

## **Dr. Meredith Root-Bernstein**

[mrootbernstein@gmail.com](mailto:mrootbernstein@gmail.com)

**Nationality:** American

**Languages:** English (native)  
Spanish, French, Italian (professional fluency)  
Portuguese (basic speaking, good comprehension)

### **Academic Positions**

2020- CNRS research scientist (CR)

Musée National d'Histoire Naturelle, Paris, France.

2019- 2021 ECOS-Sud project non-titular visiting researcher

Musée de l'Homme, Paris, France.

2019- present. Affiliated post-doctoral researcher.

Center of Applied Ecology and Sustainability (CAPES), Santiago, Chile

2017-2019 Marie-Curie FP7 COFUND Agreenskills Post Doctoral Fellow

UMR SAD-APT (Sciences for Action and Development- Activities, Products, Territories), Concepts team, National Institute for Agricultural Research (INRA), AgroParisTech, University Paris-Saclay, Paris/ Grignon, France

2016, Aug-Nov. Invited visiting researcher

AURA (Aarhus University Research on the Anthropocene), Department of Bioscience, Aarhus University, Aarhus, Denmark.

2015- present Affiliated Researcher

Institute for Ecology and Biodiversity, Santiago, Chile

2015, Oct-Dec. Invited visiting researcher

Musée National d'Histoire Naturelle, Paris, France

2014-2016 Post Doctoral Researcher

AURA (Aarhus University Research on the Anthropocene), Department of Bioscience, Aarhus University, Aarhus, Denmark.

2013-2014 Career Development Fund Research Fellow

School of Geography and the Environment, Oxford University, Oxford, UK

2012-2015 Post Doctoral Research Fellow

Department of Ecology, Pontificia Universidad Católica de Chile, Santiago, Chile

### **Education**

2019-2020 Diploma in research and experiment in art

École national d'art, Paris, France

2008- 2012 Ph.D. with Maximum Distinction

Ecology Department, Pontifical Catholic University of Chile

- 2010 April-June Visiting student  
Department of Anthropology, Durham University, UK
- 2007-2008 M.Sc. with Distinction in Biodiversity, Conservation and Management  
School of Geography and the Environment, Oxford University
- 2004-2008 M.Res. (Masters by Research)  
Department of Zoology, Oxford University
- 2000-2004 A.B. Independent Concentration in Biolinguistics (interdisciplinary major by special application)  
Princeton University

### **Other Qualifications**

- 2019-2020 HDR (habilitation to direct research), Sciences du Végétale, Université Paris Sud
- 2018, Qualified (to teach as a lecturer) in CNU section 20, “Anthropologie biologique, ethnologie, préhistoire.” (Biological anthropology, ethnology and prehistory)
- 2018, Qualified (to teach as lecturer) in CNU section 67, “Biologie des populations et écologie” (Population biology and ecology)

### **Research Profile**

I am an ethnobiologist, translational ecologist and conservationist, with an interest in degradation and restoration ecology, ethnography of human-environment relationships, governance and policy. I focus on anthropogenic and marginal habitats, mediterranean-climate and semi-arid areas.

### **Funded Research Projects for which I am P.I.**

- 2018-2020. Co-PI with Dr. Colin Hoag, Smith College. “Livestock Production, Environmental Change, and Climate Adaptation in the Global South: Comparative Interdisciplinary Research in Mountain Rangelands of Chile and Lesotho” FACE Foundation/ Thomas Jefferson Fund/ Make Our Planet Great Again, 20,000 USD
2017. “Forming a parabiologist network to monitor rare frogs in Chile” National Geographic Society, 13,211 USD.
- 2017-2019. “Improving conservation in agricultural landscapes: Can we close the Value-Action Gap?” Funding from Marie-Curie FP7 COFUND Agreenskills programme, INRA, private sources.
- 2013-2016. “Proyecto REGenera.” Study of guanaco *Lama guanicoe*- *Acacia caven* animal-plant interaction under guanaco reintroduction to “espinal” habitat, central Chile. Private funding, approximately 80,000 USD.
- 2012-2015. “Linking functional diversity and ecosystem services in espinal and matorral habitats in central Chile”. Funded by FONDECYT (Chile), aprox. 30,000 USD.

### **Funded Research Projects in which I am a named research team member**

- 2019-2021. ECOS-Sur/Sud Chile-France cooperation grant. “Ethnobiology and ecology of smallholder cattle production: can cattle help conservation and adaptation?”

## **Publications**

### *In preparation (4):*

- Root-Bernstein, M., Wheeler, H., Guerrero-Gatica, M., du Plessis, P., Hoag, C., Narayan, T., & Roturier, S. Methods and approaches for the integration of indigenous and local knowledge in conservation ecology.
- Root-Bernstein, M. & Hoag, C. Does shrub encroachment reduce foraging grass abundance through plant-plant competition in Lesotho mountain rangelands?
- Overstreet, K., Bertoni, F., Root-Bernstein, M., & Forssman, N. Disturbing disturbance. *Rubberboots Methods for the Anthropocene*, University of Minnesota Press.
- Root-Bernstein, M., & Forssman, N. Laying Out Their Traps and Cakes: Tinkering Towards Deer Aesthetics in Søby Brunkulslejer Hunting Landscapes.

