

MOHAMAD BAZZI

Evolutionary Biologist (Ph.D)

I am a postdoctoral researcher at the University of Zurich, Switzerland. My research mainly focuses on developing and applying quantitative methods to investigate phenotypic diversity in vertebrate animals. I incorporate both high-dimensional morphometric techniques and interactive data visualization to reconstruct patterns of variation and co-variation. My academic research have been revolved around studying the origins of modern shark biodiversity, as well as the origins of shark morphological, behavioural, and ecological specializations. My research draws primarily on anatomical, fossil, and molecular data from across the shark crown group, and palaeontological evidence from its proximal stem.



EDUCATION

2021
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2016

- **PhD. Candidate, Organismal and Evolutionary Biology**
Uppsala University 📍 Uppsala, Sweden
 - Thesis: 100 million years of shark macroevolution: A morphometric dive into tooth shape diversity
 - Supervisor: Professor Per E. Ahlberg
 - Opponent: Professor Matt Friedman
 - Committee members: Laura Porro, Göran Arnqvist, Gilles Cuny
- **M.S., Earth Sciences**
Uppsala University 📍 Uppsala, Sweden
- **B.S., Earth Sciences**
Uppsala University 📍 Uppsala, Sweden

2016
|
2014

2014
|
2010

RESEARCH EXPERIENCE

2022
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2021

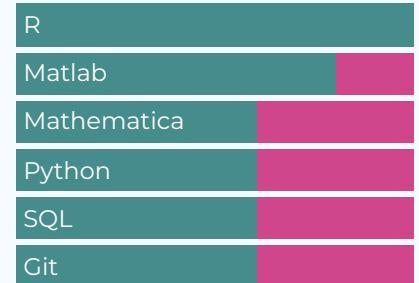
- **Postdoctoral researcher**
University of Zürich 📍 Zürich, Switzerland
 - Led the development and implementation of geometric morphometric and statistical analyses of shark cranial ecomorphology
 - Developed statistical models to predict ancient turtle micro-habitats
 - Statistically analysed and visualized growth-data of White sharks and distant relatives.
 - Implemented interpolation and ordination-based methods to investigate the dietary spectrum of ancient kangaroos
- **Visiting PhD student**
University of New England (Campione Palaeobiology Lab) 📍 Armidale, New South Wales, Australia

2019
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2019

CONTACT

- ✉ mohamad.bazzi@uzh.ch
📞 +46 738508592
👤 [Github](#)
✉ [Researchgate](#)
👤 [Linkedin](#)

PROGRAMMING SKILLS



As an early career scientist I aspire to improve my skills within a collaborative environment where I can learn from my peers

EDUCATION AND TRAINING

2021
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2021

- **Science substitute teacher**
International English School

 Uppsala, Sweden

- Upper middle school

2016
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2012

- **Museum host**
Museum of Evolution, Palaeontology and mineralogy

 Uppsala, Sweden

TEACHING EXPERIENCE

2021
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2016

- **Animal Structure and Function (UU-17505)**
Department of Organismal Biology

 Uppsala, Sweden

- B.Sc. Course
- TA and lectured
- Dissection Labs of Vertebrates
- Covered comparative biology and histology

2021
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2017

- **Evolutionary Patterns (UU-17521)**
Department of Organismal Biology

 Uppsala, Sweden

- M.Sc. Course
- TA and lectured
- Topics covered from geometric morphometrics, multivariate statistics and R programming
- Lectures and computer morphometric labs using R

2021
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2018

- **Origin and Evolution of the Vertebrates (UU-18705)**
Department of Organismal Biology

 Uppsala, Sweden

- M.Sc. Course
- TA and lectured
- Covered shark biology, ecology and evolution, geometric morphometrics, multivariate statistics and R programming
- Designed a series of lab practicals on geometric morphometrics, data visualization, and statistical design and reporting

2021
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2021

- **Marine Megafauna in deep time (BIO263)**
Paläontologisches Institut und Museum

 Zürich, Switzerland

- B.Sc. Course
- Guest lecturer
- Covered biodiversity and evolution of cartilaginous fishes

To me, teaching is an integral and necessary part of what it means to be a researcher. I adopt a dialogue approach in my teaching. This allows me to constantly self-evaluate and at the same time engage more directly with my students

BOOKMARK LEADERSHIP EXPERIENCE

2020
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2017

Thesis Supervision Sweden & Tunisia

- Johan Lilja (Undergraduate Thesis, co-supervised with Dr. Nicolas Campione)
- Jacob Wester (Undergraduate Thesis, co-supervised with Dr. Nicolas Campione)
- Holger Jacobson (Master-Level Directed Studies Course)
- Mohamed Messai (Master Thesis, co-supervised with Professor Ferid Dhahri)

