

Curriculum Vitae

Patrick Leopold Jambura MSc BSc

Address

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Education

- Since 2018 PhD student at the Department of Palaeontology, University of Vienna
Topic: Evolutionary history of lamniform sharks (Chondrichthyes; Elasmobranchii)
- 2012-2017 MSc Student of Zoology at the University of Vienna, Austria
Thesis: Evolutionary significance of tooth mineralization and development in carcharhiniform sharks, with special focus on the rare snaggletooth shark, *Hemipristis elongata* (Carcharhiniformes: Hemigaleidae)
- 2008-2012 BSc Student of Biology at the University of Vienna, Austria
Thesis: Vehicles on a Turkish nesting beach for loggerhead sea turtles

Professional Experience

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|--------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 2012 - November to December (2016)
2013 | ARGE Papageienschutz, animal care attendant
Technical office for biology Gaviria, Technical Assistant |
| 2014 - September | Korallionlab Lhaviyanni Atoll, Research Officer |

2015 - January to October	Natural History Museum Vienna, Research Assistant
2016 - December to March (2019)	House of the sea, Aqua Terra Zoo
Since July 2015	Dive-Company Assistant Instructor
Since March 2019	Technical Assistant at the University of Vienna

Field experience

2011 - July to September	Field trip to the nesting grounds of the loggerhead sea turtle <i>Caretta caretta</i> in (Fethiye, Turkey)
2012 - January	DNA Barcoding
2012 - April	Field course in recent and fossil coral reefs (El Qoseir, Egypt)
2012 - July	Field trip to Rovinj (Croatia)
2014- July	Ecological field methods in Biodiversity Research at Danube-Auen National Park, Lower Austria
2014 - September	Field work in marine sediments (Lhaviyani atoll, Maldives)

Skills

Language:	German (mother tongue) English (fluent, 8 years of education in high school, regular use) Latin (4 years of education in high school)
Software:	Adobe (Photoshop, Illustrator, Indesign) Amira 3D Software MS Office (Word, Excel, Access, PowerPoint) R (programming language) SkyScan Software Package (DataViewer, CTVOX) Mesquite, PAST, PAUP, tpsUtil, tpsDig, tpsRelw, MrBayes, SPSS
Additional skills:	PADI Assistant Instructor Driving license Salt- and Freshwater aquaristics (sharks, bony fish, invertebrates)

Publications

- 2017: Steger J, Jambura P, Mähner B, Zuschin M. Diversity, size frequency distribution and trophic structure of the macromollusc fauna of Vavvaru Island (Faadhippolhu Atoll, northern Maldives). *Ann Naturhist Mus Wien*. 2017.119a:17-54.
- 2018: Jambura PL, Pfaff C, Underwood CJ, Ward DJ, Kriwet J. Tooth mineralization and histology patterns in extinct and extant snaggletooth sharks, *Hemipristis* (Carcharhiniformes, Hemigaleidae) - evolutionary significance or ecological adaptation?. *PLoS ONE*. 2018. DOI:10.1371/journal.pone.0200951.
- 2019: Jambura PL, Kindlimann R, López-Romero F, Marramà G, Pfaff C, Stumpf S, Türtcher J, Underwood CJ, Ward DJ, Kriwet J. Micro-computed tomography imaging reveals the development of a unique tooth mineralization pattern in mackerel sharks (Chondrichthyes; Lamniformes) in deep time. *Scientific Reports*. 2019. DOI:10.1038/s41598-019-46081-3.
- Jambura et al. Evolutionary trajectories of tooth histology patterns in modern sharks (Chondrichthyes, Elasmobranchii). *Journal of Anatomy*. In Review.

Published Abstracts

- 2018: Jambura PL, Pfaff C, Türtcher J, Underwood CJ, Ward DJ, Kriwet J. The phylogenetic relevance of the unique tooth histology in lamniform sharks (Elasmobranchii). *In: Pfaff, C., & Kriwet, J. (eds): 19. Jahrestagung Gesellschaft für Biologische Systematik, Abstract volume: 22; Verlag Dr. Friedrich Pfeil, Munich.*
- Türtcher J, Pfaff C, Jambura PL, Kriwet J. Using tooth histology to distinguish morphologically similar shark teeth. *In: Pfaff, C., Zimmermann, D. & Kriwet, J. (eds): 19. Jahrestagung Gesellschaft für Biologische Systematik, Abstract volume: 51; Verlag Dr. Friedrich Pfeil, Munich.*
- 2019: Jambura PL, Türtcher J, Kindlimann R, Marramà G, Metscher B, Pfaff C, Stumpf S, Underwood CJ, Ward DJ, Kriwet J. Evolutionary Trends and the Phylogenetic Relevance of Tooth Mineralization Patterns in Sharks (Chondrichthyes; Elasmobranchii). *Journal of Morphology*. **280**, 145. 2019.
- Türtcher J, Jambura PL, López-Romero FA, Marramà G, Kindlimann R, Kriwet J. The origin and evolution of the tiger shark genus *Galeocerdo* (Elasmobranchii, Carcharhiniformes) revisited. *Journal of Morphology*. **280**, 231. 2019.