### *In submission/ revision (6):*

- Root-Bernstein, M., Holgado-Vargas, B., Bondoux, A., Guerrero-Gatica, M., Zorondo, F., Huerta, M. Valenzuela, Videla-Bello, A. Local ecological knowledge and forest resilience in a conservation landscape
- Silva-Rochefort, B., & Root-Bernstein, M. History of canids in Chile and impacts on prey adaptations.
- Root-Bernstein, M. Guanaco places: A multispecies anthropology of a rewilding project.
- Gomez, N., Bondoux, A., Alfonso, A., Carrasco-Oliva, G., Abasolo, F., Root-Bernstein, M., Zorondo-Rodríguez, F. The relationship between knowledge about environmental institutions and people's trust: empirical evidence of a non-linear association in rural Chile.
- Root-Bernstein, M., Muñoz, C., & Armesto, J. Disturbances, ecosystem engineering, succession: explaining spatial patterns of non-native plant establishment
- Root-Bernstein, M., Muñoz, C., Ebensperger, L. Risk and stress on runways of *Octodon degus*.

### *Accepted/ in press (2):*

- Root-Bernstein, M., & Højrup, M. Accepted. Natural history of the slid sites. In: *Sketches towards feral ecologies – a field guide to the Søby Brown Coal Beds as an Anthropocene Landscape*. Aarhus University Research on the Anthropocene.
- Root-Bernstein, M., Root-Bernstein, M., & Root-Bernstein, R. In press. Embodied cognition. Eds. Lenartowitz, M., Weinbaum, W. *The Practice of Thinking: Cultivating the Extraordinary*. Academia Press.

### *Published (55):*

- Wheeler, H., & Root-Bernstein, M. 2020. Introduction to special feature: Integrating indigenous and local knowledge into conservation science and decision-making. *Journal of Applied Ecology* online first.
- Frascaroli, F., Parrinello, G., & Root-Bernstein, M. 2020. Linking contemporary river restoration to economics, technology, politics, and society: perspectives from a historical case study of the Po Basin, Italy. *Ambio* online first.
- Root-Bernstein, M. 2020. “L’ange Gabriel dans la forêt du centre du Chili” Special Issue “Forêt et paysage”, *Projets de Paysage*, 22.
- Root-Bernstein, M. 2020. Tacit working theories of human behaviour I: the implementation, management and governance of conservation projects. *Ambio* 49, 1639–1657.

- Root-Bernstein, M., Bondoux, A., Guerrero-Gattica, M., & Zorondo, F. 2020. Tacit working theories of human behaviour II: Farmers' lay theories of conservation programme design. *Ambio* 49, 1658–1675.
- Root-Bernstein, M., & Ladle, R. 2019. Ecology of a Widespread Large Omnivore, *Homo sapiens*, and its Impacts on Ecosystem Processes. *Ecology and Evolution*, 9(19), 10874-10894.
- Root-Bernstein, M., Narayan, T., Cornier, L., & Bourgeois, A. 2019. Context-specific tool use by *Sus cebifrons*. *Journal of Mammalogy* 98, 102-110.
- Guerrero-Gatica, G. & Root-Bernstein, M. 2019. Challenges and limitations for scaling up to a rewilding project: scientific knowledge, best practice, and risk. *Biodiversity* (Journal of Biodiversity Conservancy International). 132-138.
- Root-Bernstein, R., & Root-Bernstein, M. 2019. The Ribosome as a Missing Link in Prebiotic Evolution III: Primitive Genomes Evolved from Ribosomal RNA Modules. *International Journal of Molecular Sciences* (Special Issue “Structure, Function and Evolution of the Ribosome”)
- Root-Bernstein, M. 2018. Rewilding. *Oxford Bibliographies*.
- Root-Bernstein, M., Gooden, J., Boyes, A. 2018. Rewilding in practice and in policy. *Geoforum* 97, 292-304.
- Root-Bernstein, M., & Svenning, J.-C. 2018. Human paths have positive impacts on plant richness and diversity: A meta-analysis. *Ecology and Evolution* 8(22), 11111-11121.
- Forssman, N., & Root-Bernstein, M. 2018. Landscapes of anticipation of the other: Ethno-ethology in a deer hunting landscape. (For the Special Issue “Feral Dynamics of Post-industrial Landscapes” edited by A. Tsing and N. Bubandt) *Journal of Ethnobiology* 38(1), 71-87.
- Comberty, C., Thornton, T., Bennett, A., & Root-Bernstein, M. 2017. Climate change adaptation, development and archaeology in the Amazon. *Archaeological Review from Cambridge* 32(2), 98-122.
- Root-Bernstein, M., Galetti, M., Ladle, R.J., 2017. Rewilding South America: ten key questions. *Perspectives in Ecology and Conservation*, 15(4), 271-281.
- Galetti, M., Root-Bernstein, M., & Svenning, J. 2017. Challenges and opportunities for rewilding South American landscapes. *Perspectives in Ecology and Conservation*, 15(4), 245-247.
- Root-Bernstein, M., & Svenning, J.-C. 2017. Restoring connectivity between fragmented woodlands in Chile with a reintroduced mobile link species. *Perspectives in Ecology and Conservation*, 15(4), 292-299.
- Root-Bernstein, M., & Jaksic, J. 2017. Making research relevant? Ecological methods and the ecosystem services framework. *Earth's Future* 5, 664-678.
- Root-Bernstein, M., Bennett, M. 2017. Mapping opportunities for environmental education in a defaunated landscape. *Perspectives in Ecology and Conservation* 15(2), 119-123.
- Müller, A., Dahm, M., Bøcher, P. K., Root-Bernstein, M., & Svenning, J. C. 2017. Large herbivores in novel ecosystems-Habitat selection by red deer (*Cervus elaphus*) in a former brown-coal mining area. *PloS one*, 12(5), e0177431.
- Root-Bernstein, M., Valenzuela, R., Huerta M., Armesto, J., Jaksic, F. 2017. *Acacia caven* nurses endemic sclerophyllous trees along a successional pathway from silvopastoral savanna to forest. *Ecosphere* 8(2).
- A'Bear, L., Hayward, J.C., & Root-Bernstein, M. 2017. Conservation science and contemporary art: thinking about Tenerife. *Leonardo* 50(1), 27-30.
- Root-Bernstein, M., & Jaksic, F. 2016. Oportunidades y desafíos para cambios adaptivos en el sistema silvopastoral de Chile central [Opportunities and challenges for adaptive change in the silvopastoral system of central Chile]. In Postigo, J.C., &

