-

# BIOGRAPHICAL

Name: Affiliation:	Daniel J. Perry University of Florida College of Medicine	Date of Birth: Place of Birth: Citizenship:	May 16, 1976 Warwick, RI U.S.A.
	Department of Pathology,		
	Immunology, and Laboratory	Home Address:	431 SE 1 <sup>st</sup> St.
	Medicine		Williston, FL 32696
Address:	PO Box 100275	Home Phone:	352-528-5706
	Gainesville, FL 32696	Cell Phone:	352-283-1998
Work Phone:	352-392-2676	Email:	perryd@pathology.ufl.edu

## **EDUCATION**

1994-1998	B.S. in Animal Sciences College of Agriculture and Life Sciences University of Vermont Burlington, VT
2005-2011	Ph.D. in Medical Sciences – Immunology and Microbiology College of Medicine University of Florida Gainesville, FL
Dissertation	Genetic Dissection of Murine Lupus Susceptibility Locus <i>Sle1c</i> Identifies Estrogen Related Receptor Gamma as a Novel Regulator of Autoimmunity
Doctoral Committee	Laurence M. Morel (advisor and chair), Eric S. Sobel, Clayton E. Mathews, Alberto Riva, Margaret R. Wallace

## **PROFESSIONAL EXPERIENCE**

## Academic

2018-present	Research Assistant Scientist College of Medicine, Department of Pathology, Immunology, and Laboratory Medicine University of Florida, Gainesville, FL
2018-present	Co-Director, Immune Monitoring Core College of Medicine, Department of Pathology, Immunology, and Laboratory Medicine

	University of Florida, Gainesville, FL
2011-2018	Postdoctoral Associate College of Medicine, Department of Pathology, Immunology, and Laboratory Medicine, Brusko Lab University of Florida, Gainesville, FL
2006-2011	Graduate Research Assistant College of Medicine, Department of Pathology, Immunology, and Laboratory Medicine, Morel Lab
2002-2005	University of Florida, Gainesville, FL Laboratory Manager College of Medicine, Department of Pathology, Immunology, and Laboratory Medicine, Morel Lab University of Florida, Gainesville, FL
1996-1998	Undergraduate Laboratory Technician Quality Milk Research Lab University of Vermont, Burlington, VT
1996-1998	Undergraduate Laboratory Technician College of Agriculture and Life Sciences, Plaut Lab University of Vermont, Burlington, VT
Additional Profession	onal Development
2019	Systems Immunology Workshop Federation of Clinical Immunological Societies (FOCiS) 2019 Boston, MA
2019	Big Data Workshop Federation of Clinical Immunological Societies (FOCiS) 2019 Boston, MA
2018	GMS5905: Informatics for Pathology Practice and Research. Certification in data science and management: Unix operating system, Python programming, and data analysis and visualization using Pandas University of Florida, Gainesville, FL 32696
Teaching	
2016	Substitute Lecturer, GMS6140 - Immune Tolerance and Treg College of Medicine University of Florida, Gainesville, FL
2009	Teaching Assistant, BMS 6830 - Essentials of Patient Care III

	College of Medicine University of Florida, Gainesville, FL
2008	Teaching Assistant, BMS 6601C - General Pathology and Immunology College of Medicine University of Florida, Gainesville, FL
Activities	
2016	Presented original research at UF Pathology Research Symposium.
2014	Attended training sessions and seminars by leaders in emerging metabolomics technologies at the Southeast Center for Integrated Metabolomics Workshop and Symposium
2014	Attended grantsmanship workshop: "Writing Winning Grants"
2013-2016	Presented original research at four UF Immune Metabolism Retreats.
2013	Organized demo and training sessions for XF96 and XFe96 extracellular flux analysis instruments (Seahorse Bioscience, Billerica, MA)
2010	Recruited and organized for Dr. Jeffrey Bluestone as the student sponsored speaker for Interdisciplinary Biomedical Graduate Program, Immunology and Microbiology Concentration

#### Honors & Awards

2009	Keystone Symposia Education Fund Scholarship. Travel Award.
2013	Federation of Clinical Immunological Societies. Poster of Merit.
2014	Experimental Pathology Innovative Grant. 2013 Competition Awardee.
2016	Society for Leukocyte Biology at AAI. Travel Stipend.

