AMANDINE GAMBLE

PhD DVM MSc

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EDUCATION

PhD in Population Biology and Ecology - Montpellier University, France	2018
Doctorate of Veterinary Medicine -Alfort National Veterinary School, France	2016
Erasmus Exchange Program – School of Veterinary Science, University of Liverpool, UK	
MSc in Ecophysiology and Animal Behavior – Strasbourg University, France	2015
RESEARCH EXPERIENCE	
Multiscale modeling of infectious disease dynamics in multihost systems	2019-2022
Postdoctoral researcher – Department of Ecology and Evolutionary Biology, University of California Los Angeles (UCLA), CA, USA – Supervisor: James Lloyd-Smith (UCLA)	
Large gulls as sentinels to track infectious agent circulation	2018-2019
Postdoctoral researcher – Center for Evolution and Functional Ecology, National Center for Scientific Research (CNRS) / Montpellier University, France – Supervisor: Craig Hebert (Environment and Climate Change Canada) and Thierry Boulinier (CNRS)	
Ecology of infectious agent circulation in colonial birds: inference using serological approaches	2015-2018
PhD student – Center for Evolution and Functional Ecology, CNRS / Montpellier University, France – Supervisor: Thierry Boulinier (CNRS)	
Impact of the nutritional state after a prolonged fast on the foraging trip efficiency in king penguin MSc and DVM theses – Hubert Curien Pluridisciplinary Institute, CNRS – Strasbourg University, France – Supervisors: Yves Handrich and Jean-Patrice Robin (CNRS)	2015

GRANTS AND FELLOWSHIPS

FUNDING METRICS Cumulated funding > 510,000 US dollars as principal investigator (PI) or co-PI

3R Grant, UCLA Animal Research Committee – 'More insights from fewer experiments: modernizing the use and re-use of animal data in virology' (role equivalent to co-PI but not eligible) – \$10,000 Coronavirus Rapid Response Grant, UCLA AIDS Institute – 'Quantitative tools to maximize insights from small-sample virological studies of SARS-CoV-2' (role equivalent to co-PI but not eligible) – \$50,000	Darwin Plus, The Overseas Territories Environment and Climate Fund – 'Pathogens as a threat to seabirds in the Falkland Islands' – \$128,000	Short-listed
3R Grant, UCLA Animal Research Committee – 'More insights from fewer experiments: modernizing the use and re-use of animal data in virology' (role equivalent to co-PI but not eligible) – \$10,000 Coronavirus Rapid Response Grant, UCLA AIDS Institute – 'Quantitative tools to maximize insights from small-sample virological studies of SARS-CoV-2' (role equivalent to co-PI but not eligible) – \$50,000 Small Research Grant, British Ecological Society – 'Circulation of infectious agents in the world 202		2022-2024
use and re-use of animal data in virology' (role equivalent to co-PI but not eligible) – \$10,000 Coronavirus Rapid Response Grant, UCLA AIDS Institute – 'Quantitative tools to maximize insights from small-sample virological studies of SARS-CoV-2' (role equivalent to co-PI but not eligible) – \$50,000 Small Research Grant, British Ecological Society – 'Circulation of infectious agents in the world 202	Collaboratory Fellowship, Institute of Quantitative and Computational Biosciences (UCLA) – \$24,000	2021-2022
small-sample virological studies of SARS-CoV-2' (role equivalent to co-PI but not eligible) – \$50,000 Small Research Grant, British Ecological Society – 'Circulation of infectious agents in the world 202		2021
	1 1	2020
		2020

