# **MOLLIE ENRIGHT**

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(508)-951-6907 Curriculum Vitae

### **EDUCATION**

University of Toledo – Toledo, OH

Expected 2023

Doctor of Philosophy, Chemistry

Gordon College – Wenham, MA

2015

Bachelor of Science: Chemistry, Magna Cum Laude

Honors Thesis: "Greening an antioxidant analysis: a new method of lycopene extraction using

2-methyltetrahydrofuran"

**University College Dublin** – Dublin, Ireland

Spring 2014

Study abroad focused on agricultural chemistry

#### **PROFESSIONAL EXPERIENCE**

Program Manager, Beyond Benign, Inc., Wilmington, MA

June 2015-present

- Manages all K-12 program and projects at green chemistry education non-profit
- Contributes to writing and training educators in science curriculum for elementary, middle, and high school science content

## Undergraduate Research in Green Chemistry, Gordon College

Fall 2013-May 2015

Research Advisor: Jennifer Noseworthy, Assistant Professor, Department of Biology

- Investigated alternative method of lycopene extraction from tomato fruit using less hazardous solvents while generating less waste
- Compared methods of extraction by HPLC and UV-Vis spectroscopy

## **Undergraduate Research in Computational Chemistry**, Gordon College

Fall 2014-Spring 2015

Research Advisor: <u>Mike Paul, Associate Professor</u>, Department of Chemistry Consulting Advisor: A. Daniel Jones, Professor, Michigan State University

- Optimized model ionization of acylsugars occurring within MS via CID using Gaussian and MacMolPlt

Research Associate, PlantGenomics @ MSU REU, Michigan State University

Summer 2014

Research Advisor: A. Daniel Jones, Professor, Department of Chemistry

- Isolated metabolites from Petunia axillaris using solid phase extraction/semi-preparative HPLC
- Elucidated structures using UHPLC/TOF-MS and 1-D and 2-D NMR to evaluate commonalities between various acylsugars

## Laboratory Teaching Assistant, Gordon College

Spring 2012-Spring 2015

Department of Chemistry

- Organized and delegated all jobs related to General Chemistry laboratory preparation
- Tutored students in general and organic chemistry labs in regard to technique and conceptual understanding

## **HONORS AND AWARDS**

NSF Student Travel Scholarship to attend 19<sup>th</sup> Green Chemistry & Engineering Conference Chemistry Teaching Assistant of the Year, Gordon College

June 2015 May 2015

### INSTITUTIONAL AND PROFESSIONAL SERVICE

**Graduate Student Liaison**, Beyond Benign, Inc.

Aug 2018-present

 Represent green chemistry education non-profit to students, faculty and other stakeholders through local, national and virtual events Organized and facilitated satellite location of Beyond Benign: Sustainable Innovations workshop at University
of Toledo as a part of the meeting's distance learning program

Symposium Organizer & Presider, 255<sup>th</sup>, 257<sup>th</sup>, 259<sup>th</sup> ACS National Meeting & Expo March 2018, 2019, 2020

- Co-organized undergraduate symposium with ACS Green Chemistry Institute: "Green chemistry student chapters: stories of success"

### Workshop Organizer & Presenter, ACS Green Chemistry & Engineering Conference

June 2017, 2018

- Organized and facilitated workshops for post-doc, graduate, and undergraduate students with team of faculty and other young professionals alongside ACS Green Chemistry Institute

#### Organizer, Tools for Integrating Green Chemistry in Your Classroom Virtual Conference

Feb 2018

 Co-organized virtual conference with the Chemical Education Xchange for high school and college educators using a combination of academic papers, videos and lesson plans

### Facilitator, Go Green to Go Gold Symposium, Wayne State University

Nov 2017

 Led hands-on workshop for multiple ACS student chapters and faculty advisors highlighting green chemistry outreach activities

#### Collaborator, ACS Global Innovation Imperative, Belém, Pará, Brazil

Nov 2016

 Developed plan of action alongside chemical educators from across Brazil, UK, and Oregon to bring green chemistry experiments to remote locations in Brazil

### Volunteer, BizNGO Chemical Footprint Conference

Dec 2015

 Supported general event facilitation at conference highlighting efforts in chemical footprint management by various brands

#### Green Chemistry Outreach Project, Bridgewater Middle School, MA

Fall 2012-Spring 2013

 Developed and facilitated workshops with team of three Gordon College students to introduce concepts of green chemistry to multiple groups of 100 8<sup>th</sup> grade students

#### **PUBLICATIONS**

"Profiling, isolation and structure elucidation of specialized acylsucrose metabolites accumulating in trichomes of Petunia species". Liu, X.; Enright, M.; Barry, C. S.; Jones, A. D. *Metabolomics* **2017**, *13* (7), 1–10.

"Greening an antioxidant analysis: a new method of lycopene extraction using 2-methyltetrahydrofuran". **Enright, M.** Honors thesis, Gordon College, May 2015.

## **SELECTED RESEARCH PRESENTATIONS**

"'Greener' sample preparation of lycopene from tomato (Lycopersiocn esculentum) for quantification by UV/Vis spectrophotometry and high performance liquid chromatography". **Enright, M.**, Noseworthy, J. <u>Poster</u> presented at Green Chemistry & Engineering Conference, Bethesda, MD, United States, July 14, 2015.