- Young, K.R. Eds. *Perspectivas socio-ecológicas, actividades productivas y cambios globales en América Latina*.
- Root-Bernstein, R., & Root-Bernstein, M. 2016. From Compositional Chemical Ecologies to Self-Replicating Ribosomes and on to Functional Trait Ecological Networks. In Pontarotti, P., ed., *Evolutionary Biology*. (pp. 327-343). Springer International Publishing.
- Root-Bernstein, M., Guerrero-Gattica, M., Piña, L, Bonacic, C., Svenning, J.-C., & Jaksic, F.M. 2016. Prospects for a model of rewilding-inspired transhumance for the restoration of a semi-arid silvopastoral system. *Regional Environmental Change* 130, 54-61.
- Root-Bernstein, M., Frascaroli, F. 2016. Where the fish swim above the birds: configurations and challenges for wetland restoration in the Po Delta, Italy. *Restoration Ecology* 24(6), 773-784.
- Barca, B., Lindon, A., & Root-Bernstein, M. 2016. Environmentalism in the crosshairs: perspectives on migratory bird hunting and poaching conflicts in Italy. *GECCO*. 6, 189-207.
- Root-Bernstein, M., & Svenning, J.-C. 2016. Prospects for rewilding with camelids. *Journal of Arid Environments*, 130, 54-61.
- Root-Bernstein, R., & Root-Bernstein, M. 2016. The Ribosome as a Missing Link in Prebiotic Evolution II: Ribosomes Encode Ribosomal Proteins that Bind to Common Regions of their Own mRNAs and rRNAs. *Journal of Theoretical Biology*. 397, 115-127.
- Root-Bernstein, M. 2016. Personal reflections on natural history as common ground for interdisciplinary multispecies socio-ecological research. *Geo: Geography and Environment* 3(1), e00015
- Root-Bernstein, M., & Jaksic, F. 2015. Ecosystem process interactions between central Chilean habitats. *Global Ecology and Conservation (GECCO)* 3, 776-788.
- Lindon, A., & Root-Bernstein, M. 2015. Pheonix flagships: Conservation values and guanaco reintroduction in an anthropogenic landscape. *Ambio* 44, 458-471.
- Root-Bernstein, M, & Root-Bernstein, R. 2015. The Ribosome as a Missing Link in the Evolution of Life. *Journal of Theoretical Biology*. 357, 130-158.
- Root-Bernstein, M., Bennett, M., Armesto, J., & Ebensperger, L. 2014. Small mammals as indicators of cryptic species diversity in the central Chilean plant endemism hotspot. *Global Ecology and Conservation (GECCO)* 2, 277-288.
- Root-Bernstein, M., & Ladle, R. 2014. Multilinguismo nas ciências ambientais: Ahora ya! (Multilingualism in environmental sciences: It's about time!) *Ambio*. 43(6), 836-837.
- Root-Bernstein, M. 2014. Nostalgia, the fleeting and the rare in Chilean relationships to nature and non human animals. *Society & Animals* 22, 560-579.
- Root-Bernstein, M., Root-Bernstein, M., & Root-Bernstein, R. 2014. Tools for thinking applied to nature provide an inclusive pedagogical framework for environmental education. *Oryx*. 48(4), 584-592.
- Root-Bernstein, M., Fierro, A., Armesto, J., & Ebensperger, L.A. 2013. Avian ecosystem functions are influenced by small mammal ecosystem engineering. *BMC Research Notes* 6: 549.
- Ladle, R.J., Bragagnolo, C., Gama, G.M., Malhado, A.C.M., Root-Bernstein, M., & Jepson, P. 2013. Private protected areas: Three key challenges. *Environmental Conservation*. FirstView, 1-2.
- Root-Bernstein, M, Montecinos Carvajal, Y., Ladle, R., Jepson, P., & Jaksic, F. 2013. Conservation easements and mining: the case of Chile. *Earth's Future* 1(1), 33-38.

- Root-Bernstein, M. 2013. Predicting the direction and magnitude of small mammal disturbance effects on plant diversity across scales. *Frontiers in Biogeography*. 5(2), 113-121.
- Root-Bernstein, M., Douglas, L., Smith, A., Veríssimo, D. 2013. Anthropomorphized species as tools for conservation: Utility beyond prosocial, intelligent and suffering species. *Biodiversity and Conservation*. 22, 1577-1589.
- Root-Bernstein, M., & Jaksic, F. 2013. The Chilean espinal: Restoration for a sustainable silvopastoral system. *Restoration Ecology*. 21(4), 409-414.
- Root-Bernstein, M., & Armesto, J. 2013. Selection and Implementation of a Flagship Fleet in a Locally Undervalued Region of High Endemicity. *Ambio*, 42(6), 776-787.
- Root-Bernstein, M. 2012. Invited Ideas: The challenges of mixing associational learning theory with information-based decision making theory. *Behavioral Ecology*. 23 (5): 940-943.
- Root-Bernstein, M., & Ebersperger, L.A. 2012. A meta-analysis of the effects of small mammal disturbances on species diversity, richness and biomass. *Austral Ecology*. 38(3), 289-299.
- Root-Bernstein, M. 2012. Rómulo de Carvalho and António Gedeão, scientist-artist. *Leonardo* 45(5).
- Root-Bernstein, M., Arévalo Rosas, N., Osman, L.P., & Ladle, R.J. 2012. Design solutions to coastal human-wildlife conflicts. *Journal of Coastal Conservation* 16(4), 585-596.
- Barua, M., Root-Bernstein, M., Ladle, R., & Jepson, P. 2011. Defining flagship uses is critical for flagship selection: A critique of the IUCN climate change flagship fleet. *Ambio* 40(4), 431-434.
- Root-Bernstein, M. 2010. Displacement activities during the honey bee transition from waggle dance to foraging. *Animal Behaviour* 79, 935-938.
- Root-Bernstein, M., & Ladle, R. 2010. Conservation by design. *Conservation Biology* 24(5), 1205-1211.
- Root-Bernstein, M. 2010. The role of context, colour and location cues in socially learned novel food source preferences in starlings, *Sternus vulgaris*. *Behavioural Processes* 84, 608-616.
- Root-Bernstein, M. 2008. A bird in the microcosm: An environment of found objects constructed to create arbitrary preferences in starlings. *Leonardo* 41(5), 506-7.
- Root-Bernstein, M. 2007. Designing for non-humans: the essential challenge for communicating design function. In Eds. Feijs, L, Kyffin, S., & Young, B. *Design and semantics of form and movement: DeSForM 2007* (conference proceedings).
- Root-Bernstein, M. 2006. Interaction with the cultural niche is mediated by learning, attention, and decision making. p 52-57 In Eds. Feijs, L, Kyffin, S., & Young, B. *Design and semantics of form and movement: DeSForM 2006* (conference proceedings).

