

Amalia P. M. Bastos

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Citizenships: Portugal, Brazil

Residency: New Zealand

EMPLOYMENT

- 2022 **Adjunct Lecturer, University of California San Diego**
Department of Cognitive Sciences
- 2022 **Postdoctoral Scholar, University of California San Diego**
Department of Cognitive Sciences, Comparative Cognition Lab
Advisor: Prof. Federico Rossano
- 2021 – 2022 **Postdoctoral Research Fellow, The University of Auckland**
School of Computer Science, Strong AI Lab
Advisors: Prof. Michael Whitbrock & Dr. Alex Taylor

EDUCATION

- 2017 – 2021 **PhD in Psychology, The University of Auckland**
Thesis: Behaviour and Complex Cognition in Kea (*Nestor notabilis*)
Advisor: Dr. Alex Taylor
Funded through a John Templeton Foundation grant.
- 2013 – 2016 **BA Honours in Biological Sciences, Oxford University (First Class)**
Thesis: Novelty and play in Goffin's cockatoos: Is there an object-play equivalent of the Coolidge effect?
Advisor: Prof. Alex Kacelnik. Studied under a full CNPq scholarship.

PUBLICATIONS

Peer-Reviewed Journal Articles

*Denotes equal authorship.

- Smith, G. E.*, **Bastos, A. P. M.***, Chodorow, M., Taylor, A. H., Pepperberg, I. M. (2022). Contrafreeloading in kea (*Nestor notabilis*) in comparison to grey parrots (*Psittacus erithacus*). *Scientific Reports*, 12, 17415. DOI: 10.1038/s41598-022-21370-6
- Taylor, A. H., **Bastos, A. P. M.**, Brown, R. L., Allen, C. (2022) The signature-testing approach to mapping biological and artificial intelligences. *Trends in Cognitive Sciences*, 26(9): 738-750. DOI: 10.1016/j.tics.2022.06.002.
- Bastos, A. P. M.**, Nelson, X. J., & Taylor, A. H. (2022) From the lab to the wild: How can captive studies aid the conservation of kea (*Nestor notabilis*)? *Current Opinion in Behavioral Sciences*, 45, 101131. DOI: 10.1016/j.cobeha.2022.101131.
- Bastos, A. P. M.**, Wood, P. M., & Taylor, A. H. (2021) Are parrots naïve realists? Kea behave as if the real and virtual worlds are continuous. *Biology Letters*, 17(9), 20210298. DOI: 10.1098/rsbl.2021.0298
- Bastos, A. P. M.***, Horváth, K.*, Webb, J., Wood, P. M., & Taylor, A. H. (2021) Self-care tooling innovation in a disabled kea (*Nestor notabilis*). *Scientific Reports*, 11, 18035. DOI:10.1038/s41598-021-97086-w
- Bastos, A. P. M.**, Wood, P. M., & Taylor, A. H. (2021) Kea (*Nestor notabilis*) fail a loose-string connectivity task. *Scientific Reports*, 11, 15492. DOI: 10.1038/s41598-021-94879-x

- Bastos, A. P. M.,** Neilands, P., Hassall, R., Lim, B. C., & Taylor, A. H. (2021) Dogs mentally represent jealousy-inducing social interactions. *Psychological Science*, 32(5): 646-654. DOI: 10.1177/0956797620979149
- Bastos, A. P. M.,** & Taylor, A. H. (2020) Macphail's null hypothesis of vertebrate intelligence: Insights from avian cognition. *Frontiers in Psychology*, 11, 1692. DOI: 10.3389/fpsyg.2020.01692
- Bastos, A. P. M.,** & Taylor, A. H. (2020) Kea show three signatures of domain-general statistical inference. *Nature Communications*, 11, 828. DOI: 10.1038/s41467-020-14695-1
- Neilands, P., Claessens, S., Ren, I., Hassall, R., **Bastos, A. P. M.,** & Taylor, A. H. (2020) Contagious yawning is not a signal of empathy: no evidence of familiarity, gender, or prosociality biases in dogs. *Proceedings of the Royal Society B*, 287, 20192236. DOI: 10.1098/rspb.2019.2236
- Neilands, P., Hassall, R., Derks, F., **Bastos, A. P. M.,** & Taylor, A. H. (2020) Watching eyes do not stop dogs stealing food: evidence against a general risk-aversion hypothesis for the watching-eye effect. *Scientific Reports*, 10, 1153. DOI: 10.1038/s41598-020-58210-4
- Bastos, A. P. M.** & Taylor, A. H. (2019) Kea (*Nestor notabilis*) represent object trajectory and identity. *Scientific Reports*, 9, 19759. DOI: 10.1038/s41598-019-56380-4
- Heaney, M., **Bastos, A. P. M.,** Gray, R. D., & Taylor, A. H. (2019) Are kea prosocial? *Ethology*, 126(2), 175–183. DOI: 10.1111/eth.12944

