JOSÉ CERCA

PERSONALIA

Born: May 12th, 1990
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BIO

I started my career in Portugal, in a university where evolution was a minor subject (3 credits out of 180), and I was not exposed to genomics. As I was finishing a MSc in Ecology, I asked my grandparents for money to participate in the European Meeting for the Society for Evolutionary Biology (ESEB), and I was immediately drawn to evolutionary genomics, adaptive radiations, and island biology. Because the field was revolutionised by genomics, PIs were looking for PhD students with bioinformatics and genomics' expertise, and I had no network on the field. I had to apply to >30 PhD positions before getting an offer at the Natural History Museum in Oslo.

The combination of my passion for biology and the challenges I faced in my career fuel my dedication, which translates into a high-productivity (11 first-authored papers), success (>1,000,000 euros obtained in grants). However, I try to distinguish myself in being a caring and a supporting colleague. I have trained students and colleagues from ~10 different institutions, many of them without access to genomics knowledge, by keeping an open door, being positive and setting a tone of encouragement, fast e-mail responses, and teaching advanced classes in bioinformatics. I have actively sought after collaborators in regions of the world which have limited resources, and I have trained students in Nigerian, Ecuadorian, Colombian, and Guatemalan universities. I often give talks to my department, invite speakers, participate and organize social events – as I firmly believe these activities encourage collaboration, proximity, happiness and productivity.

Facing the future, I want my research to focus on the links of ecology and evolutionary genomics in adaptive radiation, genome evolution, adaptation to the Anthropocene and island biology. My **long-term** aim is to become an established evolutionary biologist and lead my own research group.

PROFESSIONAL EXPERIENCE

Jan 2023 - *pres*	**Postdoctoral Researcher** – Center for Ecological & Evolutionary Synthesis, Department of Biology, University of Oslo **PI** Prof. Kjetill S. Jakobsen **Responsibility** Analyses of genomes, and population genomics	Oslo, *Norway*
Aug 2020 – Dec 2022	**Postdoctoral Researcher** – Department of Natural History, Norwegian University of Science and Technology **Project title** DarwinPlants: Probing the genomic basis of rapid evolutionary diversification in the Galápagos daisy trees (genus *Scalesia*) **PI** Prof. Michael D. Martin **Responsibility** Analysis of differential gene expression and transcriptomic networks, phylogenomics, population genomics, genome assembly & annotation	Trondheim, *Norway*
Aug 2019 – Jul 2020	**Visiting Researcher** – Berkeley Evolab, Department of Environmental Science, Policy & Management **Project title** Genomic basis of the Hawaiian spiny-leg adaptive radiation **PI** Prof. Rosemary Gillespie **Responsibility** Whole genome re-sequencing, population genomics, genome assembly & annotation	Berkeley (CA), *USA*

EDUCATION

Dec 2015 – **5th Jun 2020 (PhD conclusion date)**	**PhD in Evolutionary Genomics and Zoology**, University of Oslo (June 5th 2020) **Thesis title** On the origins of cryptic species **Main advisor** Prof. Torsten H. Struck	Oslo, *Norway*

Sept 2012 - Jul 2014	**MSc in Evolutionary Ecology** - Specialization in research in ecology (grade: 19/20 – 'A'), University of Coimbra **Thesis title** Pollinator preferences in a generalist plant hybrid zone **Main advisor** Prof. Rubén Torices	Coimbra, *Portugal*
Sept 2008 Jul 2012	BSc in Biology (grade: 16/20 – 'A'), University of Coimbra	Coimbra, *Portugal*

MANUSCRIPTS IN A FINAL STAGE OF PREPARATION OR SUBMITTED

(4) *Invited to the 2nd round of review, Molecular Ecology* **J. Cerca,** D. D. Cotoras, C. G. Santander, J. Patiño, V. Bieker, L. Hutchins, J. Lagos-Morin, S. Kennedy, H. Krehenwinkel, E. Armstrong, J. Y. Lim, A. Rominger, J. Meier, M. Martin, M. Ravinet, D. Dimitrov, T. H. Struck, R. Gillespie Multiple paths towards repeated phenotypic evolution in the spiny-leg adaptive radiation (Tetragnatha; Hawai'i)
Contribution: Experimental design, molecular DNA sequencing, data analysis, drafting of the manuscript

