

Ph.D. Research Opportunity in Marine Calcification and Global Ocean-Climate Change

The Ries Laboratory (<http://www.unc.edu/~jries/index.html>) in the Department of Marine Sciences at the University of North Carolina - Chapel Hill seeks a doctoral student interested in conducting NSF-funded research on the relationship between global ocean-climate change and marine calcification, to begin Fall 2011. Research will include field investigations of modern (e.g., coral reefs) and/or ancient (e.g., limestones) carbonate systems coupled with laboratory calcification experiments. This opportunity affords access to state-of-the-art analytical equipment, including LA-ICPMS for trace element analysis, XRD for mineralogical characterization, isotope mass spectrometry for $\delta^{34}\text{S}$, $\delta^{13}\text{C}$, and $\delta^{18}\text{O}$, and SEM with microprobe for micro-imaging and elemental mapping. In addition to completing coursework in the four core oceanographic disciplines - geological, chemical, biological, and physical oceanography – the selected doctoral student will receive in-depth training in carbonate geochemistry, carbonate sedimentology, biomineralization, global ocean-climate change, and paleoceanography, which will directly support his/her research objectives. The student will also have access to the Department's coastal laboratory in Morehead City, NC – the UNC Institute of Marine Science. Highly motivated and creative individuals with strong analytical skills are encouraged to apply. Complete application information is available at <http://marine.unc.edu/students/grad/>. Applications are due **January 1, 2011**. Please direct specific inquiries to Prof. Justin Ries at riesjustin@gmail.com.