"Further defining acylsugar structural diversity within Petunia axillaris". **Enright, M.** <u>Poster</u> presented at 249th ACS National Meeting & Expo, Denver, CO, United States, March 22-26, 2015.

"Green extraction of lycopene from tomato (Lycopersicon esculentum) using 2-methyltetrahydrofuran". **Enright, M**, Noseworthy, J. <u>Oral presentation</u> at 249th ACS National Meeting & Expo, Denver, CO, United States, March 22-26, 2015.

"Effect of high tunnel use on lycopene content in "Brandywine" and "Jet Star" tomatoes (Lycopersicon esculentum Mill.)". **Enright, M.**, Noseworthy, J. <u>Poster</u> presented at 247th ACS National Meeting & Expo, Dallas, TX, United States, March 16-20, 2014.

## SELECTED PROFESSIONAL PRESENTATIONS

"Sustainable textiles: Threads that connect us all". **Enright, M.**, Anderson, K., Natoli, T. <u>Oral presentation</u> at 254<sup>th</sup> ACS National Meeting & Expo, Washington, DC, United States, August 20-24, 2017.

"Green chemistry lead teachers: Advancing K-12 chemical education". **Enright, M.**, Anderson, K., Natoli, T. <u>Oral presentation</u> at 21<sup>st</sup> Green Chemistry & Engineering Conference, Reston, VA, United States, June 12-14, 2017.

"Students driving the future of green chemistry through higher education and outreach". **Enright, M.**, McCarthy, A. <u>Oral presentation</u> at 21<sup>st</sup> Green Chemistry & Engineering Conference, Reston, VA, United States, June 12-14, 2017.

"Are mushrooms the new plastics?: Harnessing student design thinking using ecovative materials". **Enright, M.**, Anderson, K. <u>Oral presentation</u> at 253<sup>rd</sup> ACS National Meeting & Expo, San Francisco, CA, United States, April 2-6, 2017.

"Incorporating NGSS by utilizing green chemistry innovations in the classroom". **Enright, M.**, Anderson, K. <u>Oral presentation</u> at 251<sup>st</sup> ACS National Meeting & Expo, San Diego, CA, United States, March 13-17, 2016.

"Science of Service: Gordon College's student chapter of the American Chemical Society". Gray, D., Marshall, B., Walsh, L., Fjellstad, B., Andujar, D., Enright, M. Poster presented at 249th ACS National Meeting & Expo, Denver, CO, United States, March 22-26, 2015.

#### **LEADERSHIP ACTIVITIES**

Circular Plastics Economy Symposium, Andover, MA	November 2017
ACS Student Chapter Member, Gordon College	Aug 2011-May 2015
Student Ambassador, Gordon College	Aug 2014-May 2015
Outreach Team Coordinator, Windrush Farm & Gordon College	Jan 2012-Dec 2013
Eastern Region Co-Chair of Nominating Committee, National FFA Organization	Fall 2013
Massachusetts Representative, National Agriculture Day, Washington, DC	March 2012
National FFA State Presidents' Conference, Washington, DC	July 2011
National Leadership Conference for State FFA Officers, Oswegatchie, NY	June 2011
Building Leaders & Strong Teams of Officers (BLAST Off) Conference, Dighton, MA	May 2011
State President, Massachusetts FFA Association	March 2011-March 2012

## **MENTORING AND OUTREACH**

Green Chemistry Exhibit & Team Coordinator, USA Science & Engineering Festival	April 2016, 2018
Career Workshop Facilitator, Massachusetts FFA Association	March 2016, 2017
Green Chemistry Careers Presenter, Wilmington High School	Nov 2016
Judge of Prepared Public Speaking, Eastern Region Conference, National FFA Organization	Sept 2016
STEM Careers Panel Organizer, Girls, Inc. of Lynn	April 2016
Mentor of student interns, Beyond Benign, Inc.	Jan 2016-2018
Family Festival Volunteer Coordinator, Bioneers Conference	Oct 2015
Keynote Speaker at STEM Day, St. Christopher's School	March 2015
Tutor, La Vida Scholars	Fall 2013, 2014
Nominating Committee Coordinator, Massachusetts FFA Association	March 2013
Service Trip Participant, Educational Concerns for Hunger Organization (ECHO)	March 2013
Nominating Committee Member, Connecticut FFA Association	May 2012
Speaker, President's Retiring Address, 82 <sup>nd</sup> Massachusetts FFA Convention	March 2012
Leadership Workshop Facilitator, Massachusetts FFA Association	Winter 2011
Keynote Speaker at Annual Meeting, Massachusetts Farm Bureau	December 2011
Keynote Speaker at FFA Awards Banquet, Smith Vocational High School	May 2011
Speaker at Agriculture Day at the State House, Boston, MA	April 2011

## PROFESSIONAL SOCIETY MEMBERSHIPS

Network of Early-Career Sustainable Scientists & Engineers (NESSE), member	Summer 2015-present
American Chemical Society, member	Fall 2013-present
American Association of Chemistry Teachers, member	Spring 2016-2018