Research Grant, French Polar Institute – ECOPATH 1151 'Circulation of infectious agents in (sub)antarctic colonial vertebrate populations: surveillance, understanding and management implications' (role equivalent to co-PI but not eligible) – \$250,000	2019-2023
Academic Grant, Shackleton Scholarship Fund – 'Infectious diseases as a threat to wildlife in the Southern Ocean' – \$6,970	2018
Exploration Fund Grant, The Explorer Club – 'Infectious diseases as a threat to wildlife in the Southern Ocean' – $\$1,\!200$	2018
Workshop Participation Grant, NSF Infectious Disease Evolution Across Scales Network – Immunity across scales workshop, UK – $\$500$	2018
Exchange Grant, NSF Infectious Disease Evolution Across Scales Network – Research visit at UCLA, CA, USA – \$3,320	2018
Immersion Grant, Mediterranean Center for the Environment and Biodiversity – Research visit at Colorado State University and US Department of Agriculture National Wildlife Research Center, CO, USA – \$530	2018
Travel Grant, International Arctic Science Committee – POLAR 2018 meeting, Switzerland – \$720	2018
Training and Travel Grant, British Ecological Society – Ecology and Evolution of Infectious Diseases Meeting, UK – \$630	2018
Environmental Studies Budget Grant, Falkland Islands Government – 'Infectious diseases as a threat to seabirds on New Island' (role equivalent to PI but not eligible) – \$5,570	2017
Teaching Scholarship, Montpellier University – \$6,470	2016-2018
Doctoral Scholarship, French Ministry of Research and Doctoral College of Montpellier University – Fully funded PhD – \$53,735	2015-2018
Erasmus Scholarship, European Union – 3-month exchange at University of Liverpool, UK – \$1,250	2014
Bourse aux Idées, Mérial – 'Impact of captivity and human handling on the stress level of bobtail lizards' – \$1,190	2013
AWARDS	
Dissertation Prize from the Doctoral College of Montpellier University for the PhD dissertation 'Ecology of infectious agent circulation in colonial birds: inference using serological approaches'	2019
Silver Medal from the French Veterinary Academy for the veterinary thesis 'Impact of the nutritional	2016

PEER-REVIEWED PUBLICATIONS

state after a prolonged fast on the foraging trip efficiency in king penguins'

PUBLICATION METRICS Web of Science: 4,206 citations, H-index of 8 · Google Scholar: 9,115 citations, H-index of 10 * indicates equal contribution

- 20. Ruiz-Aravena M.*, McKee C.*, **Gamble A.**, Lunn T., Morris A., Snedden C.E., Yinda K.C., Port J., Buchholz D.W., Yeo Y.Y., Faust C., Jax E., Dee L., Jones D., Kessler M., Falvo C., Crowley D., Bharti N., Brook C.E., Aguilar H.C., Peel A.J., Restif O., Schountz T., Parrish C.R., Gurley E.S., Lloyd-Smith J.O., Hudson P., Munster V.J. & Plowright R.K. (2021). Ecology, evolution, and spillover of coronaviruses from bats. *Nature Reviews Microbiology*, in press @

- 18. **Gamble A.**, Yeo Y.Y.*, Butler A.A.*, Tang H., Snedden C.E., Mason C.T., Buchholz D.W., Bingham J., Aguilar H.C. & Lloyd-Smith J.O. (2021) Drivers and distribution of henipavirus-induced syncytia: what do we know? *Viruses* 13, 1755

