
CURRICULUM VITAE

Takuya Iwamura, PhD

ADDRESS: Université de Genève
66 boulevard Carl-Vogt
1211 Genève 4, Switzerland

EMAIL: takuya.iwamura@unige.ch

EMPLOYMENT:

- | | |
|------------|---|
| 2022 Sep - | Senior Lecturer
Department of F.-A. Forel for Environmental and Aquatic Sciences
University of Geneva, Switzerland |
| 2021-2022 | Assistant Professor
Department of Forest Ecosystems and Society, College of Forestry,
Oregon State University, OR, USA |
| 2015-2020 | Senior Lecturer
School of Zoology, Faculty of Life Sciences,
Tel Aviv University, Ramat Aviv, Israel |
| 2012-2014 | NSF Postdoctoral Scholar
School of Earth and Environmental Sciences, Stanford University, CA, U.S.A. |
| 2001-2004 | Business Consultant , Booz & Co (Booz Allen Hamilton), Tokyo, Japan
Business restructuring & market analyses for automobile & security industries |

EDUCATION:

- | | |
|------|---|
| 2012 | Ph.D in Conservation Biology
The University of Queensland, Brisbane, Queensland, Australia
Supervisor: Prof. Hugh P. Possingham |
| 2006 | Master of Environmental Management (Geoinformation certificate)
Duke University, Durham, NC, USA
Supervisors: Prof. Stuart L. Pimm, Prof. Dean Urban |
| 2001 | Master of Media and Governance (Complex systems, Artificial Intelligence)
Keio University, Fujisawa, Japan |
| 1999 | B.A. in Environmental Science
Keio University, Fujisawa, Japan |

RESEARCH GRANTS (AS PI/CO-PI):

- | | |
|------|---|
| 2025 | Bezos Earth Fund's AI Grand Challenge for Climate and Nature Phase I, "AI for Co-existence: Proactive solutions for mitigating human-wildlife conflicts", \$50,000
24 awardees out of 1,200 applicants (2% success rate). Invited to apply Phase II
\$2,000,000 award (15 projects will receive from Phase I awardees, 60% chance). |
| 2024 | UKRI MRI Global Health Research Award, "The impact on human health of restoring degraded African drylands", £1,993,523 (1% success rate, 250,000 CHF to my group to hire a postdoc) |

2023	SNSF SOR4D Proposal Preparation Grant. “Sustainable Community Forests: agroforestry for biodiversity, poverty reduction and health in The Gambia”. SNSF. 5,000 CHF (received after passing pre-proposal stage, 21 out of 95 submissions)
2021-2024	McIntire Stennis Project Award “Soundscape of Pacific Northwest Old-growth Forest: Measuring forest structure and health in long-term experimental forests”. USDA National Institute of Food and Agriculture, (Support salaries of three relevant faculty members of College of Forestry + Discrete funding \$8000)
2020-2021	German-Israel Foundation for Scientific Research and Development, €19,500. “Revealing the role of governance in land use and ecological impacts in dryland: Social–Ecological System approach.”
2017-2020	Global Challenge Research Fund (GCRF), £500,000 “Health in a changing climate: the dynamic challenge of snake bite in South Asia” International collaboration with 4 other PIs.

RESEARCH SUPERVISION (PRIMARY ADVISOR):

Postdoctoral scholar

- Dr. Eyal Goldstein (2025 Sept~), University of Geneva
- Dr. Joseph J Erinjery (2017~2019), Tel Aviv University

PhD candidates

- Mr. Tanner Smith (2023~), University of Geneva
- Dr. Noam Ben-Moshe (2016~2023), Tel Aviv University
- Dr. Amir Lewin (2015~2021), Tel Aviv University

MSc. students

- Ms. Axelle Lafoucriere (2023~), University of Geneva
- Ms. Tal Raz (2017-2020), Tel Aviv University
- Mr. Eyal Goldstein (2017-2019), Tel Aviv University
- Ms. Dana Levy (2015-2017), Tel Aviv University