## **Teaching experience**

- 2021- Module on Human-Animal Interaction, GEODesign masters, Eindhoven Design Academy, NL.
- 2020- Module on Embodied Cognition, Thinking about thinking diploma, Free University of Brussels.
- 2019, 2020. Invited lecture on rewilding at AgroParisTech.
2018. Invited lecture on ecocide for Anthropocene course, Smith College.
- 2014, 2016. Invited lecture on large herbivores for Biogeography and Macroecology course, Aarhus University.

- 2014. Workshop, “Tools for thinking for conservation”. At School for Geography and the Environment, Oxford. With Robert and Michele Root-Bernstein.
- 2013- 2014. Teaching (lectures and marking) for the Biodiversity, Conservation and Management MSc course, Oxford University. Course topics: Megaherbivores in conservation; Revision courses; Research Methods courses; Design, behaviour and conservation (elective course).
- 2006- 2008. Assistant instructor (“tutor”) for Animal Behaviour, Behavioural Ecology and Sociobiology courses, Zoology Department, Oxford University.
- 2003. Assistant instructor for laboratory section (non-science majors), Animal Behavior, Department of Ecology and Evolutionary Biology, Princeton University.
- 2000. Teaching assistant, Advanced Placement English Literature, East Lansing High School, Michigan, US.

### **Supervision and mentoring experience**

- 2018- present. Mentor for Charlie Tebbutt, Biodiversity Conservation and Management MSc student, Oxford University.
- 2018. Supervision of Benjamín Silva Rochefort, undergraduate in Biology, Department of Ecology, Pontificia Universidad Católica de Chile, essay-based undergraduate project.
- 2017. Supervision of Arthur Bondoux, engineer (masters equivalent), ISTOM Ecole Supérieure d’Ingénieur Agro-développement international, France, 5<sup>th</sup> year internship and thesis.
- 2014-present. Collaboration with former masters students to publish their projects, including Adrien Lindon, Benji Barca, Luke A’Bear, Curt Hayward, Alison Boyde, Jennifer Gooden, and Trupthi Narayan.
- 2014-present. Mentoring of my project manager for Proyecto REGenera, Matías Guerrero.
- 2013. Supervision of Adrien Lindon, MSc in Biodiversity Conservation and Management, Oxford University, dissertation.  
*He received a distinction overall and the prize for best dissertation.*
- 2010-14. Supervision of undergraduate research projects: two in the School of Design and two in the Department of Ecology, Pontificia Universidad Católica de Chile.

### **Educational resource materials**

- 2020 (in prep). Root-Bernstein, M. Handbook of interdisciplinary thinking for biodiverse cities. Bioveins.
- 2016. Root-Bernstein, M., Charrier, A., Bennett M., Flores, E. *Manual para Parabiólogos [Parabiologist Manual]*. Nahuelbuta Natural (Chile).

### **Service to the academic community**

- 2019. Expert reviewer, IPBES first order draft Values, Chapters 1-5.
- 2019- Book reviewer, *Biodiversity* (Journal of Biodiversity Conservancy International)
- 2018. Expert contributor to IUCN Commission on Ecosystem Management Rewilding Task Force.
- 2018. Reviewer for the National Science Foundation (US)
- 2017- present Associate editor, *Perspectives in Ecology and Conservation*
- 2017-2019. Associate editor (mentorship programme), *Journal of Applied Ecology*.

2016. Expert reviewer, IPBES first order draft Land Degradation and Restoration Assessment, Chapters 1-8.

Journals for which I review: *Acta Oecologica*, *African Journal of Ecology*, *Ambio*, *Basic and Applied Ecology*, *Behavioral Ecology*, *Conservation Biology*, *Ecology and Society*, *Ecological Indicators*, *Environmental Monitoring and Assessment*, *Frontiers of Biogeography*, *Human Dimensions of Wildlife*, *Human Ecology*, *Journal of Arid Environments*, *Journal of Applied Ecology*, *Journal of Mammalogy*, *Journal of Theoretical Biology*, *Journal of Tropical Ecology*, *Land Use Policy*, *Oikos*, *Royal Society Open Science*, *Trends in Ecology and Evolution*, *People and Nature*, *Philosophical Transactions B*

### **Consultancy**

2019- Lead researcher for Pigeonlab, the green urban futures-focused European startup of Dovetail Labs consultancy ([www.dovetaillabs.com](http://www.dovetaillabs.com))

2016-7, for Green Growth Knowledge Platform (UNEP, OECD, World Bank, Global Green Growth Institute), report, “Changing Behaviours, Changing Policy – Evidence on Behavioural Insights for Green Growth”

### **Membership in Research Networks, Professional Groups**

British Ecology Society, member

Global Environments Network, member (<https://www.globalenvironments.org>)

National Geographic Explorers, member (<https://www.nationalgeographic.org/explorers/>)

### **Main Awards, Fellowships, Scholarships**

2019. Funding to organize an international symposium (“Colloquio Reintroducción de Guanacos en Sudamérica: Oportunidades y desafíos para la conservación de sus ecosistemas”), Pontificia Universidad Católica de Chile.

