

GEORGE AUGUSTINE O'DOHERTY

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DATE OF BIRTH: August 28, 1966; Kilkenny, Ireland

EDUCATION: The Ohio State University, Columbus, Ohio

Ph.D., Chemistry, Sept. 1987 to Jan. 1993

Advisor: Professor Leo A. Paquette

Rensselaer Polytechnic Institute, Troy, New York

B.S., Chemistry, Sept. 1984 - June 1987

Advisor: Professor Alan R. Cutler

SCIENTIFIC EMPLOYMENT:

Full Professor Chemistry (Sept. 2010 – present)

Department of Chemistry, Northeastern University

Full Member (2010)

Mary Babb Randolph Cancer Center, West Virginia University

Associate Professor Chemistry (Aug. 2005 – Aug. 2010)

Department of Chemistry, West Virginia University

Assistant Professor Chemistry (Sept. 2002 – Aug. 2005)

Department of Chemistry, West Virginia University

Assistant Professor Chemistry (Sept. 1996 – 2002)

Department of Chemistry, University of Minnesota

I.C. Postdoctoral Scholar (Sept. 1995 – 1996)

Department of Chemistry, Imperial College, London

Advisor: Professor Anthony G. M. Barrett

NSF Postdoctoral Scholar (Jan. 1993 – Aug. 1995)

Department of Chemistry, Stanford University

Advisor: Professor Barry M. Trost

HONORS and AWARDS:

Horace S. Isbell Award from the ACS Carbohydrate Division (2009)

Eberly College of Arts and Science Outstanding Researcher Award (2007)

Woodburn Professor, Eberly College of Arts and Science (2006 & 2007)

WVU's Dept. of Chemistry Outstanding Professor (2006)

Shanghai Normal University "Honored Professor" (Dec. 2005, 2010-2012)

Arnold and Mabel Beckman Young Investigator (Sept. 1999 to Aug. 2002)
NSF Postdoctoral Fellowship (Jan. 1993 to Dec. 1994)
American Chemical Society (1987 to present)
American Society for Biochemistry and Molecular Biology (2012 to present)
Visiting Professor at Indian Institute of Technology-Bombay (2015-2019)

PUBLICATIONS (206): This section is divided into four sections:

Research Articles (**166**), Reviews/Book Chapters (**31**), Book Reviews (**3**), and Patents (**6**)

(‡ Co-First Authors, the order is alphabetical)

H-index = 55

Most Recent (2024-25):

165. “*Sugar Asymmetry: The evolution of de novo asymmetric syntheses of carbohydrates from hexoses to oligosaccharides.*” Hicks, I.;‡ Kim, S.;‡ Sridhar, A.;‡ O’Doherty, G. A. *Symmetry*, **2025**, 17, 99. DOI: 10.3390/sym17010099.
164. “*Exploration of the Fusidic Acid Structure Activity Space for Antibiotic activity*” Kang, Y.-S.;‡ Silva, S. C.;‡ Smith, K.;‡ Sumida, K.;‡ Wang, Y.;‡ Chiaraviglio, L.; Donthiri, R.R.; Aljahdali, A. Z. Kirby, J. E.; O’Doherty, G. A.. *Molecules*, **2025**, 30, 465. DOI: 10.3390/molecules30030465.
163. “*Structure-Activity Relationship and Evaluation Of Cytotoxic Effects Of Digitoxigenin Derivatives On Hela Cells*” Valadares, J. M. M.; Azalim-Neto, P.; Liu, X.; Carrozza, N. C.; O’Doherty, G. A.; Quintas, L. E. M.; Barbosa, L. A. *Journal of Membrane Biology*, **2025**. DOI: 10.1007/s00232-024-00334-z
162. “*Simplified Method for Kinetic and Thermodynamic Screening of Cardiotonic Steroids Through the K⁺-Dependent Phosphatase Activity of Na⁺/K⁺-ATPase with Chromogenic pNPP Substrate*” Azalim-Neto, P.; Noel, F.; Sliva, C. S.; Villar, J. A. F. P.; Barbosa, L.; O’Doherty, G. A. Quintas, L. E. M. *Molecular Pharmacology*, **2024**, 106, 225–239. DOI: 10.1124/molpharm.124.000934.
161. “*Exploring a de novo route to bradyrhizose and its diastereomers: synthesis and isomeric equilibrium of reducing bicyclic carbohydrates*” Cunha, V. L. S.; O’Doherty, G. A.; Lowary, T. L. *Chem. Eur. J.*, **2024**, 30, e202400886. DOI: 10.1002/chem.202400886.
160. “*Tailor made glycans*” Kim, S.; O’Doherty, G. A. *Nat. Rev. Chem.*, **2024**, 8, 298–299. DOI: 10.1038/s41570-024-00598-y.

LECTURESHIPS:

1. Pfizer Lecture, Kansas University, Lawrence, KS, May 5-7, 2010
2. Honored Professor, Shanghai Normal University, Shanghai, PRC, 2010-2014
3. Visiting Professor at Indian Institute of Technology-Bombay (2015-2018)
4. Graduate Programs of the CCO Campus of the Federal University of Sao Joao del Rei (2018)

Abstracts and Meeting Contributions: Presented lectures and/or posters at over 120 national and international meetings and have been invited to give lectures describing the group’s research at over 169 scientific institutions worldwide.

Research Grant Applications: The group is currently funded by NSF and NIH (~ \$2 M total costs).

TEACHING: Taught a variety of organic chemistry lecture and lab courses at NEU, WVU and UMin. Served as the research mentor to in excess of 3 visiting scientist, 16 postdoctoral associates, 51 graduate and 115 undergraduate students.