

# Emma H. D'Agostino

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ehdagostino@gmail.com

## EMPLOYMENT

### SciMentum, Inc. +

2020-present

Medical Writer

- Develop accurate and visually appealing content in therapeutic areas including infectious disease and cancer
- Create a variety of deliverables encompassing scientific platforms, unbranded commercial, competitive intelligence, brand strategy

## EDUCATION

### Emory University, Atlanta, GA &

2016-2020

Ph.D. Biochemistry

National Science Foundation Graduate Research Fellow

George W. Woodruff Fellow

Advisor: Eric Ortlund, Ph.D.

- Small molecule modulation and structure-function characterization of nuclear receptors
- Developed first robust direct binding assay for phospholipid-sensing NR5A nuclear receptors

### The University of North Carolina at Chapel Hill, Chapel Hill, NC &

2012-2016

B.S Biology, with Honors; B.A. Chemistry; with Highest Distinction

Colonel Robinson Merit Scholar

Advisor: Matthew R. Redinbo, Ph.D.

- Alleviating drug toxicity by inhibiting a bacterial enzyme,  $\beta$ -glucuronidase, of the gut microbiome
- Built first catalog of bacterial  $\beta$ -glucuronidases in the gut using the Human Microbiome Project (HMP)
- Cloned and characterized seven novel  $\beta$ -glucuronidase enzymes

## PATIENT ADVOCACY

### Patient and Family Experience of Care Survey Consultant &

November 2018

Cystic Fibrosis Foundation (University of Wisconsin)

- Evaluated qualitative analysis of patient responses to survey inquiring about care experience at cystic fibrosis care centers nationally

### Antimicrobial Drugs Advisory Committee &

August 2018

Consumer Representative

U.S. Food and Drug Safety Administration

- Represent consumer perspective on issues before the advisory committee
- Facilitate dialogue with advisory committee about scientific issues that affect consumers

### Pulmonary-Allergy Drugs Advisory Committee &

May 2018-present

Consumer Representative

U.S. Food and Drug Safety Administration

- Represent consumer perspective on issues before the advisory committee
- Facilitate dialogue with advisory committee about scientific issues that affect consumers

### Data and Safety Monitoring Board &

December 2017-present

Patient Representative !

Cystic Fibrosis Foundation Therapeutics (national) !

- Independent committee made of physicians, scientists, statisticians and community members to protect patient safety in CFFT-sponsored clinical trials
- Analyze safety of proposed clinical trial protocols and monitor patient safety while trials are ongoing

### Research Summary Review Committee &

January 2017-present

Co-chair !

Cystic Fibrosis Foundation (national) !

- Lead project to obtain lay summaries for CF Research News, a publicly accessible database of cystic fibrosis journal article lay summaries
- Recruit editors from the CF community to ensure that summaries written by CFF-sponsored researchers are understandable to a lay audience, and serve as editor-in-chief for final approval of summaries

**Patient Research Advocate &**

**January 2016-June 2017**

Cystic Fibrosis Foundation (national)

- Served as a patient voice for research project using CF Patient Registry data to analyze transfer from pediatric to adult care
- Provided feedback during research project and contributed to manuscript published in December 2017

**Patient and Family Research Advisory Committee &  
Member !**

**April 2015-June 2017**

Cystic Fibrosis Foundation (national) !

- Committee composed of 15 cystic fibrosis patients and family members
- Created Insight CF Registry Research Project, a community-driven research initiative
- Engaged the greater cystic fibrosis community to collect research questions
- Project presented at the North American Cystic Fibrosis Conference in October 2017

## PUBLICATIONS

Mays SG\*, D'Agostino EH\*, Flynn AR, Wang H, Wang G, Okafor CD, Liu X, Patel A, Millings EJ, Cato ML, Cornelison JC, Donaldson HN, Calvert JW, Houtman R, Jui NT, Moore DD, Ortlund EA. Tapping Into a Phospholipid-LRH-1 Signaling Axis Yields a Powerful Anti-Inflammatory Agent with *In Vivo* Activity. *bioRxiv*. 2020 Sep 1; doi: <https://doi.org/10.1101/2020.09.01.278291>.

