



Kathleen (Kelly) Rein, PhD

Assistant Professor, Chemistry (FIU)

NSF-NIEHS Oceans & Human Health Center Role: Co-PI Toxic HABs, Co-PI HAB Core

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Education

B.Sc.	(1981)	Chemistry, University of Central Florida
M. Sc.	(1983)	Industrial Chemistry, University of Central Florida
Ph. D.	(1991)	Organic Chemistry, University of Miami
Post Doc.	(1992 1994)	University of Miami, Rosenstiel School

Research Interests

Isolation and identification of secondary metabolites from marine microalgae. These include primarily cyanobacteria from both marine and freshwater environments and dinoflagellates from marine environments. Many of these compounds are toxic and human exposures represent a threat to public health. In addition, we are studying the biosynthesis of polyketide toxins at the genomic level. Synthesis of analogs of marine toxins.

Representative Publications

Purkerson-Parker, S. L.; Fieber, L. A.; Rein, K. S.; Podona, T.; Baden, D. G.; (2000) "Brevetoxin Derivatives that Inhibit Toxin Activity". Chem. Biol., 7, 385 –

393.

Berry, J. P.; Reece, K. S.; Rein, K. S.; Baden, D. G.; Haas, L. W.; Ribeiro, W. L.; Shields, J. D.; Snyder, R. V.; Vogelbein, W. K.; Gawley, R. E. (2002) "Are pfiesteria species toxicogenic? Evidence against production of ichthyotoxins by pfiesteria shumwayae." PNAS, 99 (17), 10970-10975.

Snyder, R. V., Gibbs, P. D. L., Palacios, A., Abiy, L., Dickey, R., Lopez, J. V., Rein, K. S., (2003) "Polyketide Synthase Genes from Marine Dinoflagellates". Mar. Biotech. 5 (1), 1-12.

Carcache, L. M.; Rodriguez, J.; Rein, K. S., (2003) "The Structural Basis for Kainoid Selectivity at AMPA Receptors Revealed by Low-Mode Docking Calculations" Bioorg. Med. Chem. 11, 551-559.

More Info: <http://www.fiu.edu/orgs/chemistry/Faculty.htm>
http://www.rsmas.miami.edu/groups/niehs/center/kathleen_rein_cv.htm