Academic Grants and Awards

January 2013	University of Vienna Performance Scholarship
January 2014	University of Vienna Performance Scholarship
July 2018	University of Vienna Open Access Funding
February 2019	University of Vienna Open Access Funding

Membership in Scientific Associations

ÖPG (Austrian palaeontological society)

The MECO (Mediterranean Elasmobranchs Citizen Observations) Project

Conference and Symposia

- 21st Annual meeting and scientific conference of the European Elasmobranch Association, Amsterdam, Netherlands (2017)
Poster: Tooth mineralization and histology in the rare snaggletooth shark, *Hemipristis elongata* (Hemigaleidae; Carcharhiniformes) - evolutionary significance or an ecological adaptation? (co-authors: C. Pfaff, C.J. Underwood, D.J. Ward, J. Kriwet).
- 19th annual meeting of the society of biological systematics, Vienna, Austria (2018)
Talk: The phylogenetic relevance of the unique tooth histology in lamniform sharks (Elasmobranchii) (co-authors: C. Pfaff, J. Türtcher, C.J. Underwood, D.J. Ward, J. Kriwet).
- 45th Meeting of the German working group "Vertebrate Palaeontology", Magdeburg, Germany (2018)
Talk: Tooth histology in basal neoselachian sharks and its implications on tooth morphology and feeding ecology in extant groups. (co-authors: C. Pfaff, J. Türtcher, J. Kriwet).
- 22nd Annual meeting and scientific conference of the European Elasmobranch Association, Peniche, Portugal (2018)
Talk: The potential fate of the thresher shark - a fossil tale of an alopiid like shark. (co-authors: F. Romero-López, J. Kriwet).
- 46th Meeting of the German working group "Vertebrate Palaeontology", Vienna, Austria (2019)

Poster: Micro-CT imaging reveals the origin of the lamniform sharks. (co-authors: R. Kindlimann, G. Marramà, C. Pfaff, S. Stumpf, J. Türtcher, C.J. Underwood, D.J. Ward, J. Kriwet).

Chair of Session I and IV.

- 12th International Congress of Vertebrate Morphology, Prague, Czech Republic (2019)
Talk: Evolutionary Trends and the Phylogenetic Relevance of Tooth Mineralization Patterns in Sharks (Chondrichthyes; Elasmobranchii). (co-authors: J. Türtcher, R. Kindlimann, G. Marramà, B. Metscher, C. Pfaff, S. Stumpf, C.J. Underwood, D.J. Ward, J. Kriwet).
- 23rd Annual meeting and scientific conference of the European Elasmobranch Association, Rende, Italy (2019)
Talk: On the origin of the great white shark *Carcharodon carcharias* (co-authors: J. Türtcher, F. Romero-López, C. Pimiento, J. Kriwet).
Poster: Micro-CT imaging reveals the origin of the lamniform sharks. (co-authors: R. Kindlimann, G. Marramà, C. Pfaff, S. Stumpf, J. Türtcher, C.J. Underwood, D.J. Ward, J. Kriwet).

Public Outreach:

- Public relations work at the local dive club, i.e. blogging about biological fun facts, giving talks about coral reef health, the bleaching event at the great barrier reef, responsible diving in reefs etc. (**2016**).
- Co-organizer of the event "Als der Riesenhai Megalodon durch Wien schwamm" ("About the time when Megalodon swam through Vienna") at the Lange Nacht der Forschung (Long night of science) (**April 2018**).
- Press release "Fossilhai: Rätsel um einzigartige Zahnstruktur gelöst" ("The snaggletooth shark: mystery about its unique tooth structure has been solved") in Science APA, DiePresse, Salzburger Nachrichten, Tiroler Tageszeitung, and others (**August 2018**).
- Invited Talk at מפגש סחוסי ביותר (Conference of Sharks in Israel) "Evolution of Body Shapes in Sharks (and Rays)" (**January 2019**).
- Press release "The ancestor of the great white shark" in UPI, Daily Mail, Science APA, Scientific American Brasil, phys.org, Yonhap News, and others (**July 2019**).
- Press release "Der Urahn des Weißen Hais" in Science APA, scienceORF, Kurier, DiePresse, DerStandard, sciencexx, Focus, and others (**July 2019**).