EXTERNAL & INTERNAL SERVICES:

2025-	Associate Editor Environmental Policy & Science, Elsevier
2025-	AI teaching committee for the Faculty of Science, University of Geneva Section Representative for Earth and Environmental Sciences
2024 -2025	Academic committee for EU+4 MSc (Digital Biodiversity) University of Geneva
2021-2022	Hiring Committee for the Forest Economy Professorship Oregon State University

TERTIARY TEACHING:

University of Geneva

2025 Spring	Ecologie II (Undergraduate)
2025 Spring	Measurement of Biodiversity (Postgraduate)

2024 Fall	Ecologie I (Undergraduate)
2024 Spring	Ecologie II (Undergraduate)
2023 Fall	Ecologie I (Undergraduate)
2023 Spring	Ecologie II (Undergraduate)

Oregon State University

2022 Spring	Natural resource data analysis (Postgraduate)
2022 Spring	Decision making for natural resource management (Postgraduate)
2021 Fall	Interdisciplinary collaboration for socio-ecological problems (Postgraduate)
2021 Spring	Decision making for natural resource management (Postgraduate/ Online)

Tel Aviv University

2020 Spring	Theories and Tools for Spatial Ecology (Postgraduate)
2019 Fall	Scientific Literacy (Undergraduate)
2019 Spring	Theories and Tools for Spatial Ecology (Postgraduate)
2018 Fall	Biostatistics (Postgraduate)
2018 Spring	Theories and Tools for Spatial Ecology (Postgraduate)
2017 Fall	Biostatistics (Postgraduate)
2017 Spring	Theories and Tools for Spatial Ecology (Postgraduate)
2016 Fall	Biostatistics (Postgraduate)

AWARDS AND SCHOLARSHIPS:

2012	UQ Deans' Award for Research Higher Degree Excellence. Top 10%PhD theses
2008–2011	UQ Research Scholarship (Graduate school, UQ) \$43,000AUD/year
2008–2011	UQ International Research Tuition Award (Graduate school, UQ) Exemption from paying tuition of \$35,000AUD/year
2007	Research Scholar scholarship (School of Biological Sciences, UQ) \$5,000AUD
2007	Endeavour Asia Awards (Australian government) \$50,000AUD
2006	Research Scholarship (World Wildlife Fund, USA)
2005–2004	Nicholas School of Environment and Earth Sciences Scholarship (Duke University) \$4,500 USD/ year
2000	Travel scholarship for international conference (Keio University)
1999–2000	Mori Research Scholarship (Keio University) \$2,000 USD/year

PUBLICATIONS:

* Underlined names indicate the students and postdocs I supervised as a primary advisor.

1. A. Joseph,...., **T.Iwamura**, and J. Eringery (2025) Assessment of Indian Flying Fox (*Pteropus medius*) Roosting Sites in Northern Kerala using Landsat-derived NDVI. In *Remote Sensing of Land Cover and Land Use Changes in South and Southeast Asia*, Volume 2, Taylor & Francis.
2. A.N. Ahmed, K. Fornace, T. Iwamura, and K.A. Murray (2025) Human animal contact, land use change and zoonotic disease risk: a protocol for systematic review. *Sys Rev.* **14** (65)
3. A.N. Ahmed, K. Fornace, **T. Iwamura**, and K.A. Murray (2024) Human–animal contact to inform zoonotic disease risk across gradients of agricultural land use change in the Central River Region (CRR) of The Gambia (ZooContact): a formative study. *Front. Public Health.* **12**

4. G. Martín, J. Erinjery, ..., **T. Iwamura**, and K.A. Murray Global change effects on snakebite: an assessment of environmental and health sustainability trade-offs in Sri Lanka. *The Lancet Planetary Health*. **8** (8), e533-e544
5. G. Murali, **T. Iwamura**, S. Meiri and U. Roll (2023) Future temperature extremes threaten land vertebrates, *Nature*. **1-7**
6. E. Goldstein, J. J. Erinjery, ..., and **T