(3) *Rejected from A. of Botany. In prep* B. B. Tiamiyu, **J. Cerca**, X. Zhang, H. Zhang, L. Li, J. Sun, W. Dong, T. Kuang, Y. Sun, T. Deng, H. Sun, H Wang Genomic insights into adaptation and spatial drivers of genetic structure in Sino-Japanese populations of Meehania montis-koyae (Lamiaceae)
Contribution: Training of the 1st author in genomic analyses, experimental design, revision of the manuscript

(2) *Invited to the 2nd round of review, American Journal of Botany* R. Torices, L. DeSoto, **J. Cerca**, L. Mota, A. Afonso Fruit wings accelerate germination in Anacyclus clavatus (Asteraceae)
Contribution: Experimental design, data generation, revision of the manuscript

(1) *In review, Evolution* **J. Cerca***,* A simple conceptual framework and nomenclature for studying repeated, parallel and convergent evolution
Contribution: Single author-paper

PEER REVIEWED PUBLICATIONS

Bibliometric analysis according to Google Scholar (citations), Journal Citation Reports (Impact factor; IF) and Scimago (Quartile ranking for the journal).
Statement about publishing: Science depends on taxpayers' money. We owe them that our science is free, inclusive, and that our funds do not end up in the pockets of stockholders. I therefore prioritize publishing in society-ran journals, where profits flow back to the research community, and with open access options.

Total citations **571**

I-10 index **9**

H index **9**

Total # of papers **15**

First author papers **11**

On the left column there is information on paper number and whether it is **s** = society journal, **oa** = open access, **u** = undergraduate student, **c** = correspondent author, **10** = if the paper has >10 citations, **100** if the paper has >100 citations

2023

15 c **J. Cerca** … (28 authors), R. Gillespie, M. D. Martin Evolutionary Genomics of Island Radiations; ***Trends in Ecology & Evolution***
IF (5 year) = 21.01, **Q1 (top 1%)** in Ecology, Evolution, Behavior and Systematics
Contribution: Analysis of the literature, drafting the manuscript, incorporating comments from co-authors

2022

14 oa / c **J. Cerca#** … (24 authors)…, J. H. Leebens-Mack, L. Rieseberg, M. D. Martin# The genomic basis of the plant island syndrome in Darwin's giant daisies; ***Nature Communications***
# Correspondent authors
IF (5 year) = 15.805, **Q1 (top 3%)** in Genetics and Molecular Biology (miscellaneous)
Contribution: Experimental design, data analysis, writing

13 oa **J. Cerca^**, M. V. Westbury^, O. V. Shpak, M. P. Heide-Jørgensen, Ø. Wiig, E. D. Lorenzen, C. Lydersen, K. Kovacs, L. Bachmann High genomic diversity in the endangered East Greenland-Svalbard-Barents Sea stock of bowhead whales (*Balaena mysticetus*); ***Scientific reports***
IF (5 year) = 4.38, **Q1 (top 7%)** in Multidisciplinary.
Contribution: Experimental design, data analysis

