Catriona Munro

June 10, 2019

Position & Contact Information

Postdoctoral researcher, Huynh lab

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Education

| 2013 – 2018 | PhD Ecology and Evolutionary Biology, Brown University |
|-------------|---|
| | Advisor: Casey W. Dunn |
| 2012 – 2013 | MRes Ocean Science, University of Southampton |
| | Advisors: Sven Thatje, Chris Hauton |
| 2008 – 2011 | BSc Biology, First Class Honours, University College London |

Professional Appointments

| 10/2018- | Postdoctoral Researcher, Huynh lab, Collège de France |
|----------|---|
| present | |

Pre-prints

<u>Munro C</u>, Vue Z, Behringer RR, Dunn CW (2019). Morphology and development of the Portuguese man of war, *Physalia physalis*. bioRxiv pre-print: doi:10.1101/645465.

Peer-Reviewed Publications

Munro C, Siebert S, Zapata F, Howison M, Damian-Serrano A, Church SH, Goetz FE, Pugh PR, Haddock SHD, Dunn CW (2018) Improved phylogenetic resolution within Siphonophora (Cnidaria) with implications for trait evolution. Molecular Phylogenetics and Evolution. doi: 10.1016/j.ympev.2018.06.030, bioRxiv preprint: doi:10.1101/251116

Brown A, Thatje S, Oliphant A, <u>Munro C</u>, Smith KE (2018). Temperature adaptation in larval development of lithodine crabs from deep-water lineages. Journal of sea research. 142:167-173

Brown A, Thatje S, Oliphant A, <u>Munro C</u>, Smith KE (2018). Temperature effects on larval development in the lithodid crab *Lithodes maja*. Journal of Sea Research. 139:73-84

Dunn CW, Zapata F, <u>Munro C</u>, Siebert S, Hejnol A (2018). Pairwise comparisons are problematic when analyzing functional genomic data across species. Proceedings of the National Academy of Sciences. doi:10.1073/pnas.1707515115. bioRxiv preprint: doi:10.1101/107177

Dunn CW, Munro C (2016) Comparative genomics and the diversity of life. Zoologica Scripta. 45:5-13. doi:10.1111/zsc.12211

Munro C, Morris JP, Brown A, Hauton C, Thatje S (2015). The role of ontogeny in physiological tolerance: decreasing hydrostatic pressure tolerance with development in the northern stone crab Lithodes maja. Proceedings of the Royal Society of London B. 282(1809): 20150577 doi: 10.1098/rspb.2015.0577 Shank TM, Baker ET, Embley RW, Hammond S, Holden JF, White S, Walker SL, Calderon M, Herrera S, Lin TJ, Munro C, Heyl T, Stewart L, Malik M, Lobecker M, Potter J (2012) GALREX 2011: Exploration of the Deep-Water Galapagos Region. Oceanography 25 Suppl.: 50-51. URL: http://tos.org/oceanography/archive/25-1_supplement.pdf

Manuscripts in preparation

<u>Munro C</u>, Zapata F, Howison M, Haddock SHD, Dunn CW (in prep). Evolution of gene expression across species and tissues in Siphonophora. *PhD Dissertation Chapter*.

<u>Munro C</u>, Haddock SHD, Dunn CW (in prep). Molecular anatomy of siphonophores. *PhD Dissertation Chapter*.

Fellowships and Grants

| $May\ 2019-$ | Marie Sklodowska-Curie Individual Fellowship (proposal no. 841433 - JOLI) |
|--------------|---|
| May 2021 | €196,707.84 |
| June 2017- | NSF Doctoral Dissertation Improvement Grant (award no. 1701272) \$21,028 |
| May 2018 | |
| May-June | EMBRC-France funding (main PI: Casey Dunn) |
| 2017 | |
| April-May | EMBRC-France funding (main PI: Casey Dunn) |
| 2016 | |
| 2014 – 2015 | RI-EPSCoR Graduate Student Fellowship (full tuition and stipend) |

Academic Awards and Scholarships

| March 2016 | MBL Embryology Post-Course research \$1484 |
|-------------|--|
| May 2014 | Travel Award, Evolution of the First Nervous Systems II Meeting |
| 2012 – 2013 | Society for Underwater Technology, Educational Support Fund (full Masters' de- |
| | gree tuition) |
| 2011 | Dean's List, UCL |
| | Lilian Clarke Prize, UCL |
| 2008 – 2011 | Harold and Olga Fox Scholarship, UCL |
| 2009 | Darwin Prize, UCL |

