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## **CURRICULUM VITAE**

### **Education and Training**

1999 - 2003 B. A. (Chemistry), Pomona College, Claremont, CA (2003)  
Thesis: *Synthesis of a Series of 2,4-diamino-5-(4'-X-anilinomethyl) pyrimidines: Potential Inhibitors of Dihydrofolate Reductase.*

2002 Humanities student, Jesus College, Cambridge University, Cambridge, U.K.

2003 - 2007 M. D., Keck School of Medicine, University of Southern California, Los Angeles, CA. (2007)

2007 - 2010 Resident in Internal Medicine, University of California San Diego, San Diego, CA

2010 - 2011 Chief Medical Resident in Internal Medicine, University of California San Diego, San Diego, CA

2011 - 2014 Clinical Fellow in Allergy and Immunology, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD

### **Board Certification**

2010 Diplomate, American Board of Internal Medicine, Participates in MOC

2013 Diplomate, American Board of Allergy and Immunology, Participates in MOC

### **Chronology of Employment, NIH**

2013 - present **Associate Investigator**  
Natural History of Atopic Dermatitis and Other Genetic/Congenital Diseases  
Associated with Allergic Inflammation: 10-I-0148  
Screening Protocol for Genetic Diseases of Allergic Inflammation and Mast Cell  
Homeostasis and Activation: 09-I-0086  
Clinical and Basic Investigations into Known and Suspected Congenital Disorders  
Glycosylation: 14-HG-0071  
ClinSeq: A Large-Scale Medical Sequencing Clinical Research Pilot Study: 07-  
HG-0002

2014 - present **Assistant Clinical Investigator**  
Genetics and Pathogenesis of Allergy Section, LAD/NIAID

2015 - present **Principle Investigator**  
Immunologic effects of supplemental monosaccharide and nucleoside derivatives  
in patients with inherited disorders of glycosylation: 15-I-0159

### **Honors & Other Special Scientific Recognition**

2003 - 2004 Sigma Xi. Scientific Research Society. Nominated Member.

2005 - 2007 Dean's Recognition. Year III/IV. USC, Keck School of Medicine

2006 - 2007 Distinguished Scholar. USC, Keck School of Medicine.

2008 - 2009 Kaiser Excellence in Teaching Award Nominee. UCSD School of Medicine

2012 Domestic In-training Travel Award. AAAAI.

2013 - present Associate Faculty Member. Faculty of 1000.

2013 Domestic In-training Travel Award. AAAAI.

2014 Primary Immunodeficiency Summer School. CIS.

2016 NIAID Merit Award

## **Professional Contributions**

### **National Institutes of Health**

- 2013 - present Allergy/Immunology Fellowship Program Evaluation Committee
- 2014 - present Consult Attending. Allergy/Immunology Service. NIH Clinical Center
- 2015 - present Allergy/Immunology Fellowship Program Selection Committee
- 2015 Chronic Fatigue Syndrome Working Group
- 2015 - present Systemic Exertion Intolerance Disease (SEID)/Myalgic Encephalomyelitis (ME)/Chronic Fatigue Syndrome (CFS) committee

### **American Academy of Allergy and Immunology**

- 2011 - 2014 Fellow-In-Training Member
- 2014 - present Member
- 2011 - 2014 AAAAI / Fellows-in-Training Committee
- 2011 - present Genetics, Molecular Biology, & Epidemiology Committee
- 2014 - present New Allergist/Immunologist Assembly Committee
- 2016 - present Altered Immune Response Committee

## **Invited Lectures**

### **2010**

Lung Function in Asthma: Examination of the Role of Inflammation and Remodeling. UCSD, Dept of Internal Medicine Grand Rounds. La Jolla, CA, June 9, 2010.

### **2012**

*GATA2* Haploinsufficiency: MonoMac and myelodysplasia. NIAID Grand Rounds. Bethesda, MD, January 20, 2012.

Gene Therapy in *ADA*-SCID. NIAID Grand Rounds. Bethesda, MD, January 27, 2012.

### **2014**

Familial. Flexible. Flushing. A New Genetic Disease of Allergy? NIAID Grand Rounds. Bethesda, MD, August 8, 2014.

### **2015**

Nothing to Sneeze at: The Emerging Role of Sugars in Allergic Syndromes. 6th Annual Rare Disease Day Symposium: Treating Disease with Sugars. Sanford Burnham Research Institute. La Jolla, CA, February 27, 2015.

Immune Modulation by Sugars: Lessons from *PGM3* deficiency. Development and Disease: NIH / FDA Glycosciences Day. Bethesda, MD, May 28, 2015.

First Dose Anaphylaxis to Omalizumab in *PGM3* Deficiency. NIAID Grand Rounds. Bethesda, MD, August 21, 2015.

Unusual Urticarial Variants. 3<sup>rd</sup> Annual Genetic, Rare and Immune Disorders Symposium. LDTRC. Fairfax, VA, November 15, 2015.

*PGM3* deficiency Bedside to Bench and Back: a Clinicopathologic Case Discussion. Colonel Ogden Bruton Primary Immune Deficiency Symposium. WRNMMC. Bethesda, MD, November 17, 2015.

### **2016**

Genetic "Control" of Basal Serum Tryptase. The 55<sup>th</sup> Annual Swineford Allergy Conference. University of Virginia. Charlottesville, VA, April 1, 2016.