2017
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2015

Peer Supervision Sweden

- Fredrik Söderblom (Undergraduate Thesis, 2015)
- Alexander Paxinos (Graduate, Master Thesis, 2017)
- Jeroen van Dijk (Master-Level Directed Studies Course, 2017)

BOOKMARK AWARDS

2021
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2021

E och KG Lennanders stipendium Sweden

- \$32 756
- Research grant

2021
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2021

Helge Ax:son Johnsons stiftelse Sweden

- \$2 075
- Travel grant

2021
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2021

Forschungskredit Postdoc Award Switzerland

- \$84 397
- Research grant

2020
|
2020

Tullbergs f biol forskn Sweden

- \$9 827
- Research grant

2020
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2020

Johanssons, Inez Sweden

- \$9 135
- Research grant

2019
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2019

Department of Organismal Biology, UU Sweden

- \$1 092
- Travel grant

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- A vertical timeline on the left side of the chart shows years from 2016 to 2019, with each year marked by a vertical line and the years 2016, 2017, 2018, and 2019 positioned above their respective lines.
- | Year | Grant Details | Location |
|------|---|----------|
| 2019 | Helge Ax:son Johnsons stiftelse
\$2 074
· Research grant | Sweden |
| 2019 | Anna Maria Lundin stipendium
\$4 258
· Travel grant | Sweden |
| 2019 | Johanssons, Inez
\$10 373
· Research grant | Sweden |
| 2018 | Helge Ax:son Johnsons stiftelse
\$2 184
· Travel grant | Sweden |
| 2018 | Johanssons, Inez
\$8 189
· Research grant | Sweden |
| 2018 | Anna Maria Lundin stipendium
\$1 611
· Travel grant | Sweden |
| 2017 | Kungliga Vetenskapsakademien, Stiftelsen J. A Letterstedts resestipendiefond, The Royal Swedish Academy of Sciences
\$2 839
· Research grant | Sweden |
| 2017 | Johanssons, Inez
\$10 574
· Research grant | Sweden |
| 2017 | Helge Ax:son Johnsons stiftelse
\$1 965
· Travel grant | Sweden |
| 2016 | Bjurzons resestipendium
\$1 083
· Travel grant | Sweden |

SELECTED PRESS (ABOUT)

- 2021 | 2021
- **Decolonizing the Hunt for Dinosaurs and Other Fossils.**
The New York Times

2021 | 2021

 - **Lesson of the Day: 'Decolonizing the Hunt for Dinosaurs and Other Fossils'.**
The New York Times

2021 | 2021

 - **Oförklarat hajdöd för 19 miljoner år sedan oroar forskare.**
SVT Nyheter
 - Story on shark extinction 19 million years ago (<https://www.science.org/doi/10.1126/science.aaz3549>)

2018 | 2018

 - **Mass Shark Extinction Triggered by Dinosaur-Killing Asteroid.**
National Geographic

2018 | 2018

 - **Modern Shark Family Diversified After Dinosaur-Killing Impact 66 Million-Years Ago.**
International Business Times

SELECTED PRESS (BY)

- 2021 | 2021
- **How fussy eating and changing environments led to the diversity of sharks today (and spelled the end for megalodon).**
The Conversation
 - Authored with Dr Nicolás E. Campione

2018 | 2018

 - **Mass extinction 66 million years ago paved the way for modern shark communities).**
ScienceNordic
 - Authored with Professor Per Erik Ahlberg

SELECTED PUBLICATIONS

- 2022 | 2022
- **Austral polar plesiosaurs reveal environmental interplay in ancient marine reptile evolution**
Under-Review (copy available upon request)
 - Research article
 - Benjamin P. Kear, Mohamad Bazzi, Nicolás E. Campione, Daniel Madzia, Sven Sachs, Johan Lindgren and Michael S. Y. Lee

2022
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2022

- **Cold-adapted Cretaceous polar turtle reveals a trans-Antarctic radiation of stem testudines**
Under-Review (copy available upon request)
 - Research article
 - Benjamin P. Kear, Márton Rabi, Martin Kundrát, Michael S. Y. Lee, Daniel Snitting, Peter Trussler, Mohamad Bazzi, Barbara E. Wagstaff, Dorris E. Seegets-Villiers, Thomas H. Rich, Patricia Vickers-Rich and Lesley Kool

2021
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2021

- **Endocast and Bony Labyrinth of a Devonian “Placoderm” Challenges Stem Gnathostome Phylogeny.**
Current Biology
 - Research article
 - You-an Zhu, Sam Giles, Gavin C. Young, Yuzhi Hu, Mohamad Bazzi, Per E. Ahlberg, Min Zhu and Jing Lu

2021
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2021

- **Tooth morphology elucidates shark evolution across the end-Cretaceous mass extinction.**
PLOS Biology
 - Research article
 - Mohamad Bazzi, Nicolás E. Campione, Per E. Ahlberg, Henning Blom and Benjamin P. Kear