2018. FACE Foundation/ Thomas Jefferson Fund/ Make Our Planet Great Again grant

2017. National Geographic Society/Waitt Grant

2017-2019. Marie-Curie FP7 COFUND Agreenskills Post Doctoral Fellowship

2016-2018. Associate editor mentorship programme, *Journal of Applied Ecology*.

2015. Runner-up (invited to submit to *Ecography*), E4 prize for best review paper

2013. Departmental Research Funds (SoGE), twice: conference attendance & project scoping in the Po Delta, Italy (~1000 USD each)

2012. Fondation Fyssen Postdoctoral Fellowship (declined)

2012- 2015. FONDECYT Post Doctoral Research funding (~10000 USD per annum)

2010- 2012. CONICYT Doctoral Scholarship for Foreigners (Chilean government)

2010. Funding from CASEB/FONDAP, VRAID (Universidad Católica) to visit the Anthropology Department, Durham University, UK

2004- 2007. Clarendon Fund Scholarship (Oxford University)

2004- 2007. Overseas Research Studentship (ORSAS, UK government)

2002. Charlotte Forbes-Escaravage Scholarship for Study Abroad (Princeton)

### **Conference talks**



### **Invited talks**

- November 2018. Smith College, Environment Society & Policy and Anthropology Departmental talk. **Invited speaker.** “Pasts, presents and futures of semi-arid woodlands in central Chile.”
- November 2017. **Invited speaker.** Quinto Seminario por la Reserva Nacional Roblería del Cobre de Loncha, Doñihue, Chile. “Mejorando la conservación en paisajes agrícolas: ¿Es posible cerrar la brecha entre valores y acciones?” [Improving conservation in farming landscapes: Is it possible to close the gap between values and actions?]
- October 2017. CRI Research Symposium no.1, Center for Interdisciplinary Research, Paris. **Invited speaker.** “Major transitions from the evolution of life to the evolution of socio-ecosystems.”
- December 2017. Ecology Across Borders meeting, Ghent, Belgium. **Invited speaker.** “Unexpected ecological effects of a reintroduced species (*Lama guanicoe*)”
- April 2016. Multidisciplinary, Interdisciplinary, Transdisciplinary Research – What, Why, How? Aarhus Institute for Advanced Study, Aarhus, Denmark. **Invited speaker.** “Problem solving and problem generation through crossing disciplines”
- September 2015. Evolutionary Biology Meeting. Marseilles, France. With Robert Root-Bernstein, **invited speakers**, “From Compositional Chemical Ecologies to Self-Replicating Ribosomes”
- December 2013. Education for Uncertainty. SARAS, Montevideo, Uruguay. **Invited speaker**, with Robert Root-Bernstein, private pre-meeting. “Tools for thinking”
- November 2011. Diseño y Sustentabilidad. School of Design, Pontificia Universidad Católica de Chile. **Invited speaker.** “Conservación por diseño.”

### **Presentations at symposia/conference sessions I organized**

- January 13, 2020. **Co-organizer**, Greening Cities: Biodiversity, Data and Knowledge. Bioveins project (INRA/ AgroParisTech). “Sources de données sur la biodiversité urbaine en Europe (Sources of data on urban biodiversity in Europe)”, “Données en écologie urbaine: problèmes et solutions (Data problems and solutions in urban ecology)”, and moderation of two round tables.
- November 20, 2019. **Co-organizer**, Colloquio Reintroducción de Guanacos en Sudamérica: Oportunidades y desafíos para la conservación de sus ecosistemas. CAPES, Santiago, Chile. “Resultados preliminares de la respuesta de *Acacia caven* a ramoneo por guanacos, y otras observaciones de los roles ecológicos de guanacos en espinal.”
- June 21, 2019. **Co-organizer** Colloque Bétail, Dégradation, Connaissances/ Livestock, Degradation, Knowledges Colloquium. AgroParisTech, Paris, France. “What is the value of cattle? Presenting the ECOS-Sud project” and “Do shrubs compete with grasses? Contested interpretations of degraded pasture lands in Lesotho (Jefferson Fund project)” and with Laura Harrington, “Clembing from Lesotho to northern Italy: Linked landscapes of wool, mohair, water, mountains.”
- February 2012. The American Association of Geographers annual conference, New York. **Co-organizer, double session** “Sailing the Flagship: mobilizing wildlife in geographies of conservation.” Talk: “Charismatic Chilean trees: static, itchy, and thorny, but exclusive.”