- 15. Snedden C.E.*, Makanani S.K.*, Schwartz S.T., **Gamble A.**, Blakey R.V., Borremans B., Helman S.K., Espericueta L., Valencia A., Endo A., Alfaro M.E. & Lloyd-Smith J.O. (2021). SARS-CoV-2: cross-scale insights from ecology and evolution. *Trends in Microbiology* 29, 593-605
- 14. Morris D.H.*, Yinda K.C.*, **Gamble A.***, Rossine F.W., Huang Q., Bushmaker T., Fischer R.J., Matson M.J., van Doremalen N., Vikesland P.J., Marr L.C., Munster V.J. & Lloyd-Smith J.O. (2021). Mechanistic theory predicts the effects of temperature and humidity on inactivation of SARS-CoV-2 and other enveloped viruses. *eLife* 10, e65902
- 13. Barbosa A., Varsani A., Morandini V., Grimaldi W., Vanstreels R.E.T., Diaz J.I., Boulinier T., Dewar M., González-Acuña D., Gray R., McMahon C.R., Miller G., Power M., **Gamble A.*** & Wille M.* (2021). Risk assessment of SARS-CoV-2 in Antarctic wildlife. *Science of the Total Environment* 755, 143352
- 12. **Gamble A.**, Weimerskirch H. & Boulinier T. (2020). Seabirds blinded by ticks. *Frontiers in Ecology and the Environment* 18, 322
- 11. Borremans B., **Gamble A.**, Prager K.C., Helman S.K., McClain A.M., Cox C., Savage V. & Lloyd-Smith J.O. (2020). Quantifying antibody kinetics and RNA shedding during early-phase SARS-CoV-2 infection. *eLife* 9, e60122 @
- 10. Fischer R.J.*, Morris D.H.*, van Doremalen N., Sarchette S., Matson J., Bushmaker T., Yinda C.K., Seifert S., **Gamble A.**, Williamson B., Judson S., de Wit E., Lloyd-Smith J.O. & Munster V.J. (2020). Effectiveness of N95 respirator decontamination and reuse against SARS-CoV-2 virus. *Emerging Infectious Diseases* 26, 2253 @
- 9. Jaeger A.*, **Gamble A.***, Lagadec E.*, Lebarbenchon C., Bourret V., Tornos J., Barbraud C., Delord K., Weimerskirch H., Thiebot J.-B., Boulinier T. & Tortosa P. (2020). Exploring the transmission dynamics of a bacterial pathogen on a remote oceanic island reveals annual epizootics impacting an albatross population. *EcoHealth*, 17, 194-202
- 8. van Doremalen N.*, Bushmaker T.*, Morris D.H.*, Holbrook M.G., **Gamble A.**, Williamson B.N., Tamin A., Harcourt J.L., Thornburg N.J., Gerber S.I., Lloyd-Smith J.O., de Wit E. & Munster V.J. (2020). Aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *New England Journal of Medicine* 382, 1564-1567
- 7. **Gamble A.**, Bazire R., Delord K., Barbraud C., Jaeger A., Gantelet H., Thibault E., Lebarbenchon C., Lagadec E., Tortosa P., Weimerskirch H., Thiebot J.-B., Garnier R., Tornos J. & Boulinier T. (2020). Movements of an apex consumer among and within endangered seabird colonies: opportunities for pathogen spread. *Journal of Applied Ecology* 57, 367-378
- 6. **Gamble A.**, Garnier R., Chambert T., Gimenez O. & Boulinier T. (2020). Next-generation serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics. *Ecology* 101, e02923 @
- 5. Sanz-Aguilar A., Payo-Payo A., Rotger A., Moutailler S., Igual J.M., Miranda M.A., Torres M., Picorelli V., **Gamble A.** & Boulinier T. (2019). Infestation of small seabirds by *Ornithodorus maritimus* ticks: effects on chick body condition, reproduction and associated infectious agents. *Tick and Tick-borne Diseases* 11, 101281
- 4. **Gamble A.**, Garnier R., Jaeger A., Thibault E., Gantelet H., Tortosa P., Bourret V., Thiebot J.-B., Delord K., Weimerskirch H., Tornos J., Barbraud C. & Boulinier T. (2019). Exposure of albatrosses to the avian cholera agent leads to a short-lived immune response: implications for disease surveillance and management. *Oecologia* 189, 939-949
- 3. **Gamble A.**, Ramos R., Parra-Torres Y., Mercier A., Galal L., Pearce-Duvet J.M.C., Villena I., Montalvo T., Gonzalez-Solis J., Hammouda A., Oro D., Selmi S. & Boulinier T. (2019). Exposure of yellow-legged gulls to *Toxoplasma*