## **Professional Membership**

The American Association of Immunologists 2007-present American Association for the Advancement of Science 2007-2009 Federation of Clinical Immunological Societies 2013-present Society for Leukocyte Biology 2015-present

### **Journal Reviewer**

Pediatric Diabetes BMC Immunology Diabetes

### **Presented Abstracts and Invited Lectures:**

- **Perry D.J.** and Morel L.M. Genetic Dissection of *Sle1c*. The 94th Annual Meeting of the American Association of Immunologists. Miami Beach, FL. 2007. Presentation Type: Poster.
- **Perry D.J.** and Morel L.M. A congenic dissection approach to identify lupus susceptibility genes. Florida Genetics. Gainesville, FL. 2007. Presentation Type: Poster.
- **Perry D.J.**, Boackle S.A., Morel L.M. Genetic dissection of the lupus susceptibility locus *Sle1c*. Keystone Symposia: Tolerance in Transplantation and Autoimmunity. Keystone, CO. 2008. Presentation Type: Poster.
- **Perry D.J.**, Dozmorov I., Morel L.M. Treg/TH17 homeostasis is altered by a gene in the lupus susceptibility locus, *Sle1c2*. Lupus Genetics Conference. Oklahoma City, OK. 2008. Presentation Type: Poster.
- **Perry D.J.**, Dozmorov I., Morel L.M. Refinement of the lupus susceptibility locus, *Sle1c*. Florida Genetics. Gainesville, FL. 2008. Presentation Type: Poster.
- **Perry D.J.**, Dozmorov I., Morel L.M. TH17/Treg homeostasis is altered by the lupus susceptibility locus, *Sle1c-2*. Keystone Symposia: TH17 Cells in Health and Disease. Vancouver, British Columbia, Canada. 2009. Presentation Type: Poster.
- **Perry D.J.**, Thompson J.A., Han Z., Atkinson M.A., Brusko T.M. Modulation of T cell receptor and Interleukin-2 receptor signaling in human primary CD4+ T cells. The 99th Annual Meeting of the American Association of Immunologists. Boston, MA. 2012. Presentation Type: Poster.
- **Perry D.J.**, Saikumar P.L., Jia X., Brusko T.M. Functional Consequences of *PTPN22* Modulation in Primary Human CD4+ T Cells. Federation of Clinical Immunology Societies. Boston, MA. 2013. Presentation Type: Poster.
- **Perry D.J.**, Saikumar P.L., Zhang L., Brusko T.M. Functional evaluation of *PTPN22* modulation in human T cells. The 101st Annual Meeting of the American Association of Immunologists. Boston, MA. 2015. Presentation Type: Poster.
- **Perry D.J.**, Yin Y., Morel L.M., Brusko T.M. Metabolic profiling of human PBMC subsets. Society of Leukocyte Biology guest symposium at the 102nd Annual Meeting of the American Association of Immunologists. Seattle, WA. 2016. Presentation Type: **Oral**.
- **Perry D.J.**, Saikumar P.L., Zhang L., Brusko T.M. Functional evaluation of *PTPN22* modulation in human T cells. The Human Islet Research Network Annual Investigator Meeting. Bethesda, MA. 2016. Presentation Type: Poster.
- **Perry D.J.** "Genetic Risk Score and Type 1 Diabetes". American Diabetes Association. San Diego, California. 2017. Presentation Type: **Invited Oral.**
- **Perry D.J.**, Schultz A.R., Seay H.R., Atkinson M.A., Brusko T.M. Comprehensive Immunophenotyping Identifies Novel Subset Associations with Age and Type 1 Diabetes Status. Federation of Clinical Immunology Societies. Chicago, IL. 2017. Presentation Type: Poster.
- **Perry D.J.**, Wasserfall C.H., Haller M.J., Schatz D.A., Atkinson M.A., Brusko T.M. Assessing a machine learning strategy to improve measurement of T1D genetic risk. Federation of Clinical Immunology Societies. Chicago, IL. 2017. Presentation Type: Poster.

