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Current situation



September 2024 – Today: **Associate Professor** (section 68) at La Rochelle Université, LIENSs, UMR 7266, CNRS, France

Grants

2026

- **Research grant** (19,5k€) from the EC2CO Program (CNRS).
- **Research grant** (5k€) from La Rochelle Université.

2025

- **Travel grant** from the Scandinavian Physiological Society (1.2k€) to attend the IUPS Conference in Frankfurt, Germany.
- **Travel grant** from EU-CONEXUS (2.3k€) to attend the EOU Conference in Bangor, UK.
- **Grant** from the Society for Experimental Biology (SEB) to organize a symposium (16k€)
- **Grant** from the Company of Biologists (COB) to help organizing a symposium (2k€)

2024: Travel grant from the SEB (300€) to attend the SEB conference in Prague, Czev Republic.

2023

- **Research grant** from the Nils Olof Berggren Foundation (€11k).
- **Travel grant** from the Royal Physiographical Society of Lund to take part in the SEB centenary conference (€1k).
- **Research grant** from the Längmanska Cultural Fund Foundation (€1.7k).
- **Research grant** from the Lars Hierta Foundation (€2.6k).

2022: Research grant from the Helge Ax:son Johnson Foundation (€1.7k).

2020: Travel grant from the France Canada Research Fund (€3.4k).

2019

- **Travel grant** from the French Group of Bioenergetics (grant from the GDR Photosynthèse, Labex Graal, BBA Journal) to attend the 20th GFB congress in Autrans, France.
- **Travel grants** from the Company of Biologists (230€) and the SEB (300€) to attend the SEB conference in Seville, Spain.
- **Travel grant** from the BioEnvis Research Federation (300€).

2018: Ministerial research grant for a doctoral contract, French Ministry of Higher Education and Research.

Educational background



- ❖ 2018 – 2021: PhD in Ecophysiology, Université Claude Bernard Lyon 1 (UCBL1)
- ❖ 2017 – 2018: 2nd year of Master's degree « Cardiovascular, metabolic and nutritional regulation», UCBL1
- ❖ 2016 – 2017: 1st year of Master's degree « Integrative Biology and Physiology », UCBL1
- ❖ 2013 – 2016: Bachelor's degree in Biology, Physiology speciality, UCBL1

Collaborations

2025: Collaboration with Dr. Leila Parizadeh, UMR LIENSs, France



Research topic: How caffeine supplemented with microplastics can affect energy metabolism in oysters?

2020: Collaboration with Dr. Julie Nati and Dr. David J. McKenzie, UMR MARBEC, Palavas-Les-Flots, France.



Funding: MC Julie NATI grant, INDITOL Project

Research topic: Relationship between hypoxia tolerance, individual metabolic rate and cardiac and hepatic metabolism in sea bass.

2020: Collaboration with Dr. Jean-Michel Weber, University of Ottawa, Canada.



Funding: France Canada Research Fund

Research topic: Effects of lactate on carbohydrate metabolism in rainbow trout.

2019: Collaboration with Dr. Karine Salin, IFREMER, LEMAR UMR 6539, Brest, France.



Funding: BioEnvis Research Federation

Research topic: Concomitant fluctuations in temperature and oxygen and consequences for mitochondrial efficiency in producing energy in sea bass.

Professional experiences

July 2022 – July 2024: **Postdoctoral Researcher** at Lund University, Department of Biology, Sweden



Supervisor: Dr. Andreas Nord

Research themes: Thermal and dietary fluctuations and their consequences on energetic metabolism and thermoregulation in Japanese quail *Coturnix japonica*.

October 2021 – July 2022: **Temporary teaching and research assistant (ATER)** at Université Claude Bernard Lyon 1, LEHNA UMR 5023, France



Supervisors: Pr. Yann Voituron and Pr. François-Xavier Dechaume-Moncharmont

Research themes: Temporal changes in heart metabolism during a heat wave in apron of Rhône *Zingel asper*; Relationship between personality and metabolic rate in apron of Rhône and round goby *Neogobius melanostomus*; Analysis of mitochondrial metabolism thanks to muscle biopsies and consequences on swimming performance in goldfish *Carassius auratus*.

