CV, research and teaching qualifications

General information

Jonathan AC Roques

39, PhD, Docent (Associate Professor)
19850801-9331
Married, one child (Charlie, born 12-2021)
French (since birth)-Swedish (since 2022)

Home address: Teleskopgatan 10, lgh 1303
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# http://jonathanroques.com/

Higher education qualifications

Year	Diploma	University	Honors
2013	PhD in Biology	Radboud University Nijmegen (NL)	-
2008	Master II Biology	Radboud University Nijmegen (NL)	-
2007	Master I Ecophysiology	Université de Montpellier (FR)	With honors
2006	Bachelor in Biology of the Organisms	Université de Montpellier (FR)	With honors

PhD (2013) from Radboud University Nijmegen, Nijmegen, The Netherlands
Title: Aspects of Fish Welfare in Aquaculture Practices
Specialty: Physiology, Biology of aquatic organisms, Behavior
Laboratory: Department of Animal Physiology, Radboud University Nijmegen
Promotor: Dr. Pr. Flik (RU Nijmegen), Dr. van de Vis & Dr. Abbink (Wageningen University & Research)

Work experience

Current positions:

Docent (Associate Professor) (full-time) , University of Gothenburg, BioEnv, Sweden (*Since February 2025*)
Research project: Mariculture technical innovations in Sweden (MARTINIS)

Scientific advisor (part-time), Ocean Food Systems (ETHOS), non-profit organization, Maine, USA, (*Since January 2024*)

Previous positions:

- **Researcher**, University of Gothenburg, BioEnv, Sweden (*November 2018-January 2024*)
  Research project: developing Swedish circular marine aquaculture system within SWEMARC, the Swedish mariculture research center and Mariculture technical innovations in Sweden (MARTINIS)
- **Postdoctoral researcher**, University of Gothenburg, BioEnv, Sweden (*November 2016-October 2018*)
  Research project: NOMACULTURE, Finding optimal culture conditions for spotted wolffish in RAS

- **Temporary Lecturer & Research Assistant** (ATER), Université de Poitiers, Laboratoire ecologie et biologie des interactions, UMR CNRS 7267, Poitiers (France) (*Septembre 2015-August 2016*)
  Research project: Stress response in terrestrial isopods
- **Temporary Lecturer & Research Assistant** (ATER), CUFR de Mayotte, Laboratoire des sciences et technologies, Mayotte Island (France) (*January 2014-August 2014*)
  Research project: Impact of wastewater on physiology and osmoregulation of mangrove crabs

Scientific qualifications

a) Scientific publications

Peer-reviewed articles (36)

Hedén *et al.* Aquaculture potential of Atlantic wolffish (*Anarhichas lupus*): stress and physiological responses to acute handling. ***Fish Physiology and Biochemistry*** 51(39)*, in press. IF: 2.504* (2nd author, corresponding author). https://doi.org/10.1007/s10695-025-01456-4

Roques & van de Vis (**2025**) Welfare and resilience in aquaculture – Editorial. ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):3-5. *IF: 2.504* (1st author, corresponding author)

Guo *et al.* (**2025**) Evaluation of starvation status in the early developmental stages of black rockfish (*Sebastes schlegelii*) based on morphological and histological characteristics. ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):48-60. *IF: 2.504* (4th author)

Roques, Hinchliffe *et al.* (**2025**) Thermal plasticity of growth, metabolic rate and stress responses in Atlantic wolffish (*Anarhichas lupus*). ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):61-74. *IF: 2.504* (1st author, shared)

Warwas *et al.* (**2025**) Fish processing side streams are promising ingredients in diets for rainbow trout (*Oncorhynchus mykiss*) - effects on growth physiology, appetite, and intestinal health. ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):75-92. *IF: 2.504* (3rd author)

Hinchcliffe *et al.* (**2025**) Effects of dietary protein level on growth and health of juvenile Atlantic wolffish, *Anarhichas lupus*. ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):93-103. *IF: 2.504* (Second author, corresponding author)

Henze (…) & **Roques** (**2025**) Validation of the HemoCue Hb 801 portable hemoglobin analyzer for fish blood. ***Journal of Fish Biology - Special issue welfare and resilience*** 106(1):104-110. *IF: 2.504* (Last author, corresponding author)

Kasiouras *et al.* (**2025**) Heart rate monitoring during behavioural stress tests in bold and shy rainbow trout (*Oncorhynchus mykiss*). ***Fishes*** 10(1):23. *IF: 2.8* (6th author)

