JOSÉ CERCA

PERSONALIA

Born: May 12th, 1990 **Citizenship:** Portuguese

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BIO & VISION

As an evolutionary biologist, I am intrigued by the intersection of ecology and evolutionary biology, as well as the evolution of genomes. I leverage natural experiments found in archipelagos to identify and quantify evolutionary processes, as they provide unparalleled opportunities to connect ecological niches with evolution. To understand genome evolution, I utilize genomic tools, such as population-level data and comparative genomics data.

While I have a successful track record with 11 first-authored papers and over 1,000,000 euros obtained in grants, I prioritize being a supportive and empathetic colleague. I have trained students and colleagues from around 10 different institutions, including those without prior knowledge of genomics, by maintaining an open-door/zoom policy, fostering a positive atmosphere, responding promptly to emails, and teaching advanced bioinformatics classes. Furthermore, I have actively sought out collaborations in regions with limited resources and trained students in universities in Nigeria, Ecuador, Colombia, and Guatemala. I frequently present talks to my department, invite speakers, and participate in organizing social events, as I believe these activities promote collaboration, camaraderie, contentment, and productivity.

My ultimate goal is to establish myself as a prominent evolutionary biologist and lead my own research group.

PROFESSIONAL EXPERIENCE

Jan 2023 - <i>pres</i>	Postdoctoral Researcher - Center for Ecological & Evolutionary Synthesis,	Oslo,
	Department of Biology, University of Oslo	Norway
	PI Prof. Kjetill S. Jakobsen	
	Responsibility Analyses of genomes, and population genomics	
Aug 2020 – Dec	Postdoctoral Researcher - Department of Natural History, Norwegian	Trondheim,
2022	University of Science and Technology	Norway
	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 &	
A 2010 I1	annotation	Dl1
Aug 2019 – Jul 2020	Visiting Researcher – Berkeley Evolab, Department of Environmental Science, Policy & Management	Berkeley (CA), <i>USA</i>
2020	Project title Genomic basis of the Hawaiian spiny-leg adaptive radiation	(CA), USA
	PI Prof. Rosemary Gillespie	
	Responsibility Whole genome re-sequencing, population genomics,	
	genome assembly & annotation	
	Serionic moduloty of minomators	
EDUCATION		
Dec 2015 – <u>5th Jun</u>	PhD in Evolutionary Genomics and Zoology, University of Oslo (June 5th	Oslo,
<u>2020</u>	2020)	Norway
(PhD conclusion	Thesis title On the origins of cryptic species	
<u>date)</u>	Main advisor Prof. Torsten H. Struck	
Sept 2012 - Jul	MSc in Evolutionary Ecology - Specialization in research in ecology (grade:	Coimbra,
2014	19/20 – 'A'), University of Coimbra	Portugal
	Thesis title Pollinator preferences in a generalist plant hybrid zone	

Main advisor Prof. Rubén Torices

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) <u>Invited to the 2nd round of review, American Journal of Botany</u> 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) <u>In review, Molecular Ecology J. Cerca.</u> 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 relies on the support of taxpayers' funds. As researchers, we have a responsibility to ensure that our work is freely accessible, inclusive, and that funds are not diverted to benefit stockholders. To achieve this, I prioritize publishing in society-led journals, where any profits are reinvested in the research community, and opt for open access options whenever possible.

Total citations **582**I-10 index **9**H index **9**Total # of papers **15**# First author papers **11**

The left column below provides information on the paper number and its corresponding classification, where "s" denotes a society journal publication, "oa" denotes an open access publication, "u" denotes a paper with an undergraduate student as an author, "c" denotes a paper where the author is the correspondent author, "10" denotes a paper with over 10 citations, and "100" denotes a paper with over 100 citations.

2023

- 15 J. Cerca ... (28 authors), R. Gillespie, M. D. Martin Evolutionary Genomics of Island Radiations; *Trends*
- c 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 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*
 - c # Correspondent authors

IF (5 year) = 15.805, **Q1 (top 3%)** in Genetics and Molecular Biology (miscellaneous)

Contribution Experimental design, data analysis, writing

- 13 J. Cerca^, M. V. Westbury^, O. V. Shpak, M. P. Heide-Jørgensen, Ø. Wiig, E. D. Lorenzen, C. Lydersen,
- oa 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 J. Cerca, E. E. Armstrong, J. Vizueta, R. Fernández, D. Dimitrov, B. Petersen, S. Prost, J. Rozas, D.
- s /oa Petrov, R. G. Gillespie: The Tetragnatha kauaiensis genome sheds light on spider genome evolution; Genome
 - / c 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 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 W. Sowersby*, J. Cerca*, 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 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 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, PeerI 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 I. 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 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 I. 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 IF (5 year) = 3.06, Q1 (top 13%) in Ecology, Evolution, Behavior and Systematics Contribution Experimental design, fieldwork, ecological data-analysis in R, writing 2018 I. Cerca, G. Purschke, T. H. Struck; Marine connectivity dynamics: Clarifying cosmopolitan distributions

- 4
- of marine interstitial invertebrates and the meiofauna paradox. Marine Biology c /
- 10 IF (5 year) = 2.2, Q1 (top 20%) in Ecology

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5 s/c

Contribution Lead author, data-scoring of 1000+ publications, writing

- T. H. Struck, J. Feder, M. Bendiksby, S. Birkeland, J. Cerca, V. Gussarov, S. Kistenich, K. Larsson, L.H. 3
- 100 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)

- A. Afonso, S. Castro, J. Loureiro, L. Mota, <u>I. Cerca</u>, R. Torices (2014). The effects of achene type and
- s / germination time on plant performance in the heterocarpic *Anacyclus clavatus* (Asteraceae). *American*
- 10 **Journal of Botany**