October 2018 – October 2021: **PhD in Ecophysiology** at Université Claude Bernard Lyon 1, LEHNA UMR 5023, France



Title: Plasticity of aerobic performance and muscle bioenergetics in fish in response to variations in environmental parameters.

Research themes: Endurance training and hypoxia: consequences on the energy metabolism and swimming performance of goldfish; Consequences of simultaneous variations in oxygen availability and temperature on the mitochondrial efficiency to produce energy in the sea bass *Dicentrarchus labrax*; Effects of successive heat waves on the muscular metabolism of the zebrafish *Danio rerio*.

PhD directors: Pr. Damien Roussel and Dr. Loïc Teulier

Examination jury: Pr. Yann Voituron (President), Pr. Christel Lefrançois (Opponent), Pr. Pierre Blier (Opponent) et Dr. Karine Couturier (Examiner).

Date of defence: 8th November 2021

January 2018 – June 2018: **Research project – 2nd year of Master's degree** at LEHNA (UMR 5023) and IFREMER (Palavas-Les-Flots), France



Directors: Dr. Loïc Teulier and Dr. Claire Saraux

Research themes: Metabolic consequences of concomitant fluctuations in food availability and temperature in the European sardine *Sardina pilchardus*.

January 2017 – July 2017 : **Research projects** (1st year of Master's degree and voluntary projects) at LEHNA (UMR 5023) and IFREMER (Palavas-Les-Flots), France



Directors: Dr. Loïc Teulier and Dr. Claire Saraux

Research themes: Influence of hypo-osmotic water on the muscular metabolism of zebrafish; Comparison of the muscular metabolic phenotype of the gilthead sea bream *Sparus aurata* and the European sardine; Oceanographic campaign and study of small pelagics in the Mediterranean Sea.