Roques *et al.* (**2024**) Tolerance of the marine anammox *Candidatus* Scalindua to high nitrate concentrations: implications for recirculating aquaculture systems. ***Water- Special issue advanced use of anammox process in wastewater treatment*** 16(24): 3705. *IF: 3.0* (1st author, corresponding author)

Warwas *et al*. (**2024**) Seaweed fly larvae cultivated on macroalgae side streams: A novel marine protein and omega-3 source for rainbow trout. ***Aquaculture Nutrition*** 2024(1): 4221883. *IF: 3.5* (5th author)

Berry et *al*. (**2024**) Local variation in stress response of juvenile anadromous brown trout, *Salmo trutta*. ***Ecology and Evolution***. 14:e11526. *IF: 2.600* (3rd author)

Vilanova *et al*. (**2023**) Two-phase microalgae cultivation for RAS water remediation and high-value biomass production. ***Frontiers in Plant Sciences: Marine and freshwater plants*** 14:1186537. *IF: 6.627* (2nd author, corresponding author)

Roques, Micolucci *et al*. (**2023**) *Candidatus* Scalindua, a Biological Solution to Treat Saline Recirculating Aquaculture System Wastewater. ***Processes***. 11:690. *IF: 3.352* (1st author, shared, corresponding author)

Warwas *et al*. (**2023**) Marine yeast (*Candida sake*) cultured on herring brine side streams is a promising feed ingredient and omega-3 source for rainbow trout (*Oncorhynchus mykiss*). ***Aquaculture*** 571:739448. *IF: 5.135* (4th author)

Green *et al*. (**2022**) Invader at the edge-Genomic origins and physiological differences of round gobies across a steep urban salinity gradient. ***Evolutionary Applications***. 16:321-337. *IF: 4.929* (8th author)

Andersson *et al*. (**2022**). Low Holding Densities Increase Stress Response and Aggression in Zebrafish. ***Biology*** 11:725. *IF: 5,168* (2nd author)

Roques, Micolucci *et al*. (**2021**) Effects of recirculating aquaculture system wastewater on anammox performance and community structure. ***Processes*** 9:1183. *IF: 3.352* (1st author, shared, corresponding author)

Hjelmstedt et al. (**2021**) Continuous physiological welfare evaluation of European whitefish (*Coregonus lavaretus*) during common aquaculture practices leading up to slaughter. ***Aquaculture*** 534:736258. *IF: 5.135* (6th author)

Roques *et al*. (**2020**) Stress response in terrestrial isopods: A comparative study on glycaemia. ***Applied Soil Ecology*** 156: 103708. *IF: 5.509* (1st author, corresponding author)

Baudry et al. (**2020**) Invasion and distribution of the redclaw crayfish, *Cherax quadricarinatus*, in Martinique. ***Knowledge & Management of Aquatic Ecosystems*** 421:50. *IF: 1.904* (9th author)

Brijs *et al*. (**2020**) Prevalence and severity of cardiac abnormalities and arteriosclerosis in farmed rainbow trout (*Oncorhynchus mykiss*). ***Aquaculture*** 526:735417. *IF: 5.135* (6th author)

Guo et al. (**2020**) Effects of different feeding regimes on juvenile black rockfish (*Sebastes schlegilii*) survival, growth, digestive enzyme activity, body composition and feeding costs. ***Aquaculture Research*** 51:4103-4122. *IF: 2.184* (2nd author)

Knutsen et al. (**2019**) Fish welfare, fast muscle cellularity, fatty acid and body-composition of juvenile spotted wolffish (*Anarhichas minor*) fed a combination of plant proteins and microalgae (*Nannochloropsis oceanica*). ***Aquaculture*** 506:212-223. *IF: 5.135* (5th author)

Theuerkauf et al. (**2018**) Salinity variation in a mangrove ecosystem: a physiological investigation to assess potential consequences of salinity disturbances on mangrove crabs. ***Zoological studies*** 57:36. *IF: 1.904* (3rd author)

Grandjean *et al*. (**2017**) Status of *Pacifastacus leniusculus* and its role in recent crayfish plague outbreaks in France: improving distribution and crayfish plague infection patterns. ***Aquatic Invasions*** 12:541-549. *IF: 2.651* (2nd author)

Roques, Schram *et al*. (**2015**) The impact of elevated water nitrite concentration on physiology, growth and feed intake of African catfish, *Clarias gariepinus*. ***Aquaculture Research*** 46:1384-1395. *IF: 2.184* (1st author, shared, corresponding author)