Hiding in Plain Sight: Hereditary  $\alpha$  Trypsinemia. LCMB Seminar Series. National Institutes of Health. Bethesda, MD, May 25, 2016.

Demystifying an NIH ERBIN Legend: A Unique Case of Hereditary Atopy and Connective Tissue Abnormalities. NIAID Grand Rounds. Bethesda, MD, July 22, 2016.

Sugar Metabolism and Allergic Disease. Clinical Center Grand Rounds. National Institutes of Health. Bethesda, MD, November 16, 2016.

2017

Glycoproteins, Allergy, and Other Diseases. Demystifying Medicine. National Institutes of Health. Bethesda, MD, Anticipated January 31, 2017.

#### **BIBLIOGRAPHY (Selected from 16 Peer-Reviewed Research Papers and 2 Reviews)**

1. Tholpady A, Chiose I, **Lyons JJ**, *et al.* Systemic Hypersensitivity Reaction Mimicking Anaphylaxis after First Filgrastim Administration in a Healthy Donor. *Transfusion*. 2013 May;53(5):1146-7. doi: 10.1111/trf.12149.
2. **Lyons JJ**, Sun G, Stone KD, *et al.* Mendelian inheritance of elevated serum tryptase associated with atopy and connective tissue abnormalities. *J Allergy Clin Immunol*. 2014 May;133(5):1471-4. doi: 10.1016/j.jaci.2013.11.039. Epub 2014 Jan 25.
3. Zhang Y, Yu X, Ichikawa M, **Lyons JJ**, *et al.* Autosomal recessive *PGM3* mutations link glycosylation defects to atopy, immune deficiency, autoimmunity, and neurocognitive impairment. *J Allergy Clin Immunol*. 2014 May;133(5):1400-9, 1409.e1-5. doi: 10.1016/j.jaci.2014.02.013. Epub 2014 Feb 28..
4. Milner JD, Vogel TP, Forbes L, Ma CA, Stray-Pedersen A, Niemela J, **Lyons JJ**, *et al.* Early-onset lymphoproliferation and autoimmunity caused by germline *STAT3* mutations. *Blood*. 2015 Jan 22;125(4):591-9. doi: 10.1182/blood-2014-09-602763. Epub 2014 Oct 30.
5. Aderibigbe O, Priel DL, Lee CR, Ombrello MJ, Prajapati VH, Liang MG, **Lyons JJ**, *et al.* Distinct Cutaneous Manifestations and Cold-Induced Leukocyte Activation Associated With *PLCG2* Mutations. *JAMA Dermatol*. 2015 Jun;151(6):627-34. doi: 10.1001/jamadermatol.2014.5641.
6. Happel C, Stone KD, Freeman AF, Shah N, Wang A, **Lyons JJ**, *et al.* Food allergies can persist after myeloablative hematopoietic stem cell transplantation in dedicator of cytokinesis 8-deficient patients. *J Allergy Clin Immunol*. 2016 Jun;137(6):1895-1898.e5. doi: 10.1016/j.jaci.2015.11.017. Epub 2016 Jan 28.
7. Lawrence MG, Leiding JW, **Lyons JJ**, *et al.* GATA3 haploinsufficiency does not block allergic sensitization or atopic disease. *J Allergy Clin Immunol*. 2016 Feb;137(2):627-629.e2. doi: 10.1016/j.jaci.2015.06.041. Epub 2015 Aug 15.
8. Hox V, O'Connell MP, **Lyons JJ**, *et al.* Diminution of signal transducer and activator of transcription 3 signaling inhibits vascular permeability and anaphylaxis. *J Allergy Clin Immunol*. 2016 Jul;138(1):187-99. doi: 10.1016/j.jaci.2015.11.024. Epub 2016 Mar 2.
9. Lexmond WS\*, Goettel JA\*, **Lyons JJ\***, *et al.* Foxp3+ Tregs require WASP to restrain Th2-mediated food allergy. *J Clin Invest*. 2016 Oct 3;126(10):4030-4044. doi: 10.1172/JCI85129. Epub 2016 Sep 19.
10. **Lyons JJ**, Yu X, Hughes JD, *et al.* Elevated basal serum typtase identifies a multisystem disorder associated with increased *T<sub>H</sub>17* copy number. *Nat Genet*. 2016 Dec;48(12):1564-1569. doi: 10.1038/ng.3696. Epub 2016 Oct 17.
11. Carlson RJ, Bond MR, Hutchins S, Brown Y, Wolfe LA, Lam C, Nelson C, DiMaggio T, Jones N, Rosenzweig SD, Stone KD, Freeman AF, Holland SM, Hanover JA, Milner JD, **Lyons JJ**. Detection of phosphoglucomutase-3 (*PGM3*) deficiency by lectin-based flow cytometry. *J Allergy Clin Immunol*. 2017 Jan 4. pii: S0091-6749(16)32491-5. doi: 10.1016/j.jaci.2016.12.951. [Epub ahead of print]
12. **Lyons JJ**, Liu Y, Ma CA, *et al.* ERBIN deficiency links STAT3 and TGF- $\beta$  pathway defects with atopy in humans. *J Exp Med*. 2017 Jan 26. pii: jem.20161435. doi: 10.1084/jem.20161435. [Epub ahead of print]