Published articles

18. **Thoral E**, Nati J, Quémeneur J-B, Lozac'h L, Salou G, Vergnet A, Besson M, Vandeputte M, Allal F, Salin K, McKenzie DJ, Teulier L (2026) **Mitochondrial respiratory capacities are not linked to individual variation in hypoxia tolerance and standard metabolic rate in European seabass *Dicentrarchus labrax***. *J. Fish Biol.* doi: 10.1111/jfb.70491
17. **Thoral E**, Correia M G, Chamkha I, Elmér E, Nord A (2025) **Incubation temperature shapes growth and mitochondrial metabolism across embryonic development in Japanese quail**. *Proc. R. Soc. B* 292: 20251752. doi: 10.1098/rspb.2025.1752
16. Tabh J K R, Persson E, Correia M, Ciarán Ó Cuív, **Thoral E**, Nord A (2025) **Limited evidence that body size shrinking and shape-shifting alleviate thermoregulatory pressures in a warmer world**. *Commun. Biol.* 8:707. doi: 10.1038/s42003-025-08131-7
15. Correia M, **Thoral E**, Persson E, Chamkha I, Elmér E, Nord A (2025) **Postnatal development in the cold render bird mitochondria more susceptible to heat stress**. *Proc. R. Soc. B* 292: 20251027. doi: 10.1098/rspb.2025.1027
14. Watson J, Souques C, Dechaume-Montcharmont F-X, Roussel D, Le Guyader J, Lassus R, Guillard L, Clair-Boisson A, Averty L, Bastianini C, Redon L, Morales-Montaron A, Voituron A, Daufresne M, **Thoral E**, Teulier L (2025) **A multi-scaling approach showing a transient metabolic mismatch in a freshwater fish (*Zingel asper*) during an acute heat stress**. *J. Exp. Biol.* 228 (10): jeb250202. doi: 10.1242/jeb.250202
13. **Thoral E**, Dawson N J, Bettinazzi S, Rodríguez E (2024) **An evolving roadmap: using mitochondrial physiology to help guide conservation efforts**. *Conserv. Physiol.* 12(1). doi: 10.1093/conphys/coae063.
12. **Thoral E**, García-Díaz C C, Persson E, Chamkha I, Elmér E, Ruuskanen S, Nord A (2024) **The relationship between mitochondrial respiration, resting metabolic rate and blood cell count in great tits**. *Biol. Open.* bio.060302. doi:10.1242/bio.060302.
11. **Thoral E**, Dargère L, Medina-Suárez I, Clair A, Averty L, Sigaud J, Morales-Montaron A, Salin K, Teulier L (2024) **Non-lethal sampling for assessment of mitochondrial function does not affect metabolic rate and swimming performance**. *Phil. Trans. R. Soc. B.* 379: 20220483. doi:10.1098/rstb.2022.0483.
10. Nord A, Persson E, Tabh J K R, **Thoral E** (2024) **Shrinking body size may not provide meaningful thermoregulatory benefits in a warmer world**. *Nat. Ecol. Evol.* 379: 20220483. doi:10.1038/s41559-023-02307-2.
9. Talarico G G M, **Thoral E**, Farhat E, Teulier L, Mennigen J A, Weber J-M (2023) **Lactate signaling and fuel selection in rainbow trout: mobilization of energy reserves**. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 325: R556–R567. doi:10.1152/ajpregu.00033.2023.
8. Metcalfe N, Bellman J, Bize P, [...], **Thoral E**, Westerterp KR, Westerterp-Plantenga MS, Wojciechowski MS, Monaghan P (2023) **Solving the conundrum of intra-specific variation in metabolic rate: A multidisciplinary conceptual and methodological toolkit**. *BioEssays.* 2300026, doi:10.1002/bies.202300026.
7. **Thoral E**, Roussel D, Gasset E, Dutto G, Queiros Q, McKenzie D J, Bourdeix J-J, Metral L, Saraux C, Teulier L (2023) **Temperature-dependent metabolic consequences of food deprivation in the European sardine**. *J. Exp. Biol.* 226, jeb244984. doi:10.1242/jeb.244984.
6. **Thoral E**, Teulier L, McKenzie D J (2023) **Energetics of fish swimming**. *Chapter in Encyclopedia of Fish Physiology*, 2nd Edition. doi: 10.1016/B978-0-323-90801-6.00083-5.

5. **Thoral E**, Roussel D, Quispe L, Voituron Y and Teulier L (2022) **Absence of mitochondrial responses in muscles of zebrafish exposed to several heat waves.** *Comp. Biochem. Physiol. Part A Mol. Integr. Physiol.* 274, 111299. doi: 10.1016/j.cbpa.2022.111299.
4. **Thoral E**, Farhat E, Roussel D, Cheng H, Pamentier M, Weber J-M, Teulier L (2022) **Different patterns of chronic hypoxia lead to hierarchical set of adaptative mechanisms in goldfish metabolism.** *J. Exp. Biol.* 225, jeb243194. doi: 10.1242/jeb.243194.
3. **Thoral E**, Queiros Q, Roussel D, Dutto G, Gasset E, McKenzie D J, Romestaing C, Fromentin J-M, Saraux C, Teulier L (2021) **Changes in foraging mode caused by a decline in prey size have major bioenergetic consequences for a small pelagic fish.** *J. Anim. Ecol.*, 00, 1-13. doi: 10.1111/1365-2656.13535.
2. **Thoral E**, Roussel D, Chinopoulos C, Teulier L, Salin K (2021) **Low oxygen levels can help to prevent the detrimental effect of acute warming on mitochondrial efficiency in fish.** *Biol. Letters* 17. doi: 10.1098/rsbl.2020.0759.
1. Teulier L, **Thoral E**, Queiros Q, McKenzie D J, Roussel D, Dutto G, Gasset E, Bourjea J, Saraux C (2019) **Muscle bioenergetics of two emblematic Mediterranean fish species: *Sardina pilchardus* and *Sparus aurata*.** *Comp. Biochem. Physiol. Part A Mol. Integr. Physiol.* 235, 174–179. doi: 10.1016/j.cbpa.2019.06.008.