Garcia *et al*. (**2015**) Ambient salinity and osmoregulation, energy metabolism and growth in juvenile yellowtail kingfish (*Seriola lalandi* Valenciennes 1833) in a recirculating aquaculture system. ***Aquaculture Research*** 46(11):2789-2797. *IF: 2.184* (4th author)

Boerrigter *et al*. (**2015**) Recovery from transportation by road of farmed European eel (*Anguilla anguilla*). ***Aquaculture Research*** 46:1248-1260. *IF: 2.184* (4th author)

Palstra *et al***.** (**2015**) Forced sustained swimming exercise at optimal speed to enhance growth performance of yellowtail kingfish. ***Frontiers in Aquatic Physiology: Physiological adaptations to swimming in fish*** 5:00506. *IF: 4.755* (4th author)

Roques, Schram *et al*. (**2014**) The impact of elevated water nitrate concentration on physiology, growth and feed intake of African catfish, *Clarias gariepinus* (Burchell, 1822). ***Aquaculture Research*** 45:1499-1511. *IF: 2.184* (1st author, shared)

Roques, Schram *et al*. (**2014**) The impact of elevated water ammonia and nitrate concentrations on physiology, growth and feed intake of pikeperch (*Sander lucioperca*). ***Aquaculture*** 420-421:95-104. IF: 5.135 (1st author, shared)

Manuel *et al*. (**2014**) Stress in African catfish (*Clarias gariepinus*) following overland transportation. ***Fish Physiology and Biochemistry*** 40:33-44. *IF: 3.014* (3rd author)

Abbink *et al*. (**2012**) The effect of temperature and pH on the growth and physiological response of juvenile yellowtail kingfish (*Seriola lalandi*) in recirculating aquaculture systems. ***Aquaculture*** 330-333:130-135. *IF: 5.135* (3rd author)

Roques *et al*. (**2012**) Physiological and behavioural responses to an electrical stimulus in Mozambique tilapia (*Oreochromis mossambicus*). ***Fish Physiology and Biochemistry*** 38:1019-28. *IF: 3.014* (1st author)

Roques, Schram, *et al*. (**2010**) The impact of elevated water ammonia concentration on physiology, growth and feed intake of African catfish (*Clarias gariepinus*). ***Aquaculture*** 306:108-115. *IF: 5.135* (1st author, shared)

Roques, Abbink *et al*. (**2010**) Tailfin clipping, a painful procedure: Studies on Nile tilapia and common carp. ***Physiology and Behavior*** 101:533-540. *IF: 3.742* (1st author, shared)

Dissertation (1)

Roques (**2013**) Aspects of fish welfare in aquaculture practices. PhD thesis. Radboud University Nijmegen, the Netherlands. 200 pp. Includes 6 publications as first author and one unpublished manuscript.

Book chapters (4)

Sneddon & **Roques** (**2023**) Pain recognition in fish, Ch.1 in Pain Management, An Issue of Veterinary Clinics of North America: Exotic Animal Practice (Dr David Sanchez-Migallon Guzman, *editor)*

FLUORESCIENCES BIOLOGIE (Dunod editors, Paris). Biology Undergraduate textbook, 432 pp, first edition (**2018**, 4000 copies, sold-out), second edition (**2023**). ISBN: 978-2-10-076515-7. *In French*

Technical reports and science popularization (6)

Schram *et al*. **(2014)** Hoe giftig zijn ammonia en nitraat voor snoekbaars? Aquacultuur. 29:12-7. Specialized press article *(in Dutch)*

Schram *et al*. **(2012)** Hoe giftig is nitraat voor Afrikaanse meerval? Aquacultuur. 27:6-11. Specialized press article *(in Dutch)*

Abbink *et al*. **(2011)** Vissen voelen pijn: dier & welzijn. V-focus. 8:30-1. Specialized press article *(in Dutch)*

Abbink *et al*. **(2011)** Kweek van yellowtail kingfish (Seriola lalandi) in Nederland. Aquacultuur. 26:21-5. Specialized press article *(in Dutch)*

Schram *et al*. **(2010)** Het effect van verhoogde ammonia concentratie in het water op fysiologie, groei en voeropname van Afrikaanse meerval (*Clarias gariepinus*). IMARES, Report C026/10, 29 pp. Technical report *(in Dutch)*

Abbink *et al*. **(2010)** Differential responses of Nile tilapia (*Oreochromis niloticus*) to fin clip wounding and related stress: perspectives. IMARES, Report C133/09, 25 pp. Technical report

Submitted manuscripts (1)