- *gondii* along the Western Mediterranean coasts: tales from a sentinel. *International Journal for Parasitology:* Parasites & Wildlife 8, 221-228 *❷*
- 2. Bourret V., **Gamble A.**, Tornos J., Jaeger A., Delord K., Barbraud C., Tortosa P., Kada S., Thiebot J.-B., Thibault E., Gantelet H., Weimerskirch H., Garnier R. & Boulinier T. (2018). Vaccination protects endangered albatross chicks against avian cholera. *Conservation Letters* 11, e12443
- 1. Boulinier T., Kada S., Ponchon A., Dupraz M., Dietrich M., **Gamble A.**, Bourret V., Duriez O., Bazire R., Tornos J., Tveraa T., Chambert T., Garnier R. & McCoy K. D. (2016). Migration, prospecting, dispersal? What host movement matters for infectious agent circulation? *Integrative and Comparative Biology* 56, 330-342

TEACHING

University of California Los Angeles (Los Angeles, CA, USA)	
Co-instructor – Statistical Tools & Concepts for Molecular Biologists (upper-division undergraduate class; in person)	2022
Instructor – Introduction to MATLAB (workshop; hybrid)	2021-2022
Teaching assistant – Introduction to R & Data Visualization (workshop; online)	2021
Course design – Overview of statistics for ecology and behavior – For <i>Introduction to Ecology & Behavior</i> (upper-division undergraduate class)	2021
Guest lecture – Infectious diseases: how do they emerge and become pandemic? – For <i>Biology & Social Justice</i> (upper-division undergraduate class; online)	2021
Teaching Assistant – <i>Introduction to R in Ecology & Evolutionary Biology</i> (postgraduate bootcamp; in person)	2020-2021
Guest lecture – Infectious diseases: how do they emerge and become pandemic? – For <i>Biology & Social Justice</i> (upper-division undergraduate class; online)	2020
Montana State University (Bozeman, MT, USA)	
Guest lecture – Serological investigations in the time of COVID-19: insights from wildlife disease ecology and clinical studies – For <i>Disease Ecology & Spillover</i> (undergraduate and postgraduate class; online)	2020
Guest lecture – Using serology to infer eco-epidemiological processes in wild populations – For <i>Disease Ecology & Spillover</i> (undergraduate and postgraduate class; in person)	2019
Montpellier University (Montpellier, France)	
Teaching assistant – <i>Integrative Biology</i> (undergraduate class; in person)	2018
Teaching assistant - Descriptive Statistics (undergraduate class; in person)	2017-2018
Independent workshops	
Workshop – Wildlife Disease Surveillance: Epidemiology, Ecology, and Practical Tools (conservation partners; hybrid)	2018

MENTORING AND SUPERVISION

GRADUATE STUDENTS

Romain Bazire (MSc in Ecology and Biodiversity Management, Montpellier University; main supervisor: Thierry Boulinier) – 'Brown skua movements and avian cholera circulation on Amsterdam Island' (data analysis)