Evaluation and edition activities:

- Member of the editorial board of the *Journal of Thermal Biology* since November 2022.
- Guest Editor on the Special Issue “*Ontogenetic variation in thermal biology: assessing life stage-specific adaptations and sensitivity in animals*” in *Journal of Thermal Biology* (2025-2026)
- Participated in the evaluation of 16 manuscripts for 10 international peer-reviewed journals: *Journal of Experimental Biology*, *Journal of Thermal Biology*, *STOTEN*, *PeerJ*, *Frontiers in Ecology and Evolution*, *Frontiers in Physiology*, *Ethology*, *Ecology and Evolution*, *Marine Environmental Research*, *Journal of Evolutionary Biology*.

Scientific communications

Invited oral presentations in international or national congresses

- a. **Thoral E**, Roussel D, Chinopoulos C, Teulier L, Salin K. **Low oxygen levels can help to prevent the detrimental effect of acute warming on mitochondrial efficiency in fish.** Rank Symposium “*Variation in Metabolic Rate: Where Does It Come From and Does It Matter?*”, 2022, Grasmere, United Kingdom. [Award for the best oral presentation \(380€\).](#)
- b. **Thoral E.** **Similar challenges but different consequences: how climate change shapes metabolic strategies in endotherms and ectotherms.** Society for Experimental Biology (SEB) Conference, 2024, Prague, Czech Republic.
- c. **Thoral E**, Correia M, Holmberg M, Wang H-L, Andersson M N, Chamkha I, Elmer E, Isaksson C, Nord A. **Changes in diet composition affect energy metabolism at several biological scales in Japanese quail.** 15th European Ornithologists’ Union (EOU) Congress, 2025, Bangor, UK.
- d. **Thoral E.** **In water or on land: the ‘One Health’ approach in ecophysiology and ecotoxicology.** 9th Congress of the Society of Physiology and Integrative Biology (SPBI), 2026, Strasbourg, France.