SELECTED AWARDS & ACHIEVEMENTS

- 2022 **ERC Consolidator Grant** (*named senior postdoctoral fellow, PI: Dr. Alex Taylor*)
European Research Council, value: €2,051,921
- 2022 **10th Most Downloaded Paper in Scientific Reports Ecology Collection 2021**
For: “*Self-care tooling innovation in a disabled kea (Nestor Notabilis)*”
- 2021 **Faculty of Science Strategic Initiative PhD Output Award**
The University of Auckland, value: NZD\$4,000
- 2021 **Early Career Collaboration Enhancement Award**
Diverse Intelligences Summer Institute, value: US\$5,000
- 2019 **Diverse Intelligences Summer Institute Alumnus Fellowship**
UCLA, value: US\$4,000
- 2018 **Diverse Intelligences Summer Institute Fellowship**
UCLA, value: US\$2,830
- 2013 **Full CNPq Undergraduate Scholarship**
University of Oxford / CNPq, value: £116,000

TEACHING EXPERIENCE

- SUM 2022 **COGSCI 13: Cognition in the Wild**, Instructor (*fully virtual course*)
University of California San Diego
- SPR 2022 **COGSCI 142: Animal Communication**, Instructor
University of California San Diego
- 2018 **BIOSCI 337: Animal Behaviour**, Graduate Teaching Assistant
The University of Auckland
- 2018 **BIOSCI 207: Adaptive Form and Function**, Graduate Teaching Assistant
The University of Auckland

Sept 2022	Petminded Online Community*. “The Science Behind Button Teaching” [Workshop]
July 2022	Joseph Moore Museum of Earlham College, Richmond IN, USA. “If I Could Talk to the Animals” [Invited Talk]
Nov 2021	Kinds of Intelligence 3*. “Kea show three signatures of domain-general inference.” [Workshop]
Oct 2021	Department of Cognitive Science, University of California San Diego*. “Behaviour and complex cognition in kea parrots.” [Invited Talk]
Oct 2021	Royal Forest and Bird Protection Society of New Zealand*. “What do we know about kea intelligence and how can we protect them?” [Invited Talk]
Sept 2021	School of Biological Sciences Seminar Series, University of Canterbury, NZ. “The cognitive abilities of New Zealand’s alpine parrot.” [Invited Seminar]
July 2021	CogSci 2021: Comparative Cognition - Animal Minds*. “Kea show three signatures of domain-general inference.” [Poster]
July 2021	Canine Science Forum 2021*. “Dogs mentally represent jealousy-inducing social interactions.” [Poster]
April 2021	28th Annual International Conference on Comparative Cognition*. “Kea show three signatures of domain-general statistical inference.”
Mar 2021	Department of Conservation Kea Workshop hosted at Willowbank Wildlife Reserve, Canterbury, NZ. “Behaviour, cognition, and conservation of kea.” [Invited Talk]
Sept 2020	ASSAB 2020 Conference*. “Kea show three signatures of domain-general statistical inference.”
July 2019	Diverse Intelligences Grantee Summit, University of St. Andrews, Scotland, UK. “Evolutionary aesthetics? Visual preferences in kea.” [Invited Talk]
July 2019	Diverse Intelligences Summer Institute (DISI), University of St. Andrews, Scotland, UK. “What makes us click?”
July 2019	DISI, University of St. Andrews, Scotland, UK. “Smartphones and information foraging.”
Aug 2018	DISI, University of St. Andrews, Scotland, UK. “Beauty and the beast: Aesthetic preferences in nonhuman animals.”

