

Tommy Norin – Short CV

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ORCID

0000-0003-4323-7254

Degrees

- 2014 **PhD in biology** (fish ecophysiology) | Aarhus University, Denmark
Thesis title: *Intraspecific variation in metabolic rates of fishes: causes, consequences and consistency*
- 2011 **MSc in biology** | Aarhus University, Denmark
- 2007 **BSc in biology** | Aarhus University, Denmark

Positions

- 2021 – **Senior Researcher** | DTU Aqua, Denmark
- 2018 – 2021 **Postdoc** | DTU Aqua, Denmark
- 2015 – 2018 **Postdoc** | University of Glasgow, Scotland
- 2014 – 2015 **Postdoc** | Memorial University of Newfoundland, Canada

Research area

I am an animal ecological physiologist working with aquatic ectotherms, primarily fish but also marine invertebrates. My experimental and hypothesis-driven research is centred around animal energetics and metabolism. I focus on understanding the functional, behavioural, ecological, and evolutionary consequences of variation in whole-animal metabolic rate, including impacts on metabolic rate from environmental and climate change. My primary focus is on variation in metabolic rate among individuals within species, as this among-individual variation is what natural selection acts on. I work on metabolic rate because it is a fundamental physiological trait of all organisms that represents their cost of living, as metabolic rate sets the pace with which food and oxygen need to be obtained from the environment to stay alive, grow, and function.

Distinctions and awards

- 2024 **President's Medal** | Society for Experimental Biology
- 2022 **Scientist with Impact** | Society for Experimental Biology
- 2021 **Sapere Aude Research Leader** | Independent Research Fund Denmark
- 2015 **Sapere Aude Research Talent** | Independent Research Fund Denmark

Memberships of scientific committees (last 5 years)

- 2019 – 2023 **Trsutee (council member)** | Society for Experimental Biology
- 2019 – 2021 **Member** | ICES Working Group on Introduction and Transfers of Marine Organisms

Publications

Type of publication:	Number
Web of Science publications:	43
Citations:	2425
<i>h</i> -index:	24
Book chapters:	2
Reports:	1

International conferences (last 5 years)

Type of participation:	Number
Contributions as first author:	7
Invited:	7
Organizing role:	3

Evaluation tasks and reviews (last 5 years)

- Grant reviewer** | European Research Council Starting Grant
- Journal peer-reviewer** | Various journals, ~10 manuscripts per year

Educational tasks at academical level (last 5 years)

- 2026 – **BSc course developer and responsible** | Experimental Aquatic Bioscience ([25109](#)), DTU Aqua
 2025 – **PhD course responsible** | Early Career Aquatic Seminar ([25833](#), [25834](#), [25835](#)), DTU Aqua
 2024 **MSc course teacher + responsible for fish part** | Marine Biology ([NBIK21001U](#)), UCPH
 2024 **MSc course teacher + responsible for fish part** | Experimental Marine Biology ([NBIK21002U](#)), UCPH

External examination (censor):	Number and type	Place
Theses and defenses:	1 PhD (Part A), 4 MSc, 4 BSc	AU, UCPH
Courses:	2 MSc	AU

Supervision (ongoing or finished in the last 5 years)

	Principal/main supervisor	Co-supervisor
Other (MSc etc.):	7	
PhD:	1	
Postdoc:	1	

Collaboration with other stakeholders (within last 5 years)

- 2024 **Public lecture** | Natural History Association of Northern Zealand, Denmark
 2023 **Interview (website)** | Society for Experimental Biology
 2023 **Interview (radio and podcast)** | 'Vildt Naturligt', Danish Broadcasting Corporation, Denmark
 2022 **Public lecture × 3** | Folkeuniversitet, Denmark (Kolding, Odense, København)

Grants (competitive) (ongoing or finished within last 5 years)

- 2022 – 2026 **Sapere Aude Starting Grant** | Independent Research Fund Denmark €830k
 2021 – 2023 **Villum Experiment** | Villum Foundation €268k

Selected publications

- 2025 Rosén A, Andreassen A, Storm Z, Raqbi S, Moesby A, Exsteen J, Beldade R, Mills S & **Norin T** (2025) Co-variation and trade-offs in ontogenetic scaling of growth and metabolic rates. *Authorea*, 11 March 2025. [Link](#)
- 2023 Pinti J, DeVries T, **Norin T**, Serra-Pompei C, Proud R, Siegel DA, Kiørboe T, Petrik CM, Andersen KH, Brierley AS & Visser AW (2023) Model estimates of metazoans' contributions to the biological carbon pump. *Biogeosciences* 20, 997-1009. [Link](#)
- 2023 Brandl SJ, Lefcheck JS, Bates AE, Rasher DB & **Norin T** (2023) Can metabolic traits explain animal community assembly and functioning? *Biological Reviews* 98, 1-18. [Link](#)
- 2022 **Norin T** (2022) Growth and mortality as causes of variation in metabolic scaling among taxa and taxonomic levels. *Integrative and Comparative Biology* 62, 1448-1459. [Link](#)
- 2022 Blewett TA, Binning SA, Weinrauch AM, Ivy CM, Rossi GS, Borowiec BG, Lau G, Overduin S, Aragao I & **Norin T** (2022) Physiological and behavioural strategies of aquatic animals living in fluctuating environments. *Journal of Experimental Biology* 225, jeb242503. [Link](#)
- 2019 **Norin T** & Metcalfe NB (2019) Ecological and evolutionary consequences of metabolic rate plasticity in response to environmental change. *Philosophical Transactions of the Royal Society B* 374, 20180180. [Link](#)
- 2018 **Norin T**, Mills SC, Crespel A, Cortese D, Killen SS & Beldade R (2018) Anemone bleaching increases the metabolic demands of symbiont anemonefish. *Proceedings of the Royal Society B* 285, 20180282. [Link](#)
- 2017 **Norin T** & Clark TD (2017) Fish face a trade-off between 'eating big' for growth efficiency and 'eating small' to retain aerobic capacity. *Biology Letters* 13, 20170298. [Link](#)
- 2016 **Norin T** & Clark TD (2016) Measurement and relevance of maximum metabolic rate in fishes. *Journal of Fish Biology* 88, 122-151. [Link](#)
- 2016 Ern R, **Norin T**, Gamperl AK & Esbaugh AJ (2016) Oxygen dependence of upper thermal limits in fishes. *Journal of Experimental Biology* 219, 3376-3383. [Link](#)
- 2016 **Norin T**, Malte H & Clark TD (2016) Differential plasticity of metabolic rate phenotypes in a tropical fish facing environmental change. *Functional Ecology* 30, 369-378. [Link](#)
- 2014 **Norin T**, Malte H & Clark TD (2014) Aerobic scope does not predict the performance of a tropical eurythermal fish at elevated temperatures. *Journal of Experimental Biology* 217, 244-251. [Link](#)