Oral presentations in international congresses

- e. [Teulier L](#), [Thoral E](#), Queiros Q, McKenzie DJ, Dutto G, Gasset E, Bourjea J, Saraux C. **Bioenergetics of two Mediterranean fish species are related to their swimming behavior.** 56th Annual Meeting of the Canadian Zoology Society (CSZ), 2017, *Winnipeg, Canada*.
- f. [Thoral E](#), Queiros Q, Roussel D, Dutto G, Gasset E, McKenzie DJ, Romestaing C, Fromentin J-M, Saraux C, Teulier L. **Food quality affects muscle bioenergetics of small pelagic fish.** SEB Conference, 2019, *Seville, Spain*.
- g. [Thoral E](#), Farhat E, Roussel D, Cheng H, Pamentier M, Weber J-M, Teulier L. **Long-term exposure to constant and intermittent hypoxia induce different metabolic adjustments depending on the level of integration in goldfish.** SEB Conference, 2021, *online*.
- h. [Thoral E](#), J.J.H. Nati J.J.H, Quéméneur J-B, Lozac'h L, Salou G, Vergnet A, Besson M, Allal F, McKenzie D.J, Salin K, Teulier L. **Is intraspecific variation in metabolism and hypoxia tolerance related to individual mitochondrial function in fish?** 14th International Congress on the Biology of Fish (ICBF), 2022, *Montpellier, France*.
- i. [Talarico G.G.M](#), [Thoral E](#), Farhat E, Teulier L, Mennigen J.A and Weber J-M. **Lactate signaling for fuel selection: Carbohydrate and lipid mobilization in trout.** 14th ICBF, 2022, *Montpellier, France*
- j. [Thoral E](#), Correia M, Persson E, Chamkha I, Elmer E, Tabh J, Nord A. **Cold or hot spells: long-term consequences for mitochondrial metabolism in Japanese quail and comparison between different tissues.** SEB Animal Biology Early Career Researcher Symposium, 2022, *Tvärminne, Finland (online presentation due to COVID-19)*.
- k. [Thoral E](#). **How does incubation temperature affect mitochondrial thermal sensitivity and ROS production in Japanese quail embryos?** The Evolutionary Ecology Christmas meeting, 2023, *Höör, Sweden*.
- l. [Thoral E](#), Correia M, Langreiter M, Schött M, Breschel L C, Persson E, Chamkha I, Elmer E, Tabh J, Nord A. **How does environmental temperature during growth affect metabolism of birds in adulthood?** Nordic Oikos Conference, 2024, *Lund, Sweden*.
- m. [Roussel D](#), [Thoral E](#), Voituron Y, Teulier L. **Plasticity of mitochondrial coupling efficiency: the last chance to survive in adverse environment?** 63rd Annual Meeting of the CSZ, 2024, *Moncton, Canada*.
- n. [Watson J](#), Souques C, Le Guyader J, Roussel D, Lassus R, Guillard L, Clair A, Averty L, Bastianini C, Redon L, Voituron Y, Daufresne M, Dechaume-Moncharmont FX, [Thoral E](#), Teulier L. **Effects of a heatwave on cardiac mitochondrial respiration of a freshwater fish: the Rhône apron.** 63rd Annual Meeting of the CSZ, 2024, *Moncton, Canada*.
- o. [Souques C](#), Watson J, Le Guyader J, Guillard L, Averty L, Bastianini C, Clair A, Redon L, Voituron Y, Dechaume-Moncharmont FX, [Thoral E](#), Teulier L. **Facing an increasingly variable world: metabolic responses throughout a heatwave event in an endangered freshwater fish (*Zingel asper*).** 63rd Annual Meeting of the CSZ, 2024, *Moncton, Canada*.
- p. [Thoral E](#), Hellgren O, Nord A. **Does malaria infection affect mitochondrial metabolism in avian red blood cells?** 40th Congress of the International Union of Physiological Sciences (IUPS), 2025, *Frankfurt, Germany*.

Oral presentations in national congresses

- q. [Thorald E](#), Farhat E, Roussel D, Cheng H, Pamentier M, Weber J-M, Teulier L. **Chronic hypoxia acclimation and exercise enhance goldfish swimming performance.** 4th Congress of the Animal Ecophysiology (CEPA), 2019, *Rennes, France*.
- r. [Thorald E](#), Roussel D, Chinopoulos C, Teulier L, Salin K. **Low oxygen water concentrations can help to counteract the negative effects of warming on mitochondrial efficiency in fish.** Conference of Phenotypic Plasticity GDR, 2020, *online*.
- s. [Thorald E](#), Roussel D, Chinopoulos C, Teulier L, Salin K. **Low oxygen levels can help to prevent the detrimental effects of warming on mitochondrial efficiency in fish.** 25th Annual Meeting of the doctoral school EDISS, 2020, *online*. [Award for the best oral presentation \(200€\)](#).
- t. [Saraux C](#), Queiros Q, McKenzie DJ, Dutto G, Gasset E, [Thorald E](#), Teulier L, Schull Q, Fromentin J-M. **How experimental approaches can inform us on behavioural and physiological mechanisms underlying population changes in the wild?** 5th CEPA, 2021, *Montpellier, France*
- u. Dargère L, Medina-Suárez I, Clair A, Averty L, Sigaud J, [Thorald E](#), Teulier L. **Muscle biopsies: consequences on muscle metabolism and swimming performance in goldfish.** 5th Congress of SPBI, 2022, *Lyon, France*.
- v. [Thorald E](#), García-Díaz C C, Persson E, Chamkha I, Elmer E, Ruuskanen S, Nord A. **How blood mitochondrial metabolism can predict the whole-individual metabolic rate in great tits?** 6th Congress of SPBI, 2023, *Clermont-Ferrand, France*. [Award for the best oral presentation \(250€\)](#).
- w. [Thorald E](#), Correia M, Chamkha I, Elmer E, Nord A. **Consequences of thermal fluctuations on energy metabolism in birds during their embryonic development.** 1st Congress of the Thematic Network Metabolica, 2024, *La Rochelle, France*.

