

# Catriona Munro

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CNRS Researcher · Laboratoire de Biologie du Développement de Villefranche-sur-mer  
181 Chemin du Lazaret · 06230 Villefranche-sur-mer · France

✉ [catriona.munro@imev-mer.fr](mailto:catriona.munro@imev-mer.fr) 🌐 [catrionamunro.science](https://catrionamunro.science) | *Updated:* Jan. 9, 2025

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## Education

PhD Ecology and Evolutionary Biology, Brown University, 2019

MRes Ocean Science, University of Southampton, 2013

BSc Biology, University College London, 2011

## Current position

October 2023 – CNRS Researcher (CRCN)  
LBDV – UMR7009. Institut de la Mer de Villefranche (IMEV)  
Research team: ‘Cnidarian Developmental Mechanisms’

## Previous positions

Oct 2018 – Sept 2023 Postdoctoral Researcher. Huynh lab, Collège de France

2017–2018 Ivy Exchange Scholar, Yale University

## Pre-prints

Mañko MK, **Munro C**, Leclère L. (2024) The evolution of an individual-like dispersive stage in colonial siphonophores. *bioRxiv*. doi: 10.1101/2024.07.15.603641

## Peer-Reviewed Publications

2023

Mañko MK, **Munro C**, Leclère L. (2023) Establishing bilateral symmetry in hydrozoan planula larvae, a review of siphonophore early development. *Integrative and Comparative Biology*. icad081, <https://doi.org/10.1093/icb/icad081>

**Munro C**, Cadis H, Pagnotta S, Houliston E, Huynh J.-R (2023). Conserved meiotic mechanisms in the cnidarian *Clytia hemisphaerica* revealed by *Spo11* knockout. *Science Advances*. 9:eadd2873. doi: 10.1126/sciadv.add2873

Church SH, **Munro C**, Dunn, CW, Extavour, CG (2023) The evolution of ovary-biased gene expression in Hawaiian *Drosophila*. *PLoS Genetics*. 19:1-24. doi: 10.1371/journal.pgen.1010607

2022

Houliston E, Leclère L, **Munro C**, Copley R & Momose T (2022). Past, present and future of *Clytia hemisphaerica* as a laboratory jellyfish. Eds: Goldstein B & Srivastava M. *Current Topics in Developmental Biology*. 147:121-151. doi: 10.1016/bs.ctdb.2021.12.014

**Munro C**, Zapata F, Howison M, Siebert S, Dunn CW (2022). Evolution of gene expression across species and specialized zooids in Siphonophora. *Molecular Biology and Evolution*. 39:msac027. doi: 10.1093/molbev/msac027

2020

Jessus C, **Munro C**, Houliston E (2020). Managing the Oocyte Meiotic Arrest — Lessons from Frogs and Jellyfish. *Cells*. 9:1150 doi: 10.3390/cells9051150

2019

**Munro C**, Vue Z, Behringer RR, Dunn CW (2019). Morphology and development of the Portuguese man of war, *Physalia physalis*. Scientific Reports. 9:15522 doi: 10.1038/s41598-019-51842-1

2018

**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. 127:823-833 doi: 10.1016/j.ympev.2018.06.030

Brown A, Thatje S, Oliphant A, **Munro C**, 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, **Munro C**, 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, **Munro C**, Siebert S, Hejnal 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.

2016

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

2015

**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

2012

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.

## Fellowships and Awards

2019 Marie Skłodowska-Curie Individual Fellowship (#841433) €196,707.84

2017 NSF Doctoral Dissertation Improvement Grant (#1701272) \$21,028

## Invited Talks

2023 “Siphonophore genomics, larval development and evolution”. SICB Symposium: Genomics of marine larval evolution and development. January 4, 2023

2022 “Meiotic mechanisms in the jellyfish *Clytia hemisphaerica*”. Stowers Institute for Medical Research. Wednesday Lecture Series. September 14, 2022

## Teaching Experience

**Marie Curie ITN Workshop, Instructor** Computational Biology short course (PhD level). Marie Curie ITN “EvoCELL”. 3-14 June 2019. Course materials: <https://github.com/cmunro/evocell>

**Brown University, Teaching Assistant** Invertebrate Zoology. Fall semester, 2014; Fall semester, 2013.

## **Training courses**

« Encadrement et développement des doctorants » (Supervision and development of doctoral students), Sorbonne Université (online), 25 and 26 Nov 2024

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

## **Mentoring**

October 2024– Sebastien Vaché, Sorbonne Université, PhD co-thesis supervisor

15 Jan 2024 — 12 July 2024 Sebastien Vaché, Sorbonne Université Master 2 internship

15 May 2022 – March 2023 Julie Uveira, Research assistant (Ingenieure Assistant)

1 Feb 2021 – 31 Jan 2022 Hugo Cadis, Research assistant (Ingenieure Assistant)

1 Feb - 17 June 2021 Lisa Rouressol, Sorbonne Université Master 2 internship

16 March - 15 May 2020 Bastien Salmon, Sorbonne Université Master 1 internship

Fall 2015 Nicola Malakooti, undergraduate senior thesis

Sorbonne Université, Development of Marine Organisms (Master's level). Short project supervisor: 13-19 December 2019; 11-15 March 2019.

## **Thesis committee**

September 2024 – Comité de Suivi Individuel (CSI), Amélie Rudler, Université de Perpignan (UMR 5244 IHPE, Team 2MAP)

## **Professional Service**

### **PEER REVIEW**

Publons review records: <http://www.webofscience.com/wos/author/record/AAP-8755-2020>

Molecular Ecology (1); Genome Biology and Evolution (2); iScience (2); Journal of Experimental Zoology (3)

### **TO COMMUNITY**

Declics, Career and Science discussions with high school students in Nice. Lycée Albert Calmette, 1 Dec 2022; Lycée du Parc Imperial, 14 Dec 2023; Lycée Albert Calmette, 6 Dec 2024.

Nuit européen des Chercheur.e.s: evening event open to the public involving discussions and scientific demonstrations. Université Côte d'Azur, Campus Valrose, 25 Sept 2023.

Fête de la Science, Villeneuve Loubet. Oct 2021, Institut de la Mer de Villefranche. Oct 2019.

Guest lectures & zoom lab demonstrations on meiosis and fertilization, University of São Paulo (Instructor: Federico Brown). Oct 2020.

Fact checking, Portuguese man of war biology, BBC Blue Planet II. 2017.

Hennessy Elementary School, Brown Junior Researchers Program (after school science class). Feb 2016 – Feb 2018.