

## Rachel Collin- Biographical Sketch

### Professional Preparation:

Brown University	Providence, RI	Aquatic Biology	Sc.B. 1993
University of Washington	Seattle, WA	Zoology	M.Sc. 1996
University of Chicago	Chicago, IL	Evolutionary Biology	Ph.D. 2002

### Appointments:

2002-present Staff Scientist, Smithsonian Tropical Research Institute (STRI), Panama.  
2002-present Director, Bocas del Toro Research Station, STRI, Panama.  
2005-present Adjunct Professor, Department of Biology, McGill University, Canada  
2007-present Graduate Faculty, University of Louisiana at Lafayette, USA

### 10 Selected Publications

Collin, R and K.Y.K. Chan. **2016**. The sea urchin *Lytechinus variegatus* lives close to the upper thermal limit for early development in a tropical lagoon. *Ecology and Evolution*. 6(16): 5623-5634. [doi:10.1002/ece3.2317](https://doi.org/10.1002/ece3.2317)

Collin, R. and I. Ochoa **2016**. The influence of seasonal environmental variation on the reproduction of four tropical marine gastropods. *Marine Ecology Progress Series*. 555: 125-139. doi: 10.3354/meps11815.

Robertson, DR., and R. Collin. **2015**. Inter- and Intra-specific variation in egg size among reef fishes across the Isthmus of Panama. *Frontiers in Ecology and Evolution*. 2: 84. doi: 10.3389/fevo.2014.00084

Collin, R. **2013**. Phylogenetic patterns and phenotypic plasticity of molluscan sexual systems. *Integrative and Comparative Biology*. 53: 723-735. doi: 10.1093/icb/ict076

Collin, R. **2012**. Temperature-mediated trade-offs in the life histories of two slipper limpets (Gastropoda: Calyptraeidae) with planktotrophic development. *Biological Journal of the Linnean Society*. 106: 763-775.

Collin, R. **2012**. Non-traditional life history choices: What can “intermediates” tell us about evolutionary transitions between modes of invertebrate development? *Integrative and Comparative Biology*. 52: 128-137.

Collin, R. and M. Miglietta. **2008**. Reversing opinions on Dollo's Law. *Trends in Ecology and Evolution*. 23: 602-609.

Collin, R. **2006**. Sex ratio, life history invariants, and patterns of sex change in a family of protandrous gastropods. *Evolution*. 60: 735-745.

Collin, R. and Cipriani, R. **2003**. Dollo's Law and the re-evolution of shell coiling. *Proceedings of the Royal Society, Series B*. 270: 2551-2555.

Collin, R. **1995**. Sex, size, and position: A test of models predicting the size at sex change in the protandrous gastropod *Crepidula fornicata*. *American Naturalist*. 146(6): 815-831.

**Synergistic Activities:**

Organizer and founder of STRI's Training in Tropical Taxonomy program of international graduate-level short courses in taxonomy of tropical marine invertebrates. To date over 180 students from more than 25 countries have been trained.

Manager and main contributor of the Bocas del Toro Research Station (BRS) YouTube Channel, which illustrates the different marine habitats in the Bocas del Toro region and highlights research at the BRS and the CollinLab YouTube Channel which disseminates information about Panamanian invertebrates and their reproduction.

Curator and project administrator for several iNaturalist projects focused on the biodiversity of Bocas del Toro and marine invertebrates of both coasts of Panama.

Supervisor and mentor of over 30 undergraduate interns (2005-2014), 7 of whom have presented their research as posters at national conferences, and 11 of whom have co-authored published papers.

Editorial contributions: Subject editor for Marine Biology Research, Editorial board of Invertebrate Biology, and has reviewed 50+ manuscripts for more than 20 different journals in the last 5 years.