Research Positions

| 2012 | Research Assistant Shank Lab, Woods Hole Oceanographic Institution |
|---------------------------|--|
| Summer | Summer Student Fellow, then Guest Student Shank Lab, Woods Hole |
| $2011\mathrm{-end}\ 2011$ | Oceanographic Institution |

Conference Presentations

†Oral, ‡Poster, presenting author

†Munro C, S Siebert, F Zapata , CW Dunn (2018) Siphonophore Differential Gene Expression Patterns Analyzed within a Phylogenetic Context. SICB Meeting, San Francisco CA

 $\dagger \ddagger \underline{\textbf{Munro C}},$ S Siebert, M Howison , F Zapata , CW Dunn (2016) Gene expression patterns in siphonophore zooids, Hydroidfest, Bodega CA

‡Munro C, S Siebert, M Howison, F Zapata, CW Dunn (2016) Exploring the evolution of functional specialization in siphonophores using RNAseq, SICB Meeting, Portland OR

†Munro C, GW Luther III, RA Lutz, C Vetriani, TS Moore, S Herrera, TM Shank (2012) Temporal and spatial patterns of in situ community structure using time-lapse camera systems at a vent field on the East Pacific Rise, 13th International Deep-Sea Biology Symposium, Wellington New Zealand

Teaching

Instructor, Marie Curie ITN "EvoCELL" Computational Biology short course (PhD level), Class preparation, coordination, and teaching. 3-14 June 2019

Guest Lecture & Lab, Plankton diversity, ISMA course Villefranche (Undergraduate level), 25 April 2019

Short project supervisor, Development of Marine Organisms Villefranche training course (Université Pierre et Marie Curie, Master's level), 11-15 March 2019

Graduate Teaching Assistant, Brown University

Invertebrate Zoology (Undergraduate level): Fall semester, 2014

Invertebrate Zoology (Undergraduate level): Fall semester, 2013

Guest Lecture, University of Rhode Island, BIO460 Pelagic Ecology, 6 August 2014

Mentoring

Fall 2015 - Nicola Malakooti, undergraduate

Scientific Expeditions

R/V Western Flyer, ROV Doc Ricketts, Gulf of California, Mexico, March 8-16, 2015. Chief scientist: Steven Haddock

R/V Western Flyer, ROV Doc Ricketts, Monterey Bay, U.S.A, September 16-22, 2014. Chief scientist: Steven Haddock

R/V Endeavor, North East Atlantic, U.S.A, August 13-18, 2014. Chief scientist: Brad Seibel

R/V Western Flyer, ROV Doc Ricketts, Monterey Bay, U.S.A, May 17-23, 2014. Chief scientist: Steven Haddock

R/V Western Flyer, ROV Doc Ricketts, Monterey Bay, U.S.A, November 19-24, 2013. Chief scientist: Steven Haddock

R/V Falkor, ROV Global Explorer MK3, Deep-Sea Coral Shakedown cruise, Gulf of Mexico U.S.A, August 26 - September 6, 2012. Chief scientist: Peter Etnoyer

M/V Holiday Chouest, ROV UHD 34, HC3 Leg 1 and 2. October 2-26, 2011. Gulf of Mexico, U.S.A. Chief scientists: Charles Fisher and Erik Cordes

Science Outreach

Volunteering

Feb 2016 – Feb 2018, Hennessy Elementary School, Brown Junior Researchers Program (After-school science class, 5th grade students)

Science Writing

Munro, C. (2015) A day in the life of a siphonophore lab. http://thenode.biologists.com/a-day-in-the-life-of-a-siphonophore-lab/lablife/

Munro, C., S. Herrera, T. Heyl Muric (2011) Exploring the Paramount Seamounts. http://oceanexplorer.noaa.gov/okeanos/explorations/ex1103/logs/july14/july14.html

Courses and Workshops

Jun 7- Jul 18 | MBL Embryology, Woods Hole MA 2015 |

Additional Skills

| Languages | English (native), Russian (conversational), French (basic) |
|-----------|--|
| Computing | Extensive experience with large datasets (RNAseq). R, shell scripting. Work in |
| | MacOS, Linux. (Bitbucket: cmunro, Github: cmunro) |
| Diving | AAUS Scientific Diver (active, #588470), SDI Rescue Diver, SSI Advanced Open |
| | Water Diver |