

JUNIOR GONZALES, PhD

Organic and Radioactive Chemistry
The Graduate Center, CUNY
365 Fifth Avenue
New York, NY 10016 USA

Voice: (646)-7504344
Lab: (212)-7725388
jgo0035@hunter.cuny.edu
jgonzales@gc.cuny.edu

EDUCATION

- 2011-2017 **Ph.D. in Chemistry**, The Graduate Center of The City University of New York, CUNY
- 2015-2016 **Certificate in Clinical Research**, Weill Cornell Medical College, USA
- 2008-2011 **B.A., Chemistry**, Hunter College, CUNY, USA
Thesis: Phytochemical and Pharmacological Analysis of *leonurus leonetis*
Parallel Research Project: Synthesis and 5-HT_{2A} Receptor Binding Profile of Novel (\pm)
Nantanine Analogs

PROFESSIONAL EXPERIENCE

- 2011-Present Supramolecular Photonics, Chemistry Graduate Researcher
Department of Chemistry of Hunter College-CUNY
Laboratory of Dr. Michael Drain
New York, New York
- 2010-2011 Medicinal Chemistry Research Assistant
Department of Chemistry of Hunter College-CUNY
Laboratory of Dr. Wayne Harding
New York, New York
- 2010 Crystallography Research Assistant
Center of Molecular Cardiology, College of Physicians and Surgeons
Columbia University, Laboratory of Dr. Filippo Mancia
New York, New York
- 2009 Biochemistry Research Assistant
Center of Molecular Cardiology, College of Physicians and Surgeons
Columbia University, Laboratory of Andrew Marks, MD
New York, New York
- 2008 DEP Research Assistant
Department of Environmental Protection (DEP)
Wards Island Wastewater Treatment Plant
Wards Island, New York
- 2006-2007 Analytical Chemistry Research Assistant
Queensborough Community College, Chemistry Department
Research with Dr. Paris Svoronos and Dr. Joseph Bertorelli
Bayside, New York

PROFESSIONAL APPOINTMENTS

2015-present	Adjunct Assistant Professor – Undergraduate Organic Chemistry I Department of Chemistry of Borough of Manhattan Community College (CUNY) New York, New York
08/2013	Adjunct Faculty (Lecturer) – Undergraduate Organic Chemistry I Department of Chemistry of Passaic County Community College Paterson, New Jersey
2012-present	Adjunct Assistant Professor, Introduction to Organic Chemistry Organic Chemistry I and II Laboratories Physical Chemistry (Substitute) Department of Chemistry of Hunter College New York, New York

FELLOWSHIPS, TRAINEESHIPS AND FUNDING

2015-2017	Clinical and Translational Science Center (CTSC) Fellowship (\$27000.00 per year)
2014-2015	NFS, Integrative Graduate Education & Research Traineeship–IGERT Traineeship (\$15000.00)
2012-2015	NIH, Research Initiative for Scientific Enhancement – RISE Fellowship (\$42000.00)
2012	Ford Fellowship (Applied) and Louis Stoke Fellowship (Applied and Interviewed)
2008-2010	NIH, Minority Access to Research Careers – MARC Fellowship (\$25000.00)
2006-2007	NIH, Research Initiative for Minority Students – RIMS Fellowship (\$2000.00)

AWARDS

2014	The Morgan Scholarship
2010	The Belle Vader Mascots Award for Undergraduate Research
2009	The ABRCMS Award for The Best Poster Presentation

BIBLIOGRAPHY

PEER-REVIEWED PUBLICATIONS

1. "New Aporphinoid 5-HT_{2A} and α_{1A} Antagonists via Structural Manipulations of Nantenine." Chaudhary, S.; Ponnala, S.; LeGendre, O.; **Gonzales, J. A.**; Navarro, H. A.; Harding, W. W. *Bioorg Med Chem* **2011**, 18, (15), 5562-75.
2. "Evaluation of structural effects on 5-HT_{2A} receptor antagonism by aporphines: identification of a new aporphine with 5-HT_{2A} antagonist activity." Ponnala, S.; **Gonzales, J. A.**; Kapadia, N.; Navarro, H. A.; Harding, W. W. *Bioorg Med Chem* **2014**, 10, (15), 5562-75.
3. "Facile synthesis of chlorin bioconjugates by a series of click reactions." **Gonzales, J.**, Bhupathiraju, N. V., Perea, W., Chu, H., Berisha, N., Bueno, V., Dodic, N., Rozenberg, J., Greenbaum, N. L., Drain, C. M., *Chem Commun (Camb)*, **2017**. **53**(26): p. 3773-3776.
4. "Divergent Synthesis of two New Chlorins under Thermal and Microwave Conditions." **Gonzales, J.**; Bhupathiraju, N. V. S. D. K., Man, W., Hart, D., Maranan, M., Drain, M. C. *Tet. Lett.* (**2017**, under preparation).
5. "Synthesis of chlorin-folic acid conjugates for PET imaging." **Gonzales, J.**; Bhupathiraju, N. V. S. D. K., Carney, B., Hart, D., Maranan, M., Drain, M. C. *Bioconjugate Chem.* (**2017**, under preparation).