12 s /oa / c	**J. Cerca**, E. E. Armstrong, J. Vizueta, R. Fernández, D. Dimitrov, B. Petersen, S. Prost, J. Rozas, D. Petrov, R. G. Gillespie: The *Tetragnatha kauaiensis* genome sheds light on spider genome evolution; ***Genome Biology and Evolution*** **IF** (5 year) = 4.216, **Q1 (top 6%)** in Ecology, Evolution, Behvior and Systematics, **Contribution:** Experimental design, genome annotation, functional & comparative genomic analyses, writing
11	V. I. Radashevsky, V. V. Pankova, V. V. Malyar, **J. Cerca,** T. H. Struck; A review of the worldwide distribution of Marenzelleria viridis, with new records for M. viridis, M. neglecta and Marenzelleria sp. (Annelida: Spionidae); ***ZooTaxa*** **IF** (5 year) = 0.621, **Q2** in Animal Science and Zoology **Contribution:** DNA molecular work
	2021
10 c	**J. Cerca***, W. Sowersby*, B. Wong, T. Lehtonen, D. Chapple, M. Leal-Cardín, M. Barluenga^, M. Ravinet^ The role of admixture in the spread of the thick-lip ecotype in a cichlid fish radiation. ***Molecular Ecology*** * Joint first authors; ^ joint senior authors **IF** (5 year) = 6.185, **Q1 (top 3%)** in Ecology, Evolution, Behavior and Systematics **Contribution:** RADseq genomic data analysis, population genomics data analysis, writing
9 s/ oa/u / c / 10	**J. Cerca***, M. F. Maurstad*[u], N. Rochette, A. Rivera-Colón, N. Rayamajhi, J. Catchen^, T. H. Struck^ Removing the bad apples: a simple bioinformatic method to improve loci-recovery in *de novo* RADseq data for non-model organisms, ***Methods in Ecology and Evolution*** **IF** (5 year) = 6.514, **Q1 (top 2%)** in Ecology, Evolution, Behavior and Systematics *Joint first authors; ^ joint senior authors **Contribution:** Experimental design, Student supervision, RADseq genomic data analysis, writing
8 oa / c	**J. Cerca**, A. Rivera-Colón, M. Ferreira, M. Ravinet, M. Nowak, J. Catchen, T. H. Struck Incomplete lineage sorting and ancient admixture, and speciation without morphological change in ghost-worm cryptic species, ***PeerJ*** **IF** (5 year) = 2.379, **Q1 (top 12%)** in Agricultural and Biological Sciences **Contribution:** Experimental design, RADseq genomic data generation, population genomics and phylogenomics data analysis, writing
	2020
7 oa / c / 10	**J. Cerca**, C. Meyer, G. Purschke, T. H. Struck. Delimitation of cryptic species reduces the geographical range of marine ghost-worms (*Stygocapitella*; Annelida, Sedentaria), ***Molecular Phylogenetics and Evolution*** **IF** (5 year) = 4.201, **Q1 (top 6%)** in Ecology, Evolution, Behavior and Systematics **Contribution:** Experimental design, fieldwork, wet-laboratory work and sequencing, data analysis, writing
6 s/oa /c / 10	**J. Cerca**, C. Meyer, D. Stateczny, D. Siemon, J. Wegbrod, G. Purschke, D. Dimitrov, T. H. Struck. Deceleration of morphological evolution in a cryptic species complex and its links to paleontological stasis, ***Evolution*** **IF** (5 year) = 4.201, **Q1 (top 5%)** in Ecology, Evolution, Behavior and Systematics **Contribution:** Experimental design, fieldwork, wet-laboratory work and sequencing, data analysis, writing
	2019
5 s / c	**J. Cerca**, A. Agudo, S. Castro, A. Afonso, I. Alvarez, R. Torices. Fitness benefits and costs of floral advertising traits: insights from rayed and rayless phenotypes of *Anacyclus* (Asteraceae), ***American Journal of Botany*** **IF** (5 year) = 3.06, **Q1 (top 13%)** in Ecology, Evolution, Behavior and Systematics, **Q1 (top 10%)** in Plant Science, **AltMetric** = 7 (top 25% of all research outputs) **Contribution**: Experimental design, fieldwork, ecological data-analysis in R, writing
	2018
4 c / 10	**J. Cerca**, G. Purschke, T. H. Struck; Marine connectivity dynamics: Clarifying cosmopolitan distributions of marine interstitial invertebrates and the meiofauna paradox. ***Marine Biology*** **IF** (5 year) = 2.2, **Q1 (top 18%)** in Aquatic sciences, **Q1 (top 23%)** in Ecology, Evolution, Behaviour and Systematics, **Q1 (top 20%)** in Ecology **Contribution:** Lead author, data-scoring of 1000+ publications, writing

3 **100**	T. H. Struck, J. Feder, M. Bendiksby, S. Birkeland, **J. Cerca**, V. Gussarov, S. Kistenich, K. Larsson, L.H. Liow, M. Nowak, B Stedje, L. Bachmann, D. Dimitrov; 2018 Finding evolutionary processess hidden in cryptic species. ***Trends in Ecology & Evolution*** **IF** (5 year) = 19.3, **Q1 (top 1%)** in Ecology, Evolution, Behavior and Systematics **Contribution:** weekly discussions with 1st author, contribution to the literature review, writing

2014-2013 (undergraduate researcher)