2021
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2021

- **Feeding ecology has shaped the evolution of modern sharks.**
Current Biology
 - Research article
 - Mohamad Bazzi, Nicolás E. Campione, Benjamin P. Kear, Catalina Pimiento and Per E. Ahlberg

2021
|
2021

- **Southern higher-latitude lamniform sharks track mid-Cretaceous environmental change.**
Gondwana Research
 - Research article
 - Mohamad Bazzi, Benjamin P. Kear and Mikael Siversson

2019
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2019

- **Reassessment of a large lamniform shark from the Upper Cretaceous (Santonian) of Italy.**
Cretaceous Research
 - Research article
 - Gabriele Larocca Conte, Federico Fanti, Enrico Trevisani, Paolo Guaschi, Roberto Barbieri and Mohamad Bazzi

2018
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2018

- **Static dental disparity and morphological turnover in sharks across the end-Cretaceous mass extinction.**
Current Biology
 - Research article
 - Mohamad Bazzi, Benjamin P. Kear, Henning Blom, Per E. Ahlberg and Nicolás E. Campione

- 2016 | 2016
- **Late Cretaceous (Campanian) actinopterygian fishes from the Kristianstad Basin of southern Sweden.**
Geological Society, London, Special Publications
 - Book chapter
 - Mohamad Bazzi, Elisabeth Einarsson and Benjamin P. Kear
 - **Late Triassic capitosaurian remains from Svalbard and the palaeobiogeographical context of Scandinavian Arctic temnospondyls.**
Geological Society, London, Special Publications
 - Book chapter
 - Benjamin P. Kear, Stephen F. Poropat and Mohamad Bazzi
 - **Late Cretaceous dinosaurian remains from the Kristianstad Basin of southern Sweden.**
Geological Society, London, Special Publications
 - Book chapter
 - Stephen F. Poropat, Elisabeth Einarsson, Johan Lindgren, Mohamad Bazzi, Clarence Lagerstrom and Benjamin P. Kear

PEER REVIEW SERVICE

- 2021 | 2018
- **Peer Review Service**
Journals
 - Norwegian Journal of Geology
 - Acta Palaeontologica Polonica
 - Current Biology
 - Paleobiology
 - Alcheringa

INVITED ACADEMIC TALKS

- 2021 | 2021
- **University of Arts, Crafts and Design**
Stockholm, Sweden
 - Host: Konstfack
 - Artist talk with guests Bochra Taboubi and Dr. Mohamad Bazzi
 - **University of New England, Armidale**
New South Wales, Australia
 - Host: Dr. Nicolás E. Campione
 - **Dipartimento di Scienze Biologiche, Geologiche e Ambientali**
Bologna, Italy
 - Host: Dr. Federico Fanti



SYNERGISTIC ACTIVITY

2019
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2019

- **Darwin Day**
Stockholm, Sweden
 - Public Outreach
- **SciFest - the Science Festival (Uppsala University)**
Uppsala, Sweden
 - Public Outreach
- **Annual Earth Science Day (swe, Geologins Dag)**
Uppsala, Sweden
 - Public Outreach

2015
|
2012



FIELD EXPERIENCE

2021
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2020

- **Fieldwork at Hakel, Byblos, Lebanon**
Expedition leader
 - Locality age: Cenomanian-Turonian, Cretaceous

2020
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2020

- **Fieldwork at Gafsa Basin, Tunisia**
Expedition leader
 - Locality age: Ypresian, Eocene

2018
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2017

- **Fieldwork at Grande Prairie, Alberta, Canada**
Crew
 - Locality age: Campanian, Late Cretaceous

2017
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2017

- **Fieldwork at Kalbarri, Western Australia**
Crew
 - Locality age: Albian-Cenomanian, Cretaceous

2012
|
2011

- **Fieldwork at Åsen, Kristianstad Basin, Southern Sweden**
Crew
 - Locality age: Campanian, Cretaceous



GRAPHICS DESIGN

- **Software**
CorelDraw, Adobe Photoshop & Illustrator



ANCILLARY COURSES & CERTIFICATES

2019
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2019

- **Academic Teacher Training Course**
Uppsala University 📍 Uppsala, Sweden
· 7.5 ECTS

2019
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2019

- **Generalised linear (mixed) (GLMM), nonlinear (NLGLM) and general additive models (mixed) (GAMM)**
PR Statistics 📍 Glasgow, Scotland
· 3.0 ECTS

2017
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2017

- **Scientific Writing**
Uppsala University 📍 Uppsala, Sweden
· 2.0 ECTS

2011
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2010

- **Archeology**
Uppsala University 📍 Uppsala, Sweden
· 60 ECTS