Andersson *et al*. Co-farming rainbow trout (*Oncorhynchus mykiss*) and sea lettuce (*Ulva fenestrata*) increased macroalgae protein content and positively affected fish welfare. *Under review, submitted to* ***Aquaculture*** *(10-2024). IF: 5.135* (4th author)

b) Citations indices

	All	Since 2020
Citations	**1191**	**699**
h-index	16	14
i10-index	21	19

Source: Google scholar, February 2025

c) Funding

Type	Year	Financing organism	Amount
Research grant	2024	KSLA, Stockholm, SW*	60,000 SEK
Joint research grant	2024	STINT, Stockholm, SW	10,000,000 SEK
Research grant	2023	MIRAI 2.0 – University of Gothenburg, SW*	67,000 SEK
Research grant	2023	Strategic innovation program for process industrial IT and automation – PiiA, VINOVA, Stockholm, SW	3,299,290 SEK
Travel grant	2022	INSTAM-VINNOVA*	25,000 SEK
Research grant	2022	Helge Axelsson Johnsons Foundation, Stockholm, SW*	30,000 SEK
Research grant	2021	MIRAI seed-funding through VINNOVA, Stockholm, SW*	150,000 SEK
Research grant	2021	Strategic innovation program for process industrial IT and automation – PiiA, VINOVA, Stockholm, SW	600,000 SEK
Research grant	2021	Birgit & Birger Wåhlströms Foundation, Stockholm, SW*	40,000 SEK
Research grant	2020	MARTINIS, FORMAS, annual open call 2021 – Research projects for early-career researchers, Stockholm, SW*	4,000,000 SEK
Research grant	2020	Birgit & Birger Wåhlströms Foundation, Stockholm, SW*	40,000 SEK
Research grant	2020	KSLA, Stockholm, SW*	40,000 SEK
Research grant	2020	KVVS, Gothenburg, SW*	40,000 SEK
Research grant	2020	Helge Axelsson Johnsons Foundation, Stockholm, SW*	70,000 SEK
Research grant	2020	Wilhelm & Martina Lundgrens Foundation, Gothenburg, SW*	57,000 SEK
Joint research grant	2020	JSPS, Tokyo, Japan	14,500,000 JPY*
Joint research grant	2020	STINT, Stockholm, SW*	400,000 SEK
Research grant	2020	AkvaCirkulär, Familjen Kamprads Foundation, Växjö, SW	15,000,000 SEK
Travel grant	2019	University of Gothenburg, Gothenburg, SW*	8,000 SEK
Travel grant	2019	Knut and Alice Wallenberg Foundation, Stockholm, SW*	9,000 SEK
Research grant	2019	Helge Axelsson Johnsons Foundation, Stockholm, SW*	80,000 SEK
Initiation grant	2019	STINT, Stockholm, SW*	150,000 SEK
Travel grant	2019	University of Gothenburg, Gothenburg, SW*	20,000 SEK
Travel grant	2018	University of Gothenburg, Gothenburg, SW*	18,500 SEK
Travel grant	2018	Knut and Alice Wallenberg Foundation, Stockholm, SW*	12,000 SEK
Travel grant	2017	Knut and Alice Wallenberg Foundation, Stockholm, SW*	4,250 SEK
Travel grant	2017	Company of biologists, Cambridge, UK*	400 €*

Main applicant; **1 €= 11.4 SEK ; 1 JPY= 0.07 SEK (February 2025)

