

Lisa Mertens

PhD Thesis: Assessing the evolutionary and physiological resilience of southern African marine species

About my work: My MSc focused on the genetic structure of coastal organisms on South Africa's west coast. For the PhD, the research area will include the southern and part of the eastern coast as well. Looking again at a set of multiple intertidal organisms, I now investigate their evolutionary potential with the help of next generation sequencing technology (Illumina) and combine this with work on determining their physiological plasticity. South Africa is an ideal location to test ideas about local adaptation and resilience, due to its two current regimes which characterise living conditions at the coast from cool-temperate to warm-temperate to the sub-tropic/tropic. My species live in the rocky shore: sea urchin (*Parechinus angulosus*), crab (*Cyclograpsus punctatus*), limpet (*Scutellastra granularis*) and fish (*Clinus superciliosus*). Results will be available for integration into spatial management plans (marine protected areas).

If I am not busy with my own work, I am involved in tutoring in our Department in the BioExcel firstyear programme.

Supervisor: Prof Sophie von der Heyden

Co-supervisors: Prof Susana Clusella-Trullas, Prof. Rob Toonen

About me: I hold a BSc and MSc in Marine Biology from University of Bremen, Germany. I am fortunate to have worked on marine related issues in Israel (BSc thesis), South Africa (MSc thesis) and Italy (Food and Agriculture Organisation of the United Nations). In early 2015, I returned to Stellenbosch to start the work on my PhD project.

Further Interests: I am active in marine science communication and tweet about research and #SciComm at <http://twitter.com/LisaMertens88>

Moreover, I passionately follow international developments in marine policy, economy and conservation.

My own project started in 2012: <http://www.meeresbiologie-studieren.de>; <http://www.facebook.com/meeresbiologiestudieren>

Awards: 2016 - Best novice presentation, Marine and Coastal Educators (MCEN), Annual Conference 2015 - Finalist in Campus Video Competition, University of Stellenbosch (More at <http://bit.ly/2cklCpc>)

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Professional Societies: SANCOR - South African Network for Coastal and Oceanic Research DGM – German Society for Marine Research EMSEA – European Marine Science Educators Association