- Perry D.J. "T cell specificity and function in type 1 diabetes: From pathogenesis to adoptive Treg cell therapy" Canadian Society of Transplantation & Cell Transplant and Regenerative Medicine Society Joint Scientific Meeting. Halifax, Nova Scotia, CA. 2017. Presentation Type: Invited Oral.
- **Perry D.J.** "Growth Charts For the Pediatric Immune System" Pediatric Brain Tumor Foundation: Translating Discoveries to Cure the Kids (TD2). Portland, Oregon. May 2018. Presentation Type: **Invited Oral.**

### PUBLICATIONS

#### **Refereed Articles**

- Chen, Y., **D. Perry**, S. A. Boackle, E. S. Sobel, H. Molina, B. P. Croker, and L. Morel. 2005. Several Genes Contribute to the Production of Autoreactive B and T Cells in the Murine Lupus Susceptibility Locus Sle1c. J Immunol. 175: 1080-1089.
- Rahman, Z. S. M., H. Niu, **D. Perry**, E. Wakeland, T. Manser, and L. Morel. 2007. Expression of the autoimmune Fcgr2b NZW allele fails to be upregulated in germinal center B cells and is associated with increased IgG production. Genes Immun. 8: 604-612.
- Xu, Z., H. H. Potula, A. Vallurupalli, D. Perry, H. Baker, B. P. Croker, I. Dozmorov, and L. Morel. 2011. Cyclin-Dependent Kinase Inhibitor Cdkn2c Regulates B Cell Homeostasis and Function in the NZM2410-Derived Murine Lupus Susceptibility Locus Sle2c1. J Immunol. 186: 6673-6682.
- **Perry, D.**, Y. Yin, T. Telarico, H.V. Baker, I. Dozmorov, A. Perl, and L. Morel. 2012. Murine lupus susceptibility locus Sle1c2 mediates CD4+ T cell activation and maps to estrogen-related receptor γ. J Immunol. 189(2):793-803.
- Yin Y., S.C. Choi, Z. Xu, D.J. Perry, H. Seay, B.P. Croker, E.S. Sobel, T.M. Brusko, and L. Morel. 2015. Normalization of CD4<sup>+</sup> T Cell Metabolism Reverses Lupus. Sci Transl Med. Sci Transl Med. 7(274):274ra18.
- Fuhrman CA, Yeh WI, Seay HR, Saikumar Lakshmi P, Chopra G, Zhang L, Perry DJ, McClymont SA, Yadav M, Lopez MC, Baker HV, Zhang Y, Li Y, Whitley M, von Schack D, Atkinson MA, Bluestone JA, Brusko TM. 2015. Divergent Phenotypes of Human Regulatory T Cells Expressing the Receptors TIGIT and CD226. J Immunol. 195(1):145-55.
- Haller MJ, Gitelman SE, Gottlieb PA, Michels AW, Perry DJ, Schultz AR, Hulme MA, Shuster JJ, Zou B, Wasserfall CH, Posgai A, Mathews CE, Brusko TM, Atkinson MA, Schatz DA. 2016. Anti-Thymocyte Globulin + G-CSF Combination Therapy Leads to Sustained Immunomodulatory and Metabolic Effects in a Subset of Responders with Established Type 1 Diabetes. Diabetes 65(12): 3765-3775.
- Lowe JR, **Perry DJ**, Salama AKS, Mathews CM, Moss LG, Hanks BA. 2016. Genetic Risk Analysis of a Patient with Fulminant Autoimmune Type 1 Diabetes Mellitus Secondary to Combination Ipilimumab and Nivolumab Immunotherapy. J Immunother Cancer. 4:89.
- Marcial GE, Ford AL, Haller MJ, Gezan SA, Harrison NA, Cai D, Meyer JL, **Perry DJ**, Atkinson MA, Wasserfall CH, Garrett T, Gonzalez CF, Brusko TM, Dahl WJ, Lorca GL. 2017.

Lactobacillus johnsonii N6.2 Modulates the Host Immune Responses: A Double-Blind, Randomized Trial in Healthy Adults. Front Immunol. 12;8:655.

- Chen J, Chernatynskaya AV, Li JW, Kimbrell MR, Cassidy RJ, **Perry DJ**, Muir AB, Atkinson MA, Brusko TM, Mathews CE. 2017. T cells display mitochondria hyperpolarization in human type 1 diabetes. Sci Rep. 7(1):10835.
- **Perry DJ**, Wasserfall CH, Oram RA, Williams MD, Posgai A, Muir AB, Haller MJ, Schatz DA, Wallet MA, Mathews CE, Atkinson MA, Brusko TM. 2018. Application of a Genetic Risk Score to Racially Diverse Type 1 Diabetes Populations Demonstrates the Need for Diversity in Risk-Modeling. Sci Rep. 8(1):4529.
- Beam CA, Wasserfall C, Woodwyk A, Akers M, Rauch H, Blok T, Mason P, Vos D, Perry D, Brusko T, Peakman M, Atkinson M. 2020. Synchronization of the Normal Human Peripheral Immune System: A Comprehensive Circadian Systems Immunology Analysis. Sci Rep. 10(1):672. doi: 10.1038/s41598-019-56951-5