### **Other talks**

- June 4 2019. Observatoire de Paris/ College de France, Anthropology off Earth. “Things that are not alive, but that may be alive, in a certain way.”
- April 2019. Agreenskills Annual Conference, Brussels, Belgium. “Local ecological knowledge and forest resilience in a conservation landscape.”
- August 2018. Belém +30: International Congress of Ethnobiology, Belém, Brazil. “Local ecological knowledge and forest resilience in a conservation landscape.”
- November 2017. Knowledge, Culture, Ecologies meeting, Santiago, Chile. “Guanaco places: a multi-species ethnography of a rewilding project.”
- November 2017. First Annual Meeting, Society for Socioecology and Ethnobiology (Chile), Santiago, Chile. “Mejorando la conservación en paisajes agrícolas: ¿Es posible cerrar la brecha entre valores y acciones?”
- August 2017. Portland, US, ESA annual meeting. “*Acacia caven* nurses endemic sclerophyllous trees along a successional pathway from silvopastoral savanna to forest.”
- September 2016. Cambridge Centre for Research in the Arts, Social Sciences and Humanities, UK. Traps: technological mediations of human-animal encounter. “Laying out their traps and cakes: tinkering towards deer aesthetics in a hunting landscape” with Natalie Forssman.
- September 2015. European Ecology Federation, Rome, Italy. “How small is an ecosystem process?”
- August 2015. ICCB-ECCB joint meeting. Montpellier, France. “Pheonix flagships: Conservation values and guanaco reintroduction in an anthropogenic landscape”.
- December 2014. BES-SFE Joint Annual Meeting, Lille, France. “There are still many things we don’t know about small mammal community ecology”.
- March 2014. Megafauna and Ecosystem Function, from the Pleistocene to the Holocene. Oxford University, UK. “Rewilding: 10 key questions”.
- July 2013. International Congress of Conservation Biology, Baltimore. “Interactions between qualitative methods and complexity modelling: a case study of conservation in the Chilean espinal.”
- August 2011. Terceras Jornadas de Comportamiento Animal. Universidad de la Republica, Montevideo, Uruguay. “Displacement activities in the honeybee transition from waggle dance to foraging.”
- April 2011. SIEF: People make places: ways of knowing the world. Universidade Nova de Lisboa, Lisbon, Portugal. ““Leaving the *campo* is like leaving heaven”: The role of nostalgia in urban Chileans’ relationships to rural nature.”
- November 2010. Student Conference on Conservation Science. American Museum of Natural History, New York. “Design solutions to coastal human-wildlife conflicts” (speed talk)
- April 2010. International Conference on Coastal Conservation and Management, Universidad Nova de Lisboa, Estoril, Portugal. “Design solutions to coastal human-wildlife conflicts”
- Sept. 2009. Second European Congress of Conservation Biology, Czech University of Life Sciences, Prague. “Stimulating interdisciplinarity and innovation in design solutions for wildlife conservation”
- Dec. 2007. European Workshop on Design & Semantics of Form & Movement, Northumbria University, UK “Designing for non-humans: the essential challenge for communicating design function”
- Oct. 2006. European Workshop on Design & Semantics of Form & Movement. Technical University, Eindhoven/ Philips, Eindhoven, the Netherlands “Interaction with the cultural niche is mediated by learning, attention, and decision making.”
- June 2005. Animal social learning. University of St. Andrews, Scotland, UK “Memetic complementarity and cumulative culture.”

Sept. 2005. London Evolutionary Research Network, University College, London, UK.  
“Bases of evolution in parallel natural systems.”

### **Selected training courses, workshops attended**

- 2019. National Geographic Explorers Sciencetelling Bootcamp (online)
- 2018. Mediterranean Environments Regional Academy (focus on working with communities), Global Diversity Foundation, Morocco.
- 2018. Summer School in Agroecology and Animal Production, Agreenskills, VetAgro Sup, Clermont-Ferrand, France.
- 2018. Cours intensif sur l'analyse des pistes et les équations structurelles pour écologues et agronomes (Path analysis and SEMs). Montpellier, France.
- 2017. The Politics of Nature in the Anthropocene: Anthropology as Natural History, taught by Andrew Matthews, Oslo Summer School in Comparative Social Science Studies, Norway.
- 2017. Companion modeling (ComMod) training course (role-play, multi-agent modeling, futures negotiation), Chateaufort-de-Gadagne, France.
- 2017. Decolonial Thought and Environmentalism in Latin America and Africa, taught by Lesley Green, PhD course (audited), Aarhus University, Aarhus, Denmark.
- 2016. Workshop on Time. Aarhus University Research on the Anthropocene, Moesgaard Museum, Aarhus, Denmark.
- 2015. More Than Pretty Pictures – The Aesthetics Of Data Representation: How to plan your poster workshop and Visual design principles for scientific data workshop, Aarhus University.
- 2014. Reimagining the Anthropocene, Transformative Storytelling workshop, School for Geography and the Environment, Oxford University.
- 2013. Interactive Data Visualization for Socio-Environmental Data, National Socio-Environmental Synthesis Center (SESYNC), University of Maryland
- 2013. Society for Ecological Restoration Summer School, Universities of Avignon and Aix-Marseille, France
- 2013. Fieldwork supervision and first aid for fieldworkers, Oxford University
- 2006. Museums and Education, Oxford University

### **Science writing, multimedia outreach**

- 2019. Youtube video of Visayan Warty Pigs using tools, part of the supplementary material from the paper in *Mammalian Biology*. 776k views in 1 month.
- 2018- 2020. Outreach coordinator for BIOVEINS, collaboration with g.u.i. collective, blogger, [www.bioveins.eu](http://www.bioveins.eu); funded by BiodivERsA, H2020 ERA-NET COFUND
- 2019. Post on American Anthropological Association “Engagement” blog, September, “Things that are not alive, but which may be alive in a certain way”  
<https://aesengagement.wordpress.com/2019/09/10/things-that-are-not-alive-but-which-may-be-alive-in-a-certain-way-an-interdisciplinary-essay-on-a-relational-theory-of-life/>
- 2019. “La belleza de la naturaleza en sitios urbanos abandonados.” Text and illustrations. *Revista Endémico*, July 4, <https://www.endemico.org/bitacora/la-belleza-la-naturaleza-sitios-urbanos-abandonados/>