2 s / 10	A. Afonso, S. Castro, J. Loureiro, L. Mota, **J. Cerca**, R. Torices (2014). The effects of achene type and germination time on plant performance in the heterocarpic *Anacyclus clavatus* (Asteraceae). ***American Journal of Botany*** **IF** (5 year) = 3.06, **Q1 (top 13%)** in Ecology, Evolution, Behavior and Systematics, **Q1 (top 10%)** in Plant Science **Contribution:** Experimental design, data collection and writing
1 10	J. Loureiro, M. Castro, **J. Cerca**, L. Mota, R. Torices (2013) Genome size variation and polyploidy incidence in the alpine flora from Spain. ***Anales del Jardín Botánico de Madrid*** **IF** (5 year) = 0.74 **Contribution:** Field collection, flow-cytometry analysis, laboratory work and writing

AWARDS

2021	Best PhD/MSc paper award by the Natural History Museum in Oslo (~500 €)
2019	Best poster award, XV EMPSEB (European Meeting of PhD Students in Evolutionary Biology; ~500 €)
2018	Science communication Instagram Photo Competition #phdlifemn (9,7-inch, 32 GB iPad)
2017	Best poster award, NORBIS annual meeting (500 NOK; ~ 52.5 €)
2016	Best poster and speed presentation award, Forbio annual meeting (5 000 NOK; ~ 525 €)
2014	4th best individual speaker at national level - Portuguese National Debating Competition
2014	"Top 3% student" of the Faculty for Sciences and Technology, University of Coimbra (~2.500 €)

FUNDING

2022	EMBO travel fellowship to visit Prof. Bent Emerson (Spain)	76,000 NOK (7,500 €)
2021	DIKU - NORPART-2021/10475 Exchanges between Norway and Latin America to facilitating excellent joint graduate education in biodiversity genomics (co-leader with Michael D. Martin)	~8,400,000 NOK (817,021€)
2021	«Adaptation in the Anthropocene: the Iago Sparrow genome as a key to understand adaptation to anthropogenic environments», **Peder Sather** (PIs: José Cerca NTNU & Rauri Bowie, UC Berkeley)	~225,000 NOK (22,000 €)
2021	«Ecological speciation, polyploidy, and the rewiring of transcriptomic networks: untangling the drivers for genomic novelty and genomic functionality», **Norwegian Research Council**	1,691,000 NOK (165,000 €)
2019	«Genomics of Convergent Invertebrate Morphology» **Peder Sather Grant** (under R. Gillespie and T. H. Struck)	~200,000 NOK (22,000 €)
2018	«On the origin of cryptic species: Insights from the Stygocapitella subterranea species complex» **European Society of Evolutionary Biology** – Godfrey Hewitt Award	~15,000 NOK (1,230 €)
2019-16	**12 funded grants** (including travel grants, student-oriented funding and stipends) as part of my PhD project	~ 200,000 NOK (20,000 €)

FUNDING AS THIRD PARTY

2023	«Ecological speciation at a continental scale: Developing a genomic framework to disentangle the Eurasian Crossbills (*Loxia* spp.) radiation» (PI: Loïs Rancilhac, Uppsala) **Role** Population and comparative genomics data analysis	360,000 SEK
2022	«Using avian comparative genomics to investigate adaptation to extreme arid environments» **BBSRC International Partnerships Funding** (PI: Mark Ravinet, U. of Nottingham) **Role** Population and comparative genomics data analysis	19,100 £
2020	«Urban evolution in Californian Black widow spiders» **California Conservation Genomics Project** (PI: Rosemary Gillespie, UC Berkeley) **Role** Bioinformatician (experimental design, data analysis)	50,000 US$

JOURNAL COVERS

1 Evolution, January 2020, for "Deceleration of morphological evolution in a cryptic species complex and its links to paleontological stasis"

NON-PEER REVIEWED PUBLICATIONS (INCL. BOOK CHAPTERS AND RESPONSES)

5 T.H. Struck, **J. Cerca** (2020) Extant Cryptic Species as Systems to Understand Macro-Evolutionary Stasis; Proceedings of the Systematics Association, special volume on Cryptic Species

Contribution: Writing, literature survey

4 T.H. Struck, **J. Cerca** (2019) Evolutionary Significance of Cryptic Species; ***Encyclopaedia of Life Sciences***
Contribution: Writing, figure design