#### **Invited Reviews**

- Perry, D., A. Sang, Y. Yin, Y. Y. Zheng, and L. Morel. 2011. Murine models of systemic lupus erythematosus. J Biomed Biotechnol 2011: 271694.
- **Perry, D.**, A. Peck, W. Carcamo, L. Morel, and C. Nguyen. 2011. The Current Concept of TH17 Cells and Their Expanding Role in Systemic Lupus Erythematosus. Arthritis. 2011: 810649.
- Thompson, JA., **D.J. Perry**, and T.M. Brusko. 2012. Autologous regulatory T cells for the treatment of type 1 diabetes. Curr Diab Rep 2012 Oct;12(5):623-32.
- Jacobsen LM, Newby BN, **Perry DJ**, Posgai AL, Haller MJ, Brusko TM. 2018. Immune Mechanisms and Pathways Targeted in Type 1 Diabetes. Curr Diab Rep. 30;18(10):90. doi: 10.1007/s11892-018-1066-5.

### **RESEARCH SUPPORT**

#### **Ongoing Research Support**

SRA (PI: Wasserfall CH)4/1/19-3/31/20JDRF\$110,001A Composite Serological Risk Score to Predict Type 1 Diabetes Progression and ClinicalDiagnosisRole: Co-I; Contributions to experimental design

SRA (Co-PIs: Brusko TM, Perry DJ, Cerosaletti K, Linsley P)6/1/19-5/31/22JDRF, 3-SRA-2019-793-S-B\$300,000Single cell sequencing for islet-reactive T cell clonotype and transcript signaturesRole: Experimental design; Lead drafting and submission of proposal

## **Completed Research Support**

Research Subaward (PI: Gitelman, UCSF; Subrecipient PI: Brusko TM) 3/1/19-7/31/19 JDRF \$16.508 Mechanistic Studies of Adult Participants in the phase 2 new onset T1DM imatinib trial Role: Subrecipient Co-PI; Experimental design; contributions to drafting subaward proposal Postdoctoral Fellowship (PI: **Perrv DJ**) 5/1/16-4/30/18 JDRF, Award Number 2-PDF-2016-207-A-N Altered immunometabolic associations with type 1 diabetes clinical status and genetic risk Role: Experimental design, drafting and submission of proposal; execution of experiments; data analysis; project updates Biomarker Discovery (PI: Chen J) 9/1/12-8/31/15 JDRF, Award Number 17-2012-595 *Lymphocyte mitochondrial dysfunction in Type 1 diabetes* Role: Key Personnel; Experimental design, drafting of proposal Experimental Pathology Innovative Grant (PI: **Perry DJ**) 10/01/13-4/30/14 University of Florida, Department of Pathology, Immunology, and Experimental Medicine Metabolic profiling of Human PBMC subsets. Role: Experimental design, drafting and submission of proposal; execution of experiments; data analysis; project updates Innovative Grant (PI: Chen J) 7/1/12-6/30/14 American Diabetes Association *Role of T cell mitochondrial function in type 1 diabetes.* Role: Key Personnel; Experimental design; drafting of proposal Experimental Pathology Innovative Grant (PI: **Perry DJ**) 10/01/11-4/30/12 University of Florida, Department of Pathology, Immunology, and Experimental Medicine Functional consequences of PTPN2 and PTPN22 modulation in human primary T cells. Role: Experimental design, drafting and submission of proposal; execution of experiments; data analysis; project updates **Other Contributions to Funding Mechanisms** 

Interventional/Clinical Trial (PIs: Malek TR, Pugliese A, Skyler JS)08/15/17 - 07/31/22NIAID, Award Number U01AI125057Administration of Low-dose IL-2 in Established T1DRole: Contributions to experimental design and drafting of proposal

Innovative Grant (PI: Beam CA) JDRF, Award Number 1-INO-2017-458-A-N 6/1/2017-5/31/2018

Circadian Rhythm of Innate and Adaptive Immunity in T1D Role: Contributions to experimental design