2016

UNDERGRADUATE STUDENTS

(modeling study and data analysis), and 'titeR: Bayesian titer inference with R' (software development) Aubrey Butler (UCLA) – 'Mapping henipavirus-induced syncytium formation <i>in vivo</i> ' (literature review) Hubert Tang (UCLA) – 'Mapping henipavirus-induced syncytium formation <i>in vivo</i> ' (literature review) Augustin Clessin (Ecole Normale Supérieure, Lyon, France; main supervisor: Thierry Boulinier) – 'Assessing the costs and benefits of different management strategies in an epidemiological context: the case of avian cholera on Amsterdam Island' (modeling study) Jessica Kasamoto (John Hopkins University, MD, USA), via the Bruins in Genomics Program (UCLA) – 'Using mathematical models to investigate the infection dynamics of henipaviruses in cell culture' (modeling study) Natashia Benjamin (University of the District of Columbia, DC, USA), via the Bruins in Genomics Program (UCLA) – 'Using mathematical models to investigate the infection dynamics of henipaviruses in cell culture' (modeling study) RESEARCH ASSISTANTS Multiple overwintering field assistants on Amsterdam Island (Indian Ocean) Simultiple field assistants on Hornøya (Barents Sea) Multiple field assistants on the Mediterranean coasts PRESENTATIONS AND MEETING PARTICIPATIONS INVITED CONFERENCE TALKS Using serology to infer eco-epidemiological processes in seabird communities. 3 rd World Seabird Conference, Australia (online) Diseases of albatrosses on Amsterdam Island: the interest of combining approaches. POLAR 2018,	2020 2020 18-2020 2019 2019 2019 ace 2016 17-2018 17-2018
Hubert Tang (UCLA) – 'Mapping henipavirus-induced syncytium formation <i>in vivo</i> ' (literature review) Augustin Clessin (Ecole Normale Supérieure, Lyon, France; main supervisor: Thierry Boulinier) – 'Assessing the costs and benefits of different management strategies in an epidemiological context: the case of avian cholera on Amsterdam Island' (modeling study) Jessica Kasamoto (John Hopkins University, MD, USA), via the Bruins in Genomics Program (UCLA) – 'Using mathematical models to investigate the infection dynamics of henipaviruses in cell culture' (modeling study) Natashia Benjamin (University of the District of Columbia, DC, USA), via the Bruins in Genomics Program (UCLA) – 'Using mathematical models to investigate the infection dynamics of henipaviruses in cell culture' (modeling study) RESEARCH ASSISTANTS Multiple overwintering field assistants on Amsterdam Island (Indian Ocean) Sir Multiple field assistants on Hornøya (Barents Sea) Multiple field assistants on the Mediterranean coasts 20 PRESENTATIONS AND MEETING PARTICIPATIONS INVITED CONFERENCE TALKS Using serology to infer eco-epidemiological processes in seabird communities. 3rd World Seabird Conference, Australia (online) Diseases of albatrosses on Amsterdam Island: the interest of combining approaches. POLAR 2018,	2020 18-2020 2019 2019 ace 2016 17-2018
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Program (UCLA) – 'Using mathematical models to investigate the infection dynamics of henipaviruses in cell culture' (modeling study) RESEARCH ASSISTANTS Multiple overwintering field assistants on Amsterdam Island (Indian Ocean) Multiple field assistants on Hornøya (Barents Sea) Multiple field assistants on the Mediterranean coasts 20 PRESENTATIONS AND MEETING PARTICIPATIONS INVITED CONFERENCE TALKS Using serology to infer eco-epidemiological processes in seabird communities. 3rd World Seabird Conference, Australia (online) Diseases of albatrosses on Amsterdam Island: the interest of combining approaches. POLAR 2018,	nce 2016 17-2018
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9	2021
Switzerland	2018
Opportunistic feeders as sentinels for the circulation of infectious agents in spatial contexts. Waterbird Society annual meeting, Iceland	2017
CONTRIBUTED CONFERENCE TALKS	
Investigating native and introduced predators' involvement in pathogen maintenance and spread within and among endangered seabird colonies. 3rd World Seabird Conference, Australia (online)	2021
Are introduced rodents involved in disease outbreaks threatening subantarctic wildlife. 69th Wildlife Disease Association Meeting, Spain (online)	2021
Integrating demographic and epidemiological data improves dispersal quantification. EUropean Union for Bird RINGing Analytical Meeting, Canada (online)	2021
Circulation of avian cholera among endangered seabirds: the predating and scavenging brown skua as an epidemiological bridge on Amsterdam Island? Seabird Group Conference, UK	2018
Diseases threatening polar seabirds: from immuno-ecology to conservation. POLAR 2018, Switzerland	2010
	2018
Optimization of sampling designs in eco-epidemiological studies based on antibody detection in sentinel species: the case of large gulls. 4th Young Natural History Scientists' meeting, France	

