

Emma H. D'Agostino

ehdagostino@gmail.com

EMPLOYMENT

BOLDSCIENCE

May 2023-present

Lead Medical Writer

- Lead content development and review for commercial and medical affairs in heart failure and rheumatology, including advisory boards, sales training, podcasts, videos, scientific symposia, brand strategy, competitive intelligence, and more

Virgo Health

2022-May 2023

Associate Scientific Director

- Lead medical affairs content development for a COVID-19 account, including advisory boards, infographics, scientific symposia, visual literature summaries, brand strategy

SciMentum, Inc.

2020-2022

Senior Medical Writer

- Develop accurate and visually appealing content in therapeutic areas including infectious disease and immunology
- Create a variety of deliverables encompassing advisory boards, 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, β -glucuronidase, of the gut microbiome
- Built first catalog of bacterial β -glucuronidases in the gut using the Human Microbiome Project (HMP)
- Cloned and characterized seven novel β -glucuronidase enzymes

PATIENT ADVOCACY

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

PUBLICATIONS

Cato ML*, **D'Agostino EH***, Spurlin RM, Flynn AR, Cornelison JC, Johnson AM, Fujita RA, Abraham SM, Jui NT, Ortlund EA. Comparison of Activity, Structure, and Dynamics of SF-1 and LRH-1 Complexed with Small Molecule Modulators. *J Biol Chem*. 2023 Aug; 299(8):104921.

Cato ML, Cornelison JC, Spurlin RM, Courouble VV, Patel AB, Flynn AR, Johnson AM, Okafor CD, Frank F, **D'Agostino EH**, Griffin PR, Jui NT, Ortlund EA. Differential modulation of nuclear receptor LRH-1 through targeting buried and surface regions of the binding pocket. *J Med Chem*. 2022, 65, 6888-6902.

Mays SG*, **D'Agostino EH***, Flynn AR, Huang X, Wang G, Liu X, Millings EJ, Okafor CD, Patel A, Cato ML, Cornelison JC, Melchers D, Houtman R, Moore DD, Calvert JW, Jui NT, Ortlund EA. A phospholipid mimetic targeting LRH-1 ameliorates colitis. *Cell Chem Bio*. Accepted 2022.

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, Schechter 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, Gharabeh RZ, Redinbo MR. An Atlas of β -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 April 2019
American Society for Biochemistry and Molecular Biology (ASBMB)
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

1st 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