IF (5 year) = 3.06, **Q1 (top 13%)** in Ecology, Evolution, Behavior and Systematics **Contribution** Experimental design, data collection and writing

- 1 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	~8,400,000 NOK (817,021€)
	Latin America to facilitating excellent joint graduate education in biodiversity genomics (co-leader with Michael D. Martin)	
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	1,691,000 NOK (165,000 €)
	functionality», Norwegian Research Council	
2019	«Genomics of Convergent Invertebrate Morphology» Peder Sather	~200,000 NOK (22,000 €)
	Grant (under R. Gillespie and T. H. Struck)	
2018	«On the origin of cryptic species: Insights from the Stygocapitella	~15,000 NOK (1,230 €)
	subterranea species complex» European Society of Evolutionary	
	Biology – Godfrey Hewitt Award	
2019-	12 funded grants (including travel grants, student-oriented funding	~ 200,000 NOK (20,000 €)
16	and stipends) as part of my PhD project	

FUNDING AS THIRD PARTY

2023	«Earlagian anguistian at a continental anda Davidonina a conomia framavyouk to	360,000 SEK
	«Ecological speciation at a continental scale: Developing a genomic framework to disentangle the Eurasian Crossbills (<i>Loxia</i> spp.) radiation» (PI: Loïs Rancilhac, Uppsala)	000,000 0227
	Role Population and comparative genomics data analysis	
2022	«Using avian comparative genomics to investigate adaptation to extreme arid	19,100 €
	environments» BBSRC International Partnerships Funding (PI: Mark Ravinet, U. of	
	Nottingham)	
	Role Population and comparative genomics data analysis	
2020	«Urban evolution in Californian Black widow spiders» California Conservation	50,000 US\$
	Genomics Project (PI: Rosemary Gillespie, UC Berkeley)	•
	Role Bioinformatician (experimental design, data analysis)	

JOURNAL COVERS

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)

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, <u>J. Cerca</u> (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
- 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
- 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)
- 2023x Plant & Animal Genome (San Diego), Asteraceae Genome Evolution (hosted by Prof. Jennifer Mandel)
- 2022x Plant & Animal Genome (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)
- 2019x 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). Curação, 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 Galápagos Science Centre (S. Cristóbal, Galápagos) & Charles Darwin Foundation (S. Cruz, 2021-22 Nov-Feb Galápagos) Purpose: Acquire knowledge in Galápagos Flora through fieldwork and collaboration 2019 Blaxter lab at the University of Edinburgh (Scotland; 3 months); Purpose: Acquire knowledge in genome assembly and improve my bioinformatics Jan-Mar 2018 Catchen lab at the University of Illinois at Urbana Champaign (USA; 4 months); Purpose: Acquire knowledge in RADseq data analyses, population genomics and bioinformatics May-Aug **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** Conference organization "Norwegian Biodiversity & Genomics Conference 2023" (~120 2023 Lead of the ESEB symposium 'Repeated and parallel evolution'. Invited speakers: (Dr. Joana 2022 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) Genomics social hour, island adaptive radiations (invited speakers: Dr. Christine Parent – U. of 2021 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 Student representative, Master's in Ecology, University of Coimbra 2013-14 Committee member of the Ecological Group, University of Coimbra 2011-12 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 2 Postdocs (University of Oslo) 2023 Co-organization of the journal club "Is evolution predictable?" (~15 participants; University of Oslo) Intellectual, graphic design and writing input on the ITN Plant.ID – Molecular Evolution of Plants 2017 (funded ca. 4.000.000 €) 1,690 hours (25% of my PhD) dedicated to **duty work** (Teaching and curatorial duties) 2015-19 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-
 - 2023 Scientific writing (Lecturer, 1 lecture on island biogeography, 15 students, PhD level, U. Oslo)
 - Evolution (Lecturer 4 lectures on biogeography, speciation, and gene flow; 20 students, BSc/MSc 2023 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 (<i>Teaching assistant</i> ; 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 (<i>Teaching assistant</i> in the R lesson ; PhD level class; 25 students)

PHD STUDENT SUPERVISION

2016-18

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

NON-OFFICIAL PHD STUDENT SUPERVISION / CONTRIBUTION TO THESIS

Molecular Evolution (Teaching assistant, lecturer, MSc & PhD class; 36 students)

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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 <i>Scalesia</i> radiation")	Main advisor (ESPE University, Ecuador)
2021-22	BSc honors' student: Heidi Yang ("Evolution of transposable elements in the <i>Tetragnatha</i> 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	Co-supervisor
	Stygocapitella zecae and S. westheide?')	(University of Oslo)
2020-21	MSc Jaime Morin Lagos ("A comprehensive mitogenome phylogeny of the avian tribe Arini with emphasis in <i>Ara</i> species")	Co-supervisor (NTNU)
2019	BSc Kenzie Weiss-Mercord("Parallel evolution, Convergence and adaptation in the <i>Tetragnatha</i> spider adaptive radiation")	Main advisor (UC Berkeley)
2019	BSc Shi Lin ("Parallel evolution, Convergence and adaptation in the <i>Tetragnatha</i> 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 Review for Heredity (s; 1), Journal of Biogeography (s; 1), Genome Research (1) (3 papers)

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

SCIENCE COMMUNICATION

Zoologica Scripta (s; 1); Evolution (s; 1)

2018

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

RESEARCH EXPEDITIONS

2022	Cabo Verde, islands of Santo Antão, São Vicente, Santiago, Fogo and Rombos (uninhabited islets) (Main
	<i>organizer</i> – 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)
- 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)