CONTRIBUTED POSTERS AND TWITTER PRESENTATIONS

Are introduced rodents involved in disease outbreaks threatening subantarctic wildlife? Ecology Across Borders, UK (online)	2021
SARS-CoV-2 exposure dose predicts incubation time in a mouse model. World Microbe Forum (online)	2021
Modeling the relationship between pathogen dose and symptomatology: illustration with SARS-CoV-2 in humanized mice. Ecology and Evolution of Infectious Diseases Meeting, France (online)	2021
Migration, foraging, prospecting, dispersal What host movement matters for infectious agent circulation? 6 th World Seabird Twitter Conference (online) <i>©</i>	2020
Next Generation Serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics. 68 th Wildlife Disease Association Meeting, CA, USA	2019
Integrating data across scales to model the within-host dynamics of emerging viruses. Ecology and Evolution of Infectious Diseases Meeting, NJ, USA	2019
Combining approaches to understand avian cholera dynamics in seabirds: implications for conservation. Ecology and Evolution of Infectious Diseases Meeting, UK	2018
Optimization of sampling designs in eco-epidemiologic studies based on the detection of antibodies in colonial vertebrates. Ecological Research Network and LTER-France joint conference, France	2017
Optimization of sampling designs in eco-epidemiologic studies based on the detection of antibodies in colonial vertebrates. EUropean Union for Bird RINGing Analytical Meeting, Spain	2017
Influence de l'état nutritionnel après un jeûne prolongé sur l'efficacité du voyage alimentaire chez le manchot royal. 2^{nd} Colloque d'ÉcoPhysiologie Animale, France	2015
Invited seminars	
Investigating multi-host pathogen dynamics on Subantarctic islands: an open-sky laboratory. Institute of Ecology and Environmental Sciences, France (online)	2021
Advancing disease ecology through quantitative approaches. State University of New York, College of Environmental Science and Forestry, NY, USA (online)	2021
Linking exposure dose to infectious disease development using mechanistic models. UCLA Institute for Quantitative and Computational Biosciences, CA, USA (online) 🔗	2021
Linking data across scales to identify determinants of viral fitness and pathogenicity: benefits, challenges and solutions. National Health Institute Rocky Mountain Laboratories, MT, USA	2019
Combining approaches to understand avian cholera dynamics in an albatross colony. Fish, Wildlife, and Conservation Biology Department, Colorado State University, CO, USA	2018
Combining experimental and simulation-based approaches to manage avian cholera dynamics in albatross colonies. US Department of Agriculture National Wildlife Research Center, CO, USA	2018
Infectious diseases in albatrosses: from basic immuno-ecology to perspectives for conservation. South Atlantic Environmental Research Institute, Falkland Islands	2018
Symposium and thematic session organization	
What determines host species roles in multi-host disease dynamics? Ecology Across Borders, UK (hybrid)	2021
The ecology of host-parasite interactions in seabirds: combining approaches to understand ecoepidemiological dynamics and inform conservation decisions, 3 rd World Seabird Conference, Australia (online)	2021
Polar Wildlife Health Webinar of the Scientific Committee for Antarctic Research (online)	2020

INVITED PARTICIPATIONS IN WORKSHOPS AND WORKING GROUP MEETINGS

Polar Wildlife Health Webinar of the Scientific Committee for Antarctic Research (online)	2020
Durable Interaction Ecology Network, Immuno-ecology Group Meeting, France	2017
Durable Interaction Ecology Network, Tick and Tick-borne Diseases Group Meeting, France	2016

PROFESSIONAL SERVICE

PEER-REVIEW

JOURNAL REVIEWER 46 reviews for 21 journals: *Journal of Applied Ecology · Journal of Animal Ecology · Journal of* Wildlife Disease · Epidemics · Epidemiology and Infection · Pathogens and Disease · Viruses · ... (more on Publons @)

GRANT REVIEWER Swiss National Science Foundation (2) · Croatian Science Foundation (1)

AWARD COMMITTEE MEMBER 69th Wildlife Disease Association Meeting (Student Poster Presentation Award)

WORKING GROUPS AND ADVISING

Wildlife Health Monitoring Group of the Scientific Committee for Antarctic Research	Since 2020
External Advisor for the 10-year Management Plan of the French Southern Lands National Nature	2017
Reserve and the National Action Plan for the Amsterdam Albatross	

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

Ecological Society of America · British Ecological Society · Société Française d'Ecolgie et d'Evolution · Wildlife Disease Association (core member of the UCLA Chapter) · American Society for Microbiology · R Ladies