Cornelison JL\*, Cato ML\*, Johnson AM, D'Agostino EH, Melchers D, Patel AB, Mays SG, Houtman R, Ortlund EA, Jui NT. Development of a New Class of Liver Receptor Homolog-1 (LRH-1) Agonist by Photoredox Conjugate Addition. *Bioorg. Med. Chem. Lett.* 2020 Aug 15; 30 (16): 127293.

Mays SG, Stec J, Liu X, **D'Agostino EH**, Whitby RJ, Ortlund EA. Enantiomer-specific activities of an LRH-1 and SF-1 dual agonist. *Scientific Reports*. 2020 Dec 17; 10:22279.

**D'Agostino EH**, Cornelison JL, Mays SG, Flynn AR, Patel A, Jui NT, Ortlund EA. Development of a Robust Direct Binding Assay for Phospholipid-Sensing Human NR5A Nuclear Receptors. *ACS Med Chem Lett.* 2019 Nov 21; 11(3):365-370.

Sawicki GS, Ostrenga J, Petren K, Fink AK, **D'Agostino E**, Strassle C, Schecter MS, Rosenfeld M. Risk Factors for Gaps in Care during Transfer from Pediatric to Adult Cystic Fibrosis Programs in the United States. *Ann Am Thorac Soc.* 2018 Feb; 15(2):234-240.

Pollet RM, **D'Agostino EH**, Walton WG, Xu Y, Little MS, Biernat KA, Pellock SJ, Patterson LM, Creekmore BC, Isenberg HN, Bahethi RR, Bhatt AP, Liu J, Gharaibeh RZ, Redinbo MR. An Atlas of  $\beta$ -Glucuronidases in the Human Intestinal Microbiome. *Structure*. 2017 July 5; 25(7):967-977.

Weikum ER, Okafor CD, **D'Agostino EH**, Colucci JK, Ortlund EA. Structural Analysis of the Glucocorticoid Receptor Ligand-Binding Domain in Complex with Triamcinolone Acetonide and a Fragment of the Atypical Coregulator, Small Heterodimer Partner. *Mol. Pharm.* 2017 July 1; 92(1): 12-21.

## TALKS AND POSTERS

**Emory University**

Experimental Biology Conference - Poster !

American Society for Biochemistry and Molecular Biology (ASBMB)

**April 2019**

Development of a Robust Direct Binding Assay for Phospholipid-Sensing NR5A Nuclear Receptors

UAB-SERCAT Structural Biology Symposium – Poster **March 2019**  
Phospholipid Mimetic Agonists for Liver Receptor Homolog-1

DSAC Student Research Symposium- Short Talk **January 2019**  
Targeting LRH-1 with Phospholipid Mimetics  
1<sup>st</sup> Place – Oral Presentations

#### **Cystic Fibrosis Foundation**

Clinical Trial Innovation Summit – Oral Presentation **April 2020**  
Utilizing Patient Expertise in Clinical Trial Design. \*Canceled due to COVID-19.

Therapeutics Development Network Spring Meeting – Plenary Speaker **April 2018**  
The Therapeutics Development Network and the Role of Patients and Family Members

North American Cystic Fibrosis Conference – Poster **October 2017**  
Advancing Research that Matters Most to Patients & Families: Preliminary Findings from  
the Insight CF Registry Research Project

#### **University of North Carolina at Chapel Hill**

Keystone Symposium: Gut Microbiota, Metabolic Disorders and Beyond – Poster & Short Talk **April 2016**  
The Human GI Microbial GUSome, a Constellation of Drug Targets in the Microbiome

University of North Carolina John K. Koeppe Undergraduate Honors Research Symposium – Talk **April 2016**  
The Human GI Microbial GUSome, a Constellation of Drug Targets in the Microbiome

University of North Carolina Biology Undergraduate Research Symposium – Poster **November 2015**  
Characterization of Active Site Loop in Bacterial  $\beta$ -Glucuronidase

University of North Carolina Lineberger Comprehensive Cancer Center Retreat – Poster **September 2015**  
Cataloguing the Human GUSome

#### **LANGUAGES**

- French: limited working proficiency (ILR scale)
- Italian: limited working proficiency (ILR scale)
- Spanish: elementary proficiency (ILR scale)