Posters in international congresses

- x. [Teulier L](#), Guillard L, [Thorald E](#), Averty L, Clair A, Ulmann J, Romestaing C. **Bioenergetics flexibility of zebra fish muscle facing environmental constraints: chronic hypoxia vs. ion poor water acclimation.** 50 years of Hochachka Legacy - Satellite Symposium CSZ, 2017, *Winnipeg, Canada*.
- y. [Thorald E](#), Queiros Q, McKenzie DJ, Roussel D, Dutto G, Gasset E, Bourdeix J-H, Metral L, Saraux C, [Teulier L](#). **Seasonal-dependent metabolic consequences of fasting in the European sardine.** ICCPB, 2019, *Ottawa, Canada*.
- z. [Thorald E](#), Roussel D, Quispe L, Voituron Y, Teulier. **Effects of simulated heatwaves on mitochondrial respiration in red muscle of zebrafish *Danio rerio*.** 60th Annual Meeting of the CSZ, 2021, *online*.
- aa. [Thorald E](#), Correia M, Elmer E, Chamkha I, Nord A. **Effect of incubation temperature on mitochondrial thermal sensitivity and reactive oxygen species production during early-life development in Japanese quail.** SEB Centenary Conference, 2023, *Edinburgh, Scotland*. (Pecha Kucha and poster).
- bb. [Thorald E](#), Correia M, Elmer E, Chamkha I, Nord A. **Effect of incubation temperature on the thermal sensitivity of mitochondrial respiration during early-life development in Japanese quail.** 14th European Ornithologists' Union (EOU) Congress, 2023, *Lund, Sweden*. (Pecha Kucha and poster).
- cc. [Teulier L](#), [Thorald E](#), Souques C, Watson J, Clair A, Averty L, Guillard L, Morales-Montaron A, Roussel D, Dechaume-Moncharmont FX, Voituron Y. **Unlock in progress: Physiology tools in an ecological context.** 63rd Annual Meeting of the CSZ, 2024, *Moncton, Canada*.

dd. Roussel D, Teulier L, Romestaing C, Voituron Y, **Thoral E**. **Severe environmental constraints can alter mitochondrial coupling efficiency: is it truly beneficial or only the last chance to survive?** SEB Annual Conference, 2025, Antwerp, Belgium.

Poster in a national congress

ee. **Thoral E**, Roussel D, Gasset E, Dutto G, Queiros Q, McKenzie D J, Bourdeix J-J, Metral L, Saraux C, Teulier L. **The seasonal-dependent metabolic consequences of fasting in the European sardine.** 20th Congress of French Group of Bioenergetics, 2019, Autrans, France.

Popular science

ff. Oral presentation for the association “[Les Petits Débrouillards](#)” (June 2025): “Science Coffee - What impact does climate change have on marine ecosystems? Does it have any impact on fisheries? », Saintes, France.

gg. Radio interview on “France Bleu” (2025, July 3rd): “The sea temperature in Charente-Maritime has risen above 22°C, which is unprecedented for this time of year”. [Link](#) (in french).

hh. Television interview and article on ‘France 3’ (2025, July 6th): “‘Temperatures shouldn’t be this high’: the ocean is at 22°C, a rise in temperature that threatens the entire marine ecosystem”. [Link](#) (in french).

ii. Article on “Hit West” (2025, August 19th): “New fish species, storms, erosion: the harmful effects of the warming of the Atlantic Ocean”. [Link](#) (in french).