SELECTED WORKSHOPS & COURSES ATTENDED

2021	Kinds of Intelligence Programme Leverhulme Centre for the Future of Intelligence; University of Cambridge
2021	Representing the world in the developing mind: From objects to context Central European University Summer Course
2021	Evolution of Normativity Workshop

SELECTED MEDIA COVERAGE

2021	The Times , 29 September: <i>Endangered kea parrots learn to use touchscreen computers</i>
2021	Australian Geographic , 11 September: <i>Meet Bruce, the disabled kea who practices ‘self care’</i>
2021	The New York Times , 10 September: <i>Bruce Is a Parrot With a Broken Beak. So He Invented a Tool.</i>

- 2021 **The Guardian**, 10 September: *'He has adapted': Bruce the disabled New Zealand parrot uses tools for preening*
- 2021 **IFL Science**, 12 April: *The mere thought of you petting another dog may make your dog jealous*
- 2021 **New Zealand Herald**, 08 April: *Pooch pride: Yes, dogs do get jealous, NZ study shows*
- 2021 **BBC Two, Chris Packham's Animal Einsteins**, 21 February: *Masterminds*
- 2020 **TVNZ1 Sunday**, 05 April: *Kea, Kaitiaki*
- 2020 **The Times**, 05 March: *Parrots understand probability*
- 2020 **The Guardian**, 03 March: *Study finds parrots weigh up probabilities to make decisions*
- 2020 **Forbes**, 03 March: *Parrots Make Predictions Based on Statistical Probabilities*
- 2018 **New Zealand Geographic**, May/June: *Birds of Play*

THESIS & RESEARCH MENTORSHIP

Visiting Postgraduate Scholars

- 2020 **Kata Horváth**, Campus Mundi Scholarship, Eötvös Loránd University
- 2019 – 2020 **Gabriela Venable**, Yale Robert C. Bates Fellowship, Yale University
- 2019 **Amey Zhang**, Dartmouth Reynolds Fellowship, Dartmouth University

Undergraduate and Masters' Students

- 2020 – 2021 **Lisa Mulser**, The University of Auckland [Secondary Supervisor]
Summer Scholar: *Human performance in non-verbal intuitive statistics tasks*
- 2020 **Marieke van den Berg**, HAS University of Applied Sciences
Honours Thesis: *Do Kea Have Aesthetic Preferences?*
- 2020 **Martin Dessart**, La Faculté des Sciences de la Vie, Université de Strasbourg
Master's Thesis: *Effects of the Warble Call on Optimism in Kea (Nestor notabilis)*
- 2019 **Rosalie Molin**, Licence Frontières du Vivant, Université Paris Descartes
Honours Thesis: *Statistical Inference in the Kea (Nestor notabilis)*
- 2017 – 2018 **Byung Lim**, School of Psychology, The University of Auckland
Honours Thesis: *A Signature-Testing Approach of Jealousy in Dogs*

OTHER SELECTED RESEARCH & MANAGEMENT EXPERIENCE

- June 2022 **Fellowship Appointment Consultant**
CleverPet, Inc. (Leo Trottier, CEO)
- 2021 **Cognitive Science Consultant**
CleverPet, Inc. (Leo Trottier, CEO)
- 2018 – 2020 **Research Network Co-Founder**
Evolution Research at Auckland, The University of Auckland, NZ
- 2018 – 2019 **Research Group Manager** (Prof. Quentin D. Atkinson)
Language and Cultural Evolution Group, The University of Auckland, NZ
- 2017 – 2020 **Research Assistant and Lab Coordinator** (Dr. Alex H. Taylor)
Animal Minds Lab, The University of Auckland, NZ
- 2016 **Visiting Student** (Prof. Alex Kacelnik and Dr. Alice Auersperg)
The Goffin Lab, University of Vienna, Austria

PROFESSIONAL SERVICE

Publons ID: <https://publons.com/researcher/1551758/amalia-bastos>

Grant Reviewer: Mind Science Foundation Tom Slick Research Awards in Consciousness

Journal Reviewer: Animal Cognition, Behaviour, Current Zoology, Animal Behavior and Cognition, Topics in Cognitive Science, Notornis, PeerJ

OTHER SKILLS & EXPERIENCE

Languages	English (fluent); Portuguese (fluent); Spanish (read fluently, speak, and write with basic competence); French (read with basic competence).
Translation	Professional translation and proof-reading services of scientific manuscripts. Examples, 10.1371/journal.pmed.0040305 & 10.1093/acrefore/9780190632366.013.37
Computing	Office (all); Adobe: Bridge, Illustrator, Lightroom, Photoshop, Premiere Pro; statistical analyses in JASP and R; basic website design in HTML and CSS.
Others	Award-winning photographer specialising in wildlife and landscape imagery, with internationally published work. Portfolio: www.amaliabastos.com