d) Participation in scientific meetings

Seminar or congress, venue	Year	Rank in the communication	Oral	Poster
MIRAI GCT Resilient Cities and Communities workshop, Gothenburg, SW (online)	2025	1st*	x	
Nationellt Kompetenscentrum för Vattenbruk, Gothenburg, SW	2024	1st*	x	
Nationellt Kompetenscentrum för Vattenbruk, Gothenburg, SW	2024	2nd		x
Aquaculture Europe 2024, Copenhagen, DK	2024	1st*	x	
Aquaculture Europe 2024, Copenhagen, DK	2024	1st*	x	
Aquaculture Europe 2024, Copenhagen, DK	2024	5th	x	
International Congress on the Biology of Fish, Ann Arbor, USA	2024	5th		x
Innovations for the Blue Planet, Stockholm, SW	2024	1st*	x	
Innovations for the Blue Planet, Stockholm, SW	2024	3rd		x
Nationella Vattenbrukskonferensen, Umeå, SW	2024	1st*	x	
Nationella Vattenbrukskonferensen, Umeå, SW	2024	3rd		x
MIRAI sustainability workshop, Umeå, Sweden	2023	1st*	x	
MIRAI sustainability workshop, Umeå, Sweden	2023	1st*	x	
MIRAI sustainability workshop, Umeå, Sweden	2023	1st*		x
OIST, Okinawa, JP, seminar	2022	1st*		x
MIRAI sustainability workshop, Kyushu, JP	2022	1st*	x	
MIRAI sustainability workshop, Kyushu, JP	2022	1st*		x
Mucosal health in Aquaculture, Madrid, SP	2022	2nd		x
Aquaculture Europe 2022, Rimini, IT	2022	2nd	x	
Aquaculture Europe 2022, Rimini, IT	2022	4th	x	
International Congress on the Biology of Fish, Montpellier, FR	2022	2nd	x	
International Congress on the Biology of Fish, Montpellier, FR	2022	4th	x	
International Congress on the Biology of Fish, Montpellier, FR	2022	4th		x
International Congress on the Biology of Fish, Montpellier, FR	2022	3rd*		x
Nationella Vattenbrukskonferensen, Strömstad, SW	2022	1st*		x
Nationella Vattenbrukskonferensen, Strömstad, SW	2022	2nd		x
Nationella Vattenbrukskonferensen, Strömstad, SW	2022	2nd		x
Aquaculture Europe 2021, Madeira, PT	2021	4th		x
MIRAI sustainability workshop, Karlstad, SW (online)	2021	1st*	x	
MIRAI sustainability workshop, Gothenburg, SW (online)	2021	1st*	x	
Nationella Vattenbrukskonferensen, Åhus, SW	2020	1st*		x
Nationella Vattenbrukskonferensen, Åhus, SW	2020	2nd		x
Nationella Vattenbrukskonferensen, Åhus, SW	2020	5th	x	
MIRAI sustainability workshop, Stockholm, SW	2019	1st*	x	x
Hiroshima University, Higashi-Hiroshima, JP	2019	1st*	x	
MIRAI sustainability workshop, Tokyo, JP	2019	1st*	x	
Danish aquaculture day, Copenhagen, DK	2019	1st*	x	
Marine challenges blue solutions, Chalmers, Gothenburg, SW	2018	1st *		x
Marine challenges blue solutions, Chalmers, Gothenburg, SW	2018	2nd *		x
AquaAgri final conference, Stockholm, SW	2018	1st *		x
AquaAgri final conference, Stockholm, SW	2018	1st *		x
MIRAI sustainability workshop, Tokyo, JP	2018	1st *	x	x

Aquaculture 2018, Qingdao, CN	2018	1st *	x	x
Aquaculture 2018, Qingdao, CN	2018	2nd	x	x
MIRAI sustainability workshop, Gothenburg, SW	2018	1st *	x	
Colloque d'écophysiologie animale (**CEPA3**), Strasbourg, FR	2017	1st *		x
Aquaculture 2015, Montpellier, FR	2015	1st *	x	
Aquaculture 2015, Montpellier, FR	2015	1st *		x
Liverpool University, Liverpool, UK, seminar	2015	1st *	x	
SEB Prague, Prague, CZ	2015	3rd		x
WIOMSA 9th symposium, Wild Coast Sun, ZA	2015	3rd		x
SEB Valencia, Valencia, Spain	2013	5th		x
Proceedings of Aqua 2012 Global Aquaculture, Prague, CZ	2012	2nd		x
Proceedings of Aqua 2012 Global Aquaculture, Prague, CZ	2012	6th	x	
IWWR PhD day, Radboud University Nijmegen, NL	2012	1st *	x	
IMARES PhD day, Texel, NL	2012	1st *	x	
HSA Centenary International Symposium, Portsmouth, UK	2011	1st *		x
HSA Centenary International Symposium, Portsmouth, UK	2011	3rd		x
Aquaculture Europe 2011, Rhodes, GR	2011	2nd	x	
Aquaculture Europe 2011, Rhodes, GR	2011	5th	x	
IWWR PhD day, Radboud University Nijmegen, NL	2010	1st *	x	
Proceedings Aquaculture Europe 2010, Porto, PT	2010	2nd		
NVG PhD workshop, Dalfsen, NL	2009	1st *	x	