- 2019- Book reviews for *Biodiversity*.
2019. Post on The Applied Ecologist blog, “Horse grazing restores plant diversity and pollinator habitat use” April 5.  
<https://appliedecologistsblog.com/2019/04/05/horse-grazing-restores-plant-diversity-and-pollinator-habitat-use/>
2018. “Buscando Al Sapo De Bullock En Nahuelbuta: Una Historia Natural”, Text and illustrations. *Revista Endémico*, Oct. 18.  
<https://www.endemico.org/bitacora/buscando-al-sapo-bullock-nahuelbuta-una-historia-natural/>
2018. Presentation of research results to the communities of Alhué and Doñihue, Chile
2018. Post on American Anthropological Association “Engagement” blog January, “On contamination,” January. <https://aesengagement.wordpress.com/2018/01/23/on-contamination-conservation-science-in-devilish-landscapes/>
2017. Successful crowdfunding for guanaco release, Experiment  
<https://experiment.com/projects/restoring-chilean-woodlands-with-reintroduced-guanacos>
2016. Post on American Anthropological Association “Engagement” blog, June 28,  
<https://aesengagement.wordpress.com/2016/06/28/conversations/>,
2016. Post on Geoblog, “Drawing, remembering, knowing: natural history and the ecological imagination” March 8.  
<https://blog.geographyandenvironment.com/2016/03/08/drawing-remembering-knowing-natural-history-and-the-ecological-imagination/>
2014. “Never mind the selfish gene—ribosomes are the missing link.” *The Conversation*. December <https://theconversation.com/never-mind-the-selfish-gene-ribosomes-are-the-missing-link-35409>. (over 24,000 readers)
2014. “Lost without translation: scientific research” *Times Higher Education Supplement*, 26 June  
<http://www.timeshighereducation.co.uk/comment/opinion/lost-without-translation-scientific-research/2014084.article>.
2014. “When rewilding isn’t mad: guanacos can transform the espinal of Chile.” *The Conversation*, 18 March. <https://theconversation.com/when-rewilding-isnt-mad-guanacos-can-transform-the-espinal-of-chile-24248>
- 2014-present. Chilean research outreach blog: <https://degusyguanacos.wordpress.com>
2013. Successful crowdfunding for guanaco browsing experiment, Microryza  
<https://www.microryza.com/projects/can-we-restore-the-chilean-espinal-with-guanacos>
2012. Successful Kickstarter-funded project for environmental education in Chile.  
<https://www.kickstarter.com/projects/308785987/a-poster-to-introduce-kids-to-local-animals-and-pl/description>
2011. River of Words poetry/ecology workshops, Nido de Aguilas School, Santiago, Chile.
- 2005-2007. Volunteer, children’s activities, Oxford University Natural History Museum, Pitt Rivers Museum and Ashmolean Museum.

## **Art practice**

2019. Invited to participate in an art film by Laura Harrington at Moor House, in the Pennines, UK; contributed cleambling and natural history.
2018. Artist residency, 9-16 July, Biella, Italy, Fondazione Zegna/ Cittadellarte-Fondazione Pistoletto/ Unidee “Expanded body #2\_ Inhabiting Time”
2017. Invited performance within the installation *Taste of a Stone* by Otobong Nkanga at Kunsthall Aarhus, Aarhus, Denmark.

2015. Participation in art-science collaboration in Dump! exhibition, with Cecilia Vicuña, Kunsthall Aarhus, Aarhus, Denmark
- 2002-2012. Published poetry in *The New Yorker*, *Times Literary Supplement*, elsewhere.

### **My research in the press**

- 4 Oct. 2019. Pigs recorded using tools for the first time. *National Geographic*  
<https://www.nationalgeographic.com/animals/2019/10/first-tool-use-pigs-visayan-endangered/>  
This article was picked up by the press, including but not limited to the following articles:
- 5 Oct. 2019. MSN video. <https://www.msn.com/en-us/video/news/pigs-using-tools-caught-on-camera-for-first-time/vi-AAIiOB1>
- 5 Oct. 2019. Pigs recorded using tools for the first time as researcher records one digging with a stick. *DailyMail*.  
<https://www.dailymail.co.uk/sciencetech/article-7539589/Pigs-observed-using-tools-time-researcher-records-one-digging-stick.html>
- 7 Oct. 2019. Pigs spotted using tools for the first time, a new study says. CNN.  
<https://edition.cnn.com/2019/10/06/us/pigs-use-tools-study-scen-trnd/index.html>
- 7 Oct. 2019. Pigs caught on video using tools for the first time. *Science*.  
<https://www.sciencemag.org/news/2019/10/pigs-caught-video-using-tools-first-time>
- 7 Oct. 2019. Pigs have been recorded using tools for the first time. IFLScience.  
<https://www.iflscience.com/plants-and-animals/pigs-have-been-recorded-using-tools-for-the-first-time/>
- 7 Oct. 2019. Pigs spotted using tools for the first time, study shows. UNILAD.  
<https://www.unilad.co.uk/animals/pigs-spotted-using-tools-for-first-time-study-shows/>
- 8 Oct. 2019. Watch genius pigs use tools in a scientific first. VICE  
[https://www.vice.com/en\\_us/article/kz4pxn/watch-genius-pigs-use-tools-in-a-scientific-first](https://www.vice.com/en_us/article/kz4pxn/watch-genius-pigs-use-tools-in-a-scientific-first)
- 9 October 2019. “Turns out pigs use tools, too.” *Popular Mechanics*.
- 10 Oct. 2019. Un video muestra por primera vez a varios cerdos usando herramientas. GIZMODO [https://es.gizmodo.com/un-video-muestra-por-primera-vez-a-varios-cerdos-usando-1838932824?fbclid=IwAR2jOVmIfjCThddfo4y7YvB3YINhlz5KT3Ikli6EJJ6r\\_xOGVCiXvL\\_rD3Y](https://es.gizmodo.com/un-video-muestra-por-primera-vez-a-varios-cerdos-usando-1838932824?fbclid=IwAR2jOVmIfjCThddfo4y7YvB3YINhlz5KT3Ikli6EJJ6r_xOGVCiXvL_rD3Y)
- 10 October 2019. “Des sangliers surpris en train d’utiliser des outils.” *Science Post*. <https://sciencepost.fr/des-sangliers-surpris-en-train-dutiliser-des-outils/>
- 14 October 2019. “L’utilisation des outils observé pour la première fois chez des sangliers.” *Sciences et Avenir*.  
[https://www.sciencesetavenir.fr/animaux/biodiversite/l-utilisation-d-outils-observee-pour-la-premiere-fois-chez-des-sangliers\\_138206](https://www.sciencesetavenir.fr/animaux/biodiversite/l-utilisation-d-outils-observee-pour-la-premiere-fois-chez-des-sangliers_138206)
- 18 October 2019. “These rare pigs can dig it. With a tool that is. And moonwalk too.” *Mongabay*. <https://news.mongabay.com/2019/10/these-rare-pigs-can-dig-it-with-a-tool-that-is-and-moonwalk-too/>
- 29 October 2019. “Les sangliers aussi utilisent des outils.” *Le Temps*.  
<https://www.letemps.ch/sciences/sangliers-utilisent-outils>

