Infection" American Association of Immunologists Annual Meeting, Honolulu, HI (selected for a short talk and travel award)
- 2013 Frederick, D. R., J. R. Kurtz and J. B. McLachlan. "Tissue-specific Antigen Presentation during Persistent Infection with *Salmonella*" American Association of Immunologists Annual Meeting Annual Meeting, Honolulu, HI (selected for a travel award)

- 2012 Kurtz, J. R. and J. B. McLachlan. "Liver Induced Immunotolerance by Salmonellaspecific CD4 T cells During Chronic Infection" Autumn Immunology Conf., Chicago, IL
- 2012 Frederick, D. R., J. R. Kurtz and J. B. McLachlan. "Tissue-specific Antigen Presentation during Persistent Infection with *Salmonella*" UAB Spring Immunology Symposium, Birmingham, AL
- 2012 Kurtz, J. R. and J. B. McLachlan. "Liver Induced Immunotolerance by Salmonellaspecific CD4 T cells During Chronic Infection" UAB Spring Immunology Symposium Birmingham, AL
- 2011 Kurtz, J. R. and J. B. McLachlan. "Chronic infection with Salmonella typhimurium is controlled by helper T Cells" American Society for Microbiology Annual Meeting, New Orleans, LA
- 2009 McLachlan, J. B., D. M. Catron and M. K. Jenkins. "Dendritic cell antigen presentation drives simultaneous cytokine production by effector and regulatory T cells in inflamed skin" American Association of Immunologists Annual Meeting, Seattle, WA
- 2007 McLachlan, J. B., D. M. Catron and M. K. Jenkins. "Antigen presentation in nonlymphoid tissue is required for maintenance of effector CD4+ T cell function" Keystone Symposia, Santa Fe, NM
- 2006 McLachlan, J. B., and M. K. Jenkins. "MHCII presentation to antigen specific effector T cells is required for retention and sustained activation in non-lymphoid tissue" Midwinter Conference of Immunologists at Asilomar, Monterey, CA
- 2004 McLachlan, J. B., J. P. Hart, S. V. Pizzo, C. P. Shelburne, H. F. Staats, M. D. Gunn and S. N. Abraham. "Mast cell-derived tumor necrosis factor induces hypertrophy of draining lymph nodes during infection." Keystone Symposia, Taos, NM
- 2001 McLachlan, J. B., D. D. Patel, and S. N. Abraham. "Mast Cell Migration and Chemokine Production During Infection." Graduate Student Symposium, Duke University
- 2000 McLachlan, J. B., Z. Gao, and S. N. Abraham. "Mast Cell Migration to Lymph Nodes During Infection." Graduate Student Symposium, Duke University