**** Presenting author***

e) Editorship of scientific periodical

- Editor for Frontiers in aquaculture (since 2023)
- Guest editor for the Journal of Fish Biology, special issue fish welfare & resilience, published in the January 2025 issue (ISSN: 0022-112, volume 106, number 1)

f) Reviewer of scientific periodical

- Reviewer for scientific journals (>40; Aquaculture, Aquaculture research, Scientific reports, Animals, Fishes,…)
- Complete list on my web of Science reviewer profile

g) Expert assignments

- Member of the MIRAI project, aiming at strengthening the collaboration between Swedish and Japanese Universities. In the first phase (2017-19), I joined as a researcher with 1 research project, in the second phase (2020-23), I continued my active participation as a researcher, with 2 research projects and I was part of the GU transdisciplinary group expert. In the new phase (2024-26), I am a member of the global challenge team on resilient cities, and I was part of grant writing group that received a 10 million SEK grant in 2024. I have further organized a digital workshop in January 2024 aiming at connecting young researchers from Sweden and Japan.
- **Reviewer for grant attribution** (NOAA, Saltonstall-Kennedy Program, USA)

Pedagogical qualifications

a) Pedagogic distinctions

- Teaching and Learning in Higher Education 1: Basic Course (PIL101; 06-2021)
- Teaching and Learning in Higher Education 2: Subject Field Pedagogy (PIL102; 02-2019)
- Teaching and Learning in Higher Education 3: Applied Analysis (PIL103; 12-2021)
- Supervision in Postgraduate Programs (PIL201; 04-2022)

b) Teaching experience

- Docent (associate professor) in physiology at the University of Gothenburg (22-01-2025)
- Over 1200 hours (since 2007), see detail below
- Level: B.Sc., M.Sc. and PhD
- Languages: English (>80%) and French (<20%)
- Main topics: Physiology, cellular biology, endocrinology, aquaculture, animal welfare, ecology, phylogeny and systematic, reproduction biology, general biology

c) Detailed teaching

Year	University	Level	Type*	Course name	Hours
2025	Gothenburg	Master	SE-LE-TU	MARBIO (MABI01) **	10
	Gothenburg	Master	LE-TU	Research skills in Biology (BIO515)	10
	Gothenburg	Master	LE-TU	Marine Blue Economy (MAR462)	26
2024	Gothenburg	Master	SE-LE-TU	MARBIO (MABI01) **	10
	Gothenburg	Master	LE-TU-PT	Marine Animal Species (BIO484) **	68
	Gothenburg	Master	LE-TU	Marine Blue Economy (MAR462)	30
	Gothenburg	Master	TU	Animal Ecophysiology (BIO560)	40
2023	Gothenburg	Master +	LE	Frontiers of Zoology (BIO095)	10
	Gothenburg	Master	SE-LE-TU	MARBIO (MABI01) **	10
	Gothenburg	Master	LE-TU-PT	Marine Animal Species (BIO484) **	50
	Gothenburg	Master	LE-TU	Marine Blue Economy (MAR462)	26
2022	Gothenburg	Master +	LE	Frontiers of Zoology (BIO095)	10
	Gothenburg	Master	SE-LE-TU	MARBIO (MABI01)	10
	Gothenburg	Master	LE-TU-PT	Marine Animal Species (BIO484)**	50
	Gothenburg	Master	LE-TU	Marine Blue Economy (MAR462)	26
2021	Gothenburg	Master	SE-LE-TU	MARBIO (MABI01)	10
	Gothenburg	Master	LE-TU-PT	Marine Animal Species (BIO484)	122
	Gothenburg	Master	LE-TU	Marine Blue Economy (MAR462)	26
2020	Gothenburg	Master	LE	Marine Animal Species (BIO484)	68
	Gothenburg	Master	LE	Marine Blue Economy (MAR462)	20
	Gothenburg	Bachelor	LE	Integrativ Biomedicine (IBM210)	7
2019	Gothenburg	Master	LE-TU-PT	Marine Animal Species (BIO484)	70
	Gothenburg	Bachelor	LE	Integrativ Biomedicine (IBM210)	19
2018	Gothenburg	Master	LE	Marine Animal Species (BIO484)	6