3 T. H. Struck, J. Feder, M. Bendiksby, S. Birkeland, **J. Cerca**, V. Gussarov, S. Kistenich, K. Larsson, L.H. Liow, M. Nowak, B Stedje, L. Bachmann, D. Dimitrov (2018) Cryptic Species – More Than Terminological Chaos: A Reply to Heethoff ***Trends in Ecology & Evolution***; 33 (5): 310-312
Contribution: Writing

2 J. Loureiro, M. Castro, **J. M. de Oliveira**, P. Antunes, J. Canhoto, S. Castro; Aplicações da Citometria de Fluxo em Horticultura (2012). ***Revista da Associação Portuguesa de Horticultura*** *(In Portuguese)*
Contribution: Flow cytometry data generation and writing

1 S. Perkins, J. Perkins, **J.C. de Oliveira**, M. Castro, S. Castro, J. Loureiro; Weighing in: Discovering the ploidy of hybrid elepidote rhododendrons (2012). ***Rhododendrons, Camellias and Magnolias*** 34-48.
Contribution: Flow-cytometry data generation and writing

INVITED ORAL COMMUNICATIONS (INTERNATIONAL CONFERENCES)

x - declined

2024 XX International Botanical Congress (Spain, hosted by Prof.s Luis Valente and Jairo Patiño)
2024 SICB 2024 (invited by Elizabeth Carlen)
2023*x* Plant & Animal Genome (PAG; San Diego), Asteraceae Genome Evolution (hosted by Prof. Jennifer Mandel)
2022*x* Plant & Animal Genome (PAG; San Diego), Asteraceae Genome Evolution (hosted by Prof. Jennifer Mandel)
2017 BioSyst.EU Meeting. Gothenburg, Sweden (audience of ~60, hosted by Prof. Hugo de Boer)

INVITED ORAL COMMUNICATIONS (DEPT SEMINARS)

x – declined; **Breakdown: 14 talks in 7 different countries (Denmark, Iceland, Ecuador, Norway, Portugal, UK, Switzerland, Sweden).**

2023 University of Bern (Switzerland, hosted by Prof. Katie Peichel, upcomming)
2023 U. of Nottingham, School of Life Sciences (UK, audience of 30, hosted by Dr Mark Ravinet)
2022 UC Davis, Plant Biology Department (California, USA, audience of 20, hosted by Prof. Neelima Sinha)
2022 UC Berkeley, Botany Lunch Talk (California, USA, audience of 20, hosted by Prof. Bruce Baldwin)
2022 Tiputini Biodiversity Station (Ecuador, audience of 20, hosted by Gabriela Guijarro)
2022 Charles Darwin Foundation (Galápagos-Ecuador, audience of 15, hosted by Dr. Patricia Jaramillo)
2022 University San Francisco de Quito (Ecuador, audience of 30, hosted by Dr. Rivas-Torres)
2022 Norwegian U. of Life Sciences, CiGeNe seminar (audience of 40, hosted by Dr. Marie Saitou)
2022 University of Iceland (audience of 20, hosted by Quentin Horta-Lacueva)
2021 Late Lunch Talk, University of Oslo (Norway, audience of 50, hosted by Oliver Kersten)
2021 University of Hawai'i at Hilo (USA, audience of 40, hosted by Prof. Matt Knope)
2021 The International Compositae Alliance (TICAtalks; audience of 50, hosted by TICA)
2021 ITQB, U. Nova de Lisboa (Portugal , audience of 70, hosted by Prof. Rita Abranches)
2019 California Academy of Sciences (USA, audience of 15, hosted by Dr. Athena Lam)
2019*x* Evolutionary Genomics Seminars, Centre for GeoGenetics (Natural History Museum of Denmark)
2018 Department of organismal biology, Uppsala University (Sweden; audience of 30)

ORAL COMMUNICATIONS

Breakdown: 3 talks in Internal Conferences (ESEB, EMPSEB, GIGA), 3 online, and 7 National Conferences (UK, Norway, Portugal)

2023 PopGroup 56, Queen Mary University of London (UK)
2022 NORBIS - Norwegian Conference for Bioinformatics (Norway)
2022 Meeting of the European Society for Evolutionary Biology (ESEB)
2022 Online Plant Genome Conference
2020 Virtual Genomics Social Hour – Long read sequencing & Genome Assembly

