

EXPERIENCE:

Present: Chemical Specialist, *Gardner Groff Greenwald & Villanueva, P.C.* Drafting patent applications with an emphasis on chemistry and biotechnology; prior art searching. Specific areas of expertise include liquid chromatography-mass spectrometry of biomolecules and nucleoside/nucleotide/nucleic acid chemistry.

EDUCATION:

Georgia Institute of Technology; Atlanta, GA: Ph.D. in Chemistry, 2012

- President's Fellowship
- Cherry Emerson Fellowship

University of Missouri – Kansas City; Kansas City, MO: B.S. in Biology and Chemistry, 2006

- Summa cum laude
- Dean's List

Harvard College; Cambridge, MA: B.A. in Government, 2000

- President, Undergraduate Chapter of Amnesty International
- Cum laude

PROFESSIONAL MEMBERSHIPS:

American Chemical Society
Georgia Bio

PUBLICATIONS:

Barks, H.L.; **Buckley, R.**; Grieves, G.A.; Di Mauro, E.; Hud, N.V.; and Orlando, T.M. 2010. "Guanine, adenine, and hypoxanthine production in UV-irradiated formamide solutions: relaxation of the requirements for prebiotic purine nucleobase formation," *ChemBioChem*, 11, 1240-1243.

Buckley, R.; Enekwa, C.D.; Williams, L.D.; and Hud, N.V. 2011. "Molecular recognition of Watson-Crick-like purine-purine base pairs," *ChemBioChem*, 12, 2155-2158.

Anumukonda, L.N.; Young, A.; Lynn, D.G.; **Buckley, R.**; Warrayat, A.; Graves, C.L.; Bean, H.D.; and Hud, N.V. 2011. "Adenine synthesis in a model prebiotic reaction: connecting origin of life chemistry with biology," *J. Chem. Ed.*, 88, 1698-1701.

PRESENTATIONS:

Buckley, R. and Hud, N.V. 2010. "Small molecule recognition of homopurine DNA duplexes (poster)," Joint Southeast and Southwest Regional Meeting of the American Chemical Society, New Orleans, LA.

Buckley, R. and Anumukonda, L.N. 2011. "Adenine synthesis in a model prebiotic reaction: connecting origin of life chemistry with biology (oral presentation and demonstration)," Georgia Science Teachers Association Annual Meeting, Atlanta, GA.

Buckley, R.; Pino, S.; Khanam, J.; Di Mauro, E.; and Orlando, T.M. 2012. "Synergetic effects of pyrite, UV irradiation, and atmospheric gases on the generation of nitrogen heterocycles from formamide solutions (poster)," AbSciCon, Atlanta, GA.