2017	Poitiers	Master	SE-LE	Advanced Projects in Ecology	3
2016	Poitiers	Master	PT	Génétique des Populations	12
	Poitiers	Master	LE-TU-PT	Ecophysiologie et Chronobiologie	15
	Poitiers	Bachelor	TU	Sexualité et Reproduction	6
	Poitiers	Bachelor	TU-PT	Evolution des Plans d'organisation	39
	Poitiers	Bachelor	TU-PT	Organismes et Milieux	44
	Poitiers	Master	SE-LE	Stratégies Évolutives	4
	Poitiers	Master	PT	Modeling and Statistic tools	8
	Poitiers	Master	PT	Advanced Projects in Ecology	8
	Poitiers	Master	SE	Travaux de Recherche	2
	Poitiers	Master	PT	Molecular Ecology	8
	Poitiers	Bachelor	TU-PT	Diversité du Vivant	77
2014	Mayotte	Bachelor	PT	Histologie	8
2013	Montpellier	Master	SE-LE	Ecology	8
	Nijmegen	Master +	LE	Laboratory Animal Sciences	4
	Nijmegen	Master	LE	Animal Physiology	6
	Nijmegen	Master	LE	Endocrinology	6
2012	Montpellier	Master	SE-LE	Ecology	8
	Nijmegen	Master +	LE	Laboratory Animal Sciences	4
	Nijmegen	Master	LE	Animal Physiology	6
	Nijmegen	Master	LE	Endocrinology	6
2011	Montpellier	Master	SE-LE	Ecology	8
	Nijmegen	Master +	LE	Laboratory Animal Sciences	4
	Nijmegen	Master	LE	Animal Physiology	6
	Nijmegen	Master	LE	Endocrinology	6
2010	Montpellier	Master	SE-LE	Ecology	8
2009	Montpellier	Master	SE-LE	Ecology	8
	Nijmegen	Bachelor	PT	Endocrinology	20
	Nijmegen	Bachelor	PT	Cytology-Histology	40
2008	Montpellier	Master	SE-LE	Ecology	8
	Nijmegen	Bachelor	PT	Endocrinology	20
	Nijmegen	Bachelor	PT	Cytology-Histology	40
2007	Nijmegen	Bachelor	PT	Cytology-Histology	40
				Total =	**1224**

**** SE: seminar, LE: lecture, PT: practical, TU: tutorial; **co-course leader***

d) Responsibility for planning: course leader experience:

- **Comparative Physiology of Marine Animals including Applications for Aquaculture** (BIO484, GU)
  Co-course leader since 2022. In this course, I am responsible of PBL groups, I have supervised student projects and I have given lectures on temperature, homeostasis, life cycles, aquaculture and stress starting in 2018. Since 2022, I have been co-course leader where I am responsible for

preparing the PBL groups, grading reports, ensuring the communication on Canvas between the students and the teachers, updating teaching material and organizing the two-days study visit at the Kristineberg research station. I am also responsible for preparing/correcting exams.

- **Introduction to Sustainable Production and Utilization of Marine Bioresources (**MABI01, GU) Mandatory course of the MAR-BIO master program, co-course leader since 2023. In this first module, the students from this unique Nordic master program spend one week at each of the partner university (Nord in Norway, Holár in Iceland, and Gothenburg in Sweden). Prior to each visit, they have one-week on-line teaching. My role in this module is to be responsible for the Canvas page and the on-line teaching of the Swedish part, with lectures and discussion. I further organize and accompany the students during their visit in Sweden, where they visit part of our research infrastructure and our industrial partners, to get inspiration for their future master thesis. In 2024, I was responsible for 21 students during the Swedish week. I lecture on global aquaculture, aquaculture systems and species diversification. I also organize an exercise where the students, based on their previous knowledge and the one they acquired during the course, design the 'aquaculture system of their dream' and present it to the rest of the class.

e) Pedagogical development work

- One first year university textbook (Dunod editors, collection Fluorescience)
- Development of original teaching material
- Docent lecture to be held at the University of Gothenburg (January 22 2025). Title: Fish health and welfare in recirculating aquaculture systems

f) Supervision

40 trainees (since 2007), including seven bachelor students, 28 master students, three PhD and two post-docs (see list below)

Year	University	Level	Student name	Role
2025	Gothenburg	Master	Lizeth Alcocer Arboleda	Main supervisor
2024	Hiroshima	PhD	Naoki Fujii	Guest supervisor
2024	Gothenburg	Master	Göran Thomann	Main supervisor
2024	Gothenburg	Master	Emma Johansson*	Main supervisor
2024	Gothenburg	Master	Nayomi Edirisinghe *	Secondary supervisor
2024	Gothenburg	Master	Haya Al Quood*	Main supervisor
2024	Gothenburg	Master	Maria Berger*	Main supervisor
2024	Ecole de Biologie Industrielle (Cergy)	Bachelor	Lise Brault	Main supervisor
2024	Gothenburg	Master	Amélie Marqué	Main supervisor
2024	Gothenburg	Master	Joris Claus	Main supervisor
2024	Gothenburg	Master	Fionn Stoltenberg	Main supervisor
2024	Gothenburg	PhD	Mafalda Tomás[#]	Secondary supervisor
2023	Gothenburg	Master	Dániel Kácsor	External supervisor
2023	Gothenburg	Master	Mahmudul Hasan	Main supervisor
2023	Gothenburg	Master	Md Hasibur Rahman	Main supervisor