- 3 August 2019. “El regreso del guanaco,” *La Segunda*
- July 2019. “Exitosa reintroducción de guanacos en Cajon de Maipo: Ahora científicos reinsertarán una manada.” *El Tercero*, <https://www.latercera.com/que-pasa/noticia/guanacos-cajon-del-maipo/755654/>
- July 2019. “¿Guanacos para el cambio climático? Científicos proponen reintroducir su población en la RM para salvar al bosque nativo” *Plublimetro*.  
<https://www.publimetro.cl/cl/noticias/2019/07/24/cientificos-proponen-reintroducir-mas-guanacos-la-region-metropolitana.html>
- August 2018. “El guanaco y su potencial para recuperar el bosque.” *Endémico*, [www.endemico.org](http://www.endemico.org)
- July 2018. “Proyecto pionero permite reintroducir guanacos en el Cajón de Maipo” *Dedal de oro*, p. 2-5.
- 2 Feb 2018. “Investigadores liberan guanacos en Cajón del Maipo para restaurar ecosistema mediterráneo.” *Biobiochile.cl*
- 3 Feb 2018. “Liberan guanacos en el Cajón del Maipo.” *La Segunda*
- 8 Feb 2018. “Reintroducen guanacos en el Cajón del Maipo para mejorar el bosque.” *El Mercurio*
- 8 Feb 2018. “Reintroducen guanacos en el Cajón del Maipo para mejorar el bosque.” *Economía y Negocios online economiaynegocios.cl*
- 12 Feb. 2018. “Liberan guanacos en Cajón del Maipo para restaurar el bosque de hojas duras” *Las Últimas Noticias*
- 9 April 2017. “Proyecto busca regresar guanacos a Chile central.” *La Tercera*  
<http://www.latercera.com/noticia/proyecto-busca-regresar-guanacos-la-zona-central/>
- 20 March 2017. “Estudio indica que el espino protege a otras plantas nativas” *La Tercera* (Santiago, Chile) <http://www.latercera.com/noticia/estudio-indica-espino-protege-otras-plantas-nativas/>
- 22 June 2016. “Could bringing back camels “rewild” the American West?” *The Washington Post* [https://www.washingtonpost.com/news/speaking-of-science/wp/2016/06/22/could-camels-make-the-west-wild-again/?postshare=6501466603582892&tid=ss\\_tw](https://www.washingtonpost.com/news/speaking-of-science/wp/2016/06/22/could-camels-make-the-west-wild-again/?postshare=6501466603582892&tid=ss_tw)
- 7 April 2015. “The selfish ribosome theory could upend evolution as we know it” *Vice Motherboard*, <http://motherboard.vice.com/read/the-selfish-ribosome-theory-could-upend-evolution-as-we-know-it>
- February 2015. “Hvordan opstod liv her på Jorden?” *Videnskab*  
<http://videnskab.dk/miljo-naturvidenskab/var-det-her-jordens-forste-liv>
- November 2014. “El guanaco, de regreso en la Región Metropolitana.” *Chile Indomito*.  
<http://chileindomito.cl>
- 26 September 2014. “In Chile, an animal whose numbers please no one.” *The New York Times*. <http://www.nytimes.com/2014/09/26/world/americas/in-chile-a-fight-over-guanaco-hunting.html>
- 06 January 2014. “Rewilding Chile’s savanna with guanacos could increase biodiversity and livestock.” *Mongabay*, <http://news.mongabay.com/2014/1227-watsa-rewilding-guanacos.html>
- 29 November 2013. “Guanacos enlisted for restoration” *Science* 342:6162, 3.**
- 23 August 2013. “How anthropomorphism can be a tool for animal conservation” *Treehugger* <http://www.treehugger.com/endangered-species/can-anthropomorphism-help-encourage-conservation.html>
- 23 August 2013. “Relating animals to humans could help conservation projects” *Science Daily*. <http://www.sciencedaily.com/releases/2013/08/130822105033.htm>
- 22 February 2012. “Emprendadores relatan cómo lograron FINANCIAR sus PROYECTOS en la red Kickstarter.” *La Segunda*.  
<http://www.lasegunda.com/Noticias/CienciaTecnologia/2012/02/723722/emprededoras-relatan-como-lograron-financiar-sus-proyectos-en-la-red-kickstarter>