PATENTS

Patent N° **62/251,828**

Chlorins and Phthalocyanines for Biological Applications

Nov 16, 2015

PROFESSIONAL PRESENTATIONS (TALKS)

01. **Gonzales, J. 2017.** Facile Synthesis of Chlorin Bioconjugates by a series of click reactions, Hunter College-Chemistry Department, (Thesis Defense Seminar), New York, NY, Mar. (2017)
02. **Gonzales, J. 2017.** Photosensitizer Chlorin Drug for Diagnostic and PDT Treatment of Dengue, Weill Cornell Medical College, (Research in progress Lunch Series), New York, NY, Feb. (2017)
03. **Gonzales, J. 2016.** Synthesis of Chlorin using microwaves for applications in nanomedicine, Borough of Manhattan Community College Seminar Day, New York, NY, Apr. (2016)
04. **Gonzales, J. 2015.** How to Read a Scientific Paper, Hunter College of The City University of New York, Talk to Undergraduates, New York, NY, Feb, (2015)
05. **Gonzales, J. 2014.** Chlorins for Diagnostic, Imaging and Therapy of Cancer, Graduate Center of The City University of New York, Seminar Day, New York, NY, Dec, (2014)

RESEARCH PRESENTATIONS

- Trnaslational Science 2017*, Association for Clinical and Translational Science. Washington, DC
"Synthesis of a NH-chlorin, NMe-chlorin and a chlorin dimer using a distinct ylide" **Apr. (2017)**
- Gordon Conferences, Salve Regina University, New Port, Rhode Island
"Divergent Synthesis of Chlorins with Distinct Azomethine Ylide Formation" **Jun. (2016)**
- 50th National ACS, Western Regional Meeting (WRM), Boston, Massachusetts
"Preparation of Chlorins for Biomedical Applications" **Aug. (2015)**
- CHI 14* (Cambridge Healthtech Institute Conference), San Diego, California
"Design and Synthesis of Soluble Chlorins for Detection, Imaging and target-therapy of Cancer " **Apr. (2014)**
- ABRCMS 10* (Annual Biomedical Research Conference for Minority Students), Charlotte, North Carolina
"Purification and Crystallization of Integral Membrane Proteins, the NYCOMPS project " **Nov. (2010)**
- 14th Annual Conference of The National Hispanic Medical Association*, Washington, DC
"Nitrosylation of Type 2 Ryanodine Receptor in Arrhythmia post- ischemia Reperfusion" **Mar. (2010)**
- ABRCMS 09* (Annual Biomedical Research Conference for Minority Students), Phoenix, Arizona
"The Role of Type 2 Ryanodine Receptor in Arrhythmia post- ischemia Reperfusion" **Nov. (2009)**
- 57th Undergraduate Research Symposium (URS) ACS, PACE University, New York
"Phytochemical Analysis of Rhytidophyllum Tomentosum and Leonurus Leonetis" **May (2009)**
- 42nd National ACS, Western Regional Meeting (WRM) Las Vegas, Nevada
"Ionization Constant of Carboxylic Acids using Low-Field NMR" **Sep. (2008)**
- 236th National ACS (American Chemical Society) Philadelphia, Pennsylvania
"Determination of the Ionization Constant of Carboxylic Acids with Freezing Point Measurements" **Aug. (2008)**

EXTRACURRICULAR ACTIVITIES:

- 2010-2016 MBRS Admission Committee Member
2008 Tutor for Minority Students at Borough of Manhattan Community College

REFERENCES:

Dr. Michael Drain (Hunter College, cdrain@hunter.cuny.edu)

Dr. Wayne Harding (Hunter College, wayne.harding@hunter.cuny.edu)

Andrew Marks, MD (Columbia University, arm42@columbia.edu)