Technical and theoretical skills

Key-words: Integrative physiology, mitochondrial bioenergetics, oxygen consumption, ATP production, ROS production, muscular metabolism, swimming performance, fish, birds

Cellular metabolism:

- **Measurement of mitochondrial respiration, ROS and ATP production** in different tissues from fish and birds (muscle, liver, heart) *via* high precision respirometers Oroboros® for oxygen consumption coupled to **magnesium green** for ATP synthesis, or coupled to **AmplexRed** for the ROS production.
- **Enzymatic assays by spectrophotometry**
- (cytochrome c oxidase, citrate synthase, lactate dehydrogenase).

In vivo measurements:

- **Study of swimming performance** (U_{crit}) and metabolic rate with the Loligo® swim tunnels fitted with optode probe for oxygen consumption.
- **Surgery:** Double cannulation in dorsal aorta in rainbow trout for blood samplings in parallel with the infusion of different molecules; Blood collection in birds from brachial vein; Tissues dissection.
- **Muscle shivering:** Insertion of an electrode in birds’ muscle to measure the shivering activity of muscle, coupled to the measure of metabolic rate with the LabChart® System.

Supervising activity

- **3 BSc students:** Marine Hoareau (2019) ; Esther Rochard (2026) ; Eloïse Raverdy (2026)
- **6 MSc students (1st year):** Océane Malvezin (2021) ; Laura Quispe (2021) ; Lilian Redon (2022) ; Chloé Souques (2022) ; Matilda Langreiter (2023) ; Jocelyn Garcia (2026)
- **2 MSc students (2nd year):** Laurélie Dargère (2022) ; Maria Correia (2022 - 2023)
- **2 research assistants:** Maria Correia (2023) ; Malin Holmberg (2024)

Administrative and collective activities

Jurys:

- **December 2026:** PhD review (Examien) for the PhD defense of Raphaëlle Huard (Brest University, France)
- **December 2025:** PhD review (Examiner) for the PhD defense of Nathan Frizot (University Clermont Auvergne, France).
Title: Predicting the performance of aquatic consumers in a context of warming and thermal variance
- **January 2025:** PhD review (Reviewer) for the PhD defense of Florence Hunter-Manseau (University of Moncton, Canada).
Title: Molecular, metabolic and physiological responses to environmental fluctuations: the importance of mitochondria during dietary and thermal variations in *Drosophila melanogaster*.

Other activities:

February 2026: Co-organisation of a symposium “EcoMito: Bridging cellular performance to ecophysiology” in Lyon, France (60 international delegates).

September 2025: Co-organisation of a pre-congress symposium as a member of the Special Interest Group “Comparative Physiology” from the Scandinavian Physiological Society (SPS) at the IUPS Conference (2025, Frankfurt, Germany) entitled: “From cell to whole organism: how oxygen shapes the physiology of individuals”.

August 2025: Co-organisation of a thematic session at the EOU Conference (2025, Bangor, UK) entitled: “Adapting to the world ahead: how the developmental environment shapes adult phenotype for the better or worse”.

July 2025: Co-organisation of a thematic sessions at the SEB Annual Conference (2025, Antwerp, Belgium) entitled: “Cellular metabolism and individual performance: navigating from animals to plants in a changing world”.

June 2024 – June 2026: Member of the steering committee of the Comparative Physiology Special Interest Group in the Scandinavian Physiology Society.

September 2023 – June 2025: Co-organisation of the international club newspaper "EcoMito" (~30 people per month). The aim of this journal club is to give young researchers (PhD students and post-docs) the opportunity to present their recently published work in the field of mitochondrial metabolism in an ecological context.

July 2023: Co-organisation of a thematic session at the SEB Centenary Conference (2023, Edinburgh, Scotland) entitled: “Keeping the pace: integrating mitochondrial and cellular bioenergetics to whole-animal fitness in a changing environment”