2023	Gothenburg	Master	Ebuka Unegbu	Main supervisor
2023	Gothenburg	Master	Rebecca Bussmann	Secondary supervisor
2023	Gothenburg	Master	Kristina Kayatta[#]	External supervisor
2023	Gothenburg	Master	Joana Henze	Main supervisor
2021	Gothenburg	PhD	Mishaal Akbar[#]	Secondary supervisor
2021	Gothenburg	Postdoc	Federico Micolucci	Main supervisor
2021	Gothenburg	Master	Tamby Yateem	Main supervisor
2021	Gothenburg	Master	Mahibul Islam	Main supervisor
2020	Sorbonne (Paris)	Master	Marie Montjouridès	Main supervisor
2020	Gothenburg	Postdoc	Nedia Matusse	Main supervisor
2019	Gothenburg	Bachelor	Miguel Guerreiro	Main supervisor
2018	Gothenburg	Master	Alexander Thóren	Secondary supervisor
2018	Gothenburg	Master	Hans Sandholt	Main supervisor
2018	Gothenburg	Bachelor	Robert Morgan	Secondary supervisor
2018	Gothenburg	Bachelor	Felicia Fetscher	Main supervisor
2018	Gothenburg	Bachelor	Koen De Reus	Main supervisor
2016	Poitiers	Master	Camille Houdelet	Secondary supervisor
2014	Montpellier	Master	Laurence Azzopardi	Secondary supervisor
2012	Nijmegen	Bachelor	Tirsa van Schaik	Main supervisor
2012	Nijmegen	Master	Margot Bekhuis	Main supervisor
2011	Montpellier	Master	Yanik Yokohama	Main supervisor
2010	Montpellier	Master	Aurélie Fourneyron	Main supervisor
2010	Montpellier	Master	Gaétan Chereau	Main supervisor
2010	Nijmegen	Master	Femke Geurds	Main supervisor
2007	Nijmegen	Bachelor	Erik Ducker	Secondary supervisor

On-going supervision; [#]Quited

Outreach and information activities

- Participation in the Gothenburg science festival
  - 2024, presenting the MARTINIS project and the basic principles and component of a RAS in Norstand at the SWEMARC stand in Nordstan ('Odla fisk i en loop' ('Growing fish in a loop')
  - 2023, presenting my MARTINIS project on the main stage in Nordstan
  - 2021, ''6-ratters-smakmeny-med-hallbar-bla-sjomat', presenting my MARTINIS project, online
  - 2018, 'Forskarfika', presenting my research over a fika

- Participation in the 2024 'Prao med forskare vid Göteborgs universitet', where we present the researcher activities to high school students. I presented my work as a researcher in aquaculture and planned activities to measure water quality in RAS and glucose levels in fish plasma
- Taking part in the 2023 Upptäckarklubbens: Research-at-a-glance. Presentation of aquaculture and the work of SWEMARC to children in grades 4 and 5. Organization of a competition where the children had to guess the ingredient in the different alternative fish feed from my projects within SWEMARC

Scientific techniques

Diverse biological assays *in vitro*, radioimmunoassay's, blood physiology, histology, light and electronic microscopy, cell culture, mass spectrometry, fluorescence *in* situ hybridization, Ussing chambers, animal nutrition, animal handling, biopsies and dissections, pit-tagging, behavioral quantification

Other information

- Languages: French: mother tongue, English: bilingual, Swedish: SFI level D
- Certified to design and perform animal studies (FELASA, category C) and to work with radioactive substances.
- Driving license (B)

References

- **Prof. Kristina Snuttan Sundell**, University of Gothenburg and SWEMARC, Sweden. Leader of the FEL group and director of SWEMARC, the Swedish mariculture research center
  Email: kristina.sundell@bioenv.gu.se

- **Prof. Tomonori Kindaichi**, University of Hiroshima, Japan. Main collaborator in the MARTINIS project
  Email: tomokin@hiroshima-u.ac.jp

- **Prof. Barry Antonio Costa-Pierce**, Professor II at the Faculty of Biosciences & Aquaculture, Nord University, Norway, President/CEO of the ecological aquaculture foundation and founder of Earth Ocean Food Systems (ETHOS). Former guest professor at SWEMARC. Honorary doctor of the University of Gothenburg (2023).
  Email: bcp@oceanfoods.org