INSTITUTIONAL SERVICE

Advisory Board of the Institute of Quantitative and Computational Biosciences (UCLA) – Postdoctoral representative	2021-2022
Advisory Board of the Mediterranean Environment Research Observatory (Montpellier University) – Doctoral student representative	2016-2018

OUTREACH

INVITED BLOG POSTS AND NEWSPAPER ARTICLES

Tracking predator movements to understand pathogen spread. <i>Nature Research Ecology and Evolution Community</i> , 1 November @	2020
Next-generation serology: integrating cross-sectional and capture-recapture approaches to infer disease dynamics. <i>The Bulletin of the Ecological Society of America</i> 101, e01670 @	2020
Predator and scavenger movements as opportunities for pathogen spread among endangered seabirds. The Applied Ecologist's Blog, 21 January French translation also available	2020
Tracking predator and scavenger movements to understand pathogen spread among endangered seabirds. <i>Blog of the Zone Atelier Antarctique LTSER</i> , 9 January ②	2020
Investigating the cause of seabird deaths on New Island. Penguin News, 10 August	2018

PUBLIC TALKS AND SCHOOL PRESENTATIONS

<i>QBio-EDGE: Empowering Diversity and Growth in Education in Quantitative Biology</i> – Organization and delivery of scientific presentations and workshops in K-12 schools in the Los Angeles agglomeration	2021-2022
Skype a Scientist – Presentation of the work of a scientist in K-12 schools (Ontario Pathfinders Girl Guides, Ontario, Canada · Alice King Community School Albuquerque, New Mexico, USA · St. Francis de Sales, Lake Zurich, Illinois, USA)	Since 2020
Café des Science – Comprendre et contrôler les pandémies zoonotiques en intégrant écologie, virologie et mathématiques, Consulate General of France in Los Angeles, California, USA (online) <i>ℯ</i>	2020
Infectious diseases in seabirds: from basic eco-immunology to conservation. Falkland Islands Chamber of Commerce, Falkland Islands	2019

MEDIA COVERAGE AND INTERVIEWS

In the Press – National Geographic \cdot The New York Times \cdot The Telegraph \cdot Hakai Magazine \cdot Reuters \cdot Ars Technica \cdot abc10 \cdot Sciences et Avenir \cdot Science et Vie \cdot Information.dk \cdot El Ágora \cdot ...

ON THE RADIO AND PODCASTS – Science Vs (scientific advising) · KNX (scientific advising)

ON TELEVISION – *France 2* (interview) · *BBC Brasil* (scientific advising)

SKILLS

MODELING AND DATA ANALYSIS Bayesian inference and maximum likelihood estimation · Hierarchical models · Compartmental models and ordinary differential equations · Capture-recapture modeling · Occupancy modeling · Integrated modeling · Tracking data analysis · Data simulation

PROGRAMMING AND SOFTWARE $R \cdot STAN \cdot MATLAB \cdot LaTeX \cdot MARK$ (capture-recapture) $\cdot E$ -SURGE (capture-recapture) $\cdot PRESENCE$ (occupancy)

 $\textbf{FIELDWORK} \ Isolated \ sites \cdot Capture \ and \ handling \ of \ wild \ animals \cdot Animal \ tagging \cdot Biologger \ deployment \cdot Biological \ sample \ collection \ from \ wild \ animals \ (blood, swabs, etc.) \cdot Animal \ necropsy \cdot Electronic \ notebook \ development$

Main field campaigns:

2019	New Island, Falkland Islands, Southern Atlantic Ocean (6 weeks, leader)
2019	Kerguelen Islands, Southern Indian Ocean (9 weeks, co-leader)
2018	New Island, Falkland Islands, Southern Atlantic Ocean (6 weeks, solitary)
2017	Crozet Islands, Southern Indian Ocean (9 weeks, co-leader)
2017	Hornøya, Barents Sea (6 weeks, co-leader)
2016	Amsterdam Island, Southern Indian Ocean (9 weeks, co-leader)
2016	Hornøya, Barents Sea (7 weeks, assistant)

LABORATORY Immunoassays · Microbiology

LANGUAGES French (native) · English (fluent)