2020 Virtual Genomics Social Hour – RADseq & population genetics
2019 European Meeting of PhD Students in Evolutionary Biology. Pedrogão, Portugal (EMPSEB)
2019 Forbio annual meeting. Trondheim, Norway
2018 GIGA (Global Invertebrate Genomics Alliance). Curaçao, Dutch Antilles
2018 Forbio annual meeting. Tromsø, Norway
2017 Young Systematics Forum. Natural History Museum, England
2017 ForBio annual meeting. Bergen, Norway
2015 IV Congreso Ibérico de Ecología. Coimbra, Portugal

RESEARCH STAYS (> 3 MONTHS)

2022 **Rivas-Torres Lab** at University San Francisco de Quito (Ecuador; 3 months)
Purpose: Network

2021-22 Nov-Feb **Galápagos Science Centre** (S. Cristóbal, Galápagos) & **Charles Darwin Foundation** (S. Cruz, Galápagos)
Purpose: Acquire knowledge in Galápagos Flora through fieldwork and collaboration

2019 Jan-Mar **Blaxter lab** at the University of Edinburgh (Scotland; 3 months);
Purpose: Acquire knowledge in genome assembly and improve my bioinformatics

2018 May-Aug **Catchen lab** at the University of Illinois at Urbana Champaign (USA; 4 months);
Purpose: Acquire knowledge in RADseq data analyses, population genomics and bioinformatics

COMMISIONS OF TRUST

2023 **Grant reviewer** for the **Irish Research Council** (1 proposal reviewed)
2018-19 **Grant reviewer** for the Graduate Research Excellence Grants - R.C. Lewontin Early Award of the Society of Study of Evolution (33 proposals reviewed each year)
2017-18 **Grant reviewer** for the "Marie Skłodowska-Curie Fellowships training program and potential hosts" workshop of the Norwegian Research School in Biosystematics (FORBIO) (total of 5 proposals reviewed)

SERVICE TO COMMUNITY

2023 **Conference organization** "Norwegian Biodiversity & Genomics Conference 2023" (~120 participants)
2022 **Lead of the ESEB symposium 'Repeated and parallel evolution'**. Invited speakers: (Dr. Joana Meier – Sanger Institute; Dr. Sean Stankowsky – IST Austria; Dr. Gabriel Jamie – U. of Cambridge)
2022 **Co-lead on a special edition on 'adaptive and non-adaptive Radiations'** to the Cold Spring Harbor Special Series: Coordination of 4 papers, lead of a flagship paper
2021 **Three consulting sessions** on RADseq & population genomics (Physalia research school)
2021 **Genomics social hour, island adaptive radiations** (invited speakers: Dr. Christine Parent – U. of Idaho, Dr. Matthew Knope – U. of Hawai'i, Dr. Anthony Geneva – Rutgers U.; 100 participants)
2020 **Genomics social hour, urban evolution** (invited speakers: Dr. Mark Ravinet – U. of Nottingham, Dr. Marta Szulkin – U. of Warsaw, Dr. Kristin Winchell – Washington U. in St. Louis; 30 participants)
2018-19 **Member** of the **Graduate Student Advisory Committee** of the **Society of Study of Evolution**
2016 **Symposium organization** "Elephant in the room: Evolutionary and Ecological implications of cryptic speciation", University of Oslo (~60 participants)
2013-14 **Treasurer**, Debating Union, University of Coimbra
2013-14 **Student representative**, Master's in Ecology, University of Coimbra
2011-12 **Committee member** of the Ecological Group, University of Coimbra
2009-11 **Vice-president**, Biology Student's Union, University of Coimbra

INSTITUTIONAL RESPONSABILITIES

2023-25 1,690 hours (25% of my Postdoc) dedicated to **duty work** (Teaching and project coordination duties)
2023 **Hiring committee** for 1 PhD and 1 Postdoc (University of Oslo)
2023 **Co-organization of the journal club** "Is evolution predictable?" (~15 participants; University of Oslo)
2017 **Intellectual, graphic design** and **writing input** on the ITN Plant.ID – Molecular Evolution of Plants (funded ca. 4.000.000 €)
2015-19 1,690 hours (25% of my PhD) dedicated to **duty work** (Teaching and curatorial duties)

TEACHING EXPERIENCE

Breakdown: Teaching assistant in 6 courses (2 for MSc/PhD-level, 4 for PhD-level), Lecturer in 8 courses (2 BSc-level, 1 MSc-level, 5 PhD-level), Course organizer and lecturer in 4 (4 PhD-level)

2023 **Scientific writing** (***Lecturer,*** 1 lecture on island biogeography, 15 students, PhD level, U. Oslo)
2023 **Evolution** (***Lecturer*** 4 lectures on biogeography, speciation, and gene flow; 20 students, BSc/MSc level, U. Oslo)
2022 **Speciation Genomics** (***Teaching assistant***, PhD level class; 35 students)
2022 **Introduction to Bioinformatics** (***Course design & lecturer,*** PhD level class; 65 students)
2021 **Oh-know: Online hosted-Kmer non-model organism workshop** (***Course design & lecturer***; PhD level class; 50 students)
2021 **Introduction to Bioinformatics** (***Course design & lecturer***; PhD level class 32 students)
2021 **Biogeography** (***Lecturer*** in island biogeography, 30 students, BSc level, NTNU)
2019 **Physalia: Rad-Seq data analysis** (***Teaching assistant***; PhD level class; 30 students)
2019 **ForBio Workshop: Proposal writing** (***Course design & lecturer***; PhD level class; 25 students)
2018 **Introduction to Bioinformatics for Biosystematics** (***Teaching assistant***; PhD level class; 33 students)
2018 **Evolution and systematics of the Animal kingdom** (***Lecturer***; MSc level class; 5 students)
2017 **High Throughput Sequencing technologies and bioinformatics** (***Teaching assistant*** in the **Transcriptomics** module; MSc & PhD level class; 40 students)
2017 **Phylogenomics** (***Teaching assistant*** in the **R lesson**; PhD level class; 25 students)
2016-18 **Molecular Evolution** (***Teaching assistant***, ***lecturer***; MSc & PhD class; 36 students)

PHD STUDENT SUPERVISION

2022-25	Jaime Morin ("Phylogenomics and population genomics of *Pyrrhura* parrots uing ancient and modern DNA")	Co-supervisor (NTNU)

NON-OFFICIAL PHD STUDENT SUPERVISION / CONTRIBUTION TO THESIS

2021-22	Freddy Gutierrez (UC Berkeley, USA)	Experimental design, genomics training Genomics of Adaptive radiation
2022-	Bashir Tiamiyu (U of Illorin, Nigeria)	Genomics training – Plant biogeography genomics
2020-22	Rosa Jiménez (U San Carlos of Guatemala, Guatemala)	Genomics training – Bird evolutionary genomics
2022-	Francesco Zapelloni (Universitat de les Illes Balears, Spain)	Genomics training – Invertebrate genomics
2020	Leke Hutchins (UC Berkeley, USA)	Molecular DNA lab training – Metabarcoding of Hawaiian Arthropods

BSC / MSC STUDENT SUPERVISION

Breakdown: 12 students from 5 universities in 3 different countries (Ecuador, Norway, USA)

2022	**BSc** Mishell Vasquez Morales (Asteraceae genomics, tbd)	Co-advisor (U. Of Hawai'i, Hilo, USA)
2022	**BSc** Pavel Énriquez ("Chloroplast phylogenetics of the *Scalesia* radiation")	Main advisor (ESPE University, Ecuador)
2021-22	**BSc honors' student:** Heidi Yang ("Evolution of transposable elements in the *Tetragnatha* radiation")	Main advisor (UC Berkeley, USA)
2020-22	**MSc** Nina Casillas ("Genomic basis for stripe morphs in European adders")	Co-advisor (NTNU)
2020-21	**MSc** Adel Dehkordi ("Population genomic signatures of glaciation in *Stygocapitella zecae* and *S. westheidei*")	Co-supervisor (University of Oslo)
2020-21	**MSc** Jaime Morin Lagos ("A comprehensive mitogenome phylogeny of the avian tribe Arini with emphasis in *Ara* species")	Co-supervisor (NTNU)
2019	**BSc** Kenzie Weiss-Mercord("Parallel evolution, Convergence and adaptation in the *Tetragnatha* spider adaptive radiation")	Main advisor (UC Berkeley)
2019	**BSc** Shi Lin ("Parallel evolution, Convergence and adaptation in the *Tetragnatha* spider adaptive radiation")	Main advisor (UC Berkeley)
2019-21	**BSc** Marius Maurstad ("Removing the poisoned apples: a simple method to improve RADseq inference")	Main advisor (University of Oslo)

2019-21	**MSc** Stian Helsem ("How old are these worms? Dating the Annelid phylogenetic tree")	Co- advisor (University of Oslo)
2018-20	**MSc** Astrid Bang ("Metabarcoding of Kinorhyncha from the Oslo Fjord")	Co- advisor (University of Oslo)

PEER REVIEW CONTRIBUTION

Statement about reviewing: Science depends on taxpayers' money. We owe them that our science is free, inclusive, and that our funds do not end up in the pockets of stockholders. I therefore prioritize reviewing society-ran journals, where profits flow back to the research community. **s** = society journal; **#** = total for that journal

2023 (1 paper)	Review for Journal of Biogeography (s; 1)
2022 (7 papers)	Review for IBIS (s; 1); Molecular Ecology Resources (1); Molecular Biology & Evolution (s; 3); Systematic biology (s; 2)
2021 (10papers)	Systematic Biology (**s**; 1); Genome Biology and Evolution (**s**; 4); Journal of Heredity (**s**; 1); Journal of Animal Ecology (**s**; 1); Journal of Evolutionary Biology (**s**; 2) ; Molecular Ecology (1)
2020 (5 papers)	PNAS (1); Heredity (**s**; 1); Molecular Phylogenetics and Evolution (1); BMC Evolutionary Biology (1); Journal of Animal Ecology (**s**; 1)
2019	Heredity (**s**; 1); Systematics and Biodiversity (1)
2018	Zoologica Scripta (**s**; 1); Evolution (**s**; 1)

SCIENCE COMMUNICATION

2021 -	YouTuber in *PT*: Channel on data visualization (~50 followers) YouTuber in *EN*: Channel on genomic data analyses (~50 followers)	2 videos >10 videos
2018 -	5 contributions to local high schools and talks to biology undergraduates about scientific careers and challenges	2 talks at high-schools, 3 talks towards undergraduates
2020	**J. Cerca**, A. Johnsen, T. H. Struck, L. Bachmann: Naturhistoriske samlinger i den molekylære æraen: En kostbar hobby eller en bærebjelke for moderne forskning? Naturen	Article about Natural History Collections in the journal 'Naturen'
2017	Appointed as a blogger in De Rerum Natura http://dererummundi.blogspot.com/	Portugal's most read science blog
2015-18	Several contributions to the Portuguese Society of Education and Promotion of Evolution (NEDE-APBE) and Forskning.no (Norway)	
2016	Chief Judge in the Debating competition "Brave New World" (focusing on scientific topics)	British Parliamentary Debate

RESEARCH EXPEDITIONS

2022	Cabo Verde, islands of Santo Antão, São Vicente, Santiago, Fogo and Rombos (uninhabited islets) (***Main organizer*** – 5 weeks; Collection of birds)
2021	Galápagos, islands of Floreana, Santa Cruz (uninhabited islets) (***Main organizer*** – 2 weeks; Collection of plants)
2018	Volchanets, Far-East Russia (***Main organizer*** – 2 weeks; Collection and identification of interstitial invertebrates)
2018	Sylt, Germany (***Main organizer, alone in the field*** – 2 weeks; Collection of Jaw-worms (Gnathostomulida) as part of a collaboration)
2017	Bodø, Tromsø, Norway (***Main organizer, alone in the field*** – 4 weeks; Collection and identification of interstitial invertebrates)
2016	Massachusets, Maine and Washington State, USA (***Main organizer, alone in the field*** – 5 weeks; Collection and identification of interstitial invertebrates)
2016	Plymouth, London, Cardiff, UK (***Main organizer, alone in the field*** – 4 weeks; Collection and identification of interstitial invertebrates)
2016	Roscoff, France (***participant*** – 2 weeks; Collection and identification of interstitial invertebrates)
2013	Andalucía, Spain (***participant*** – 5 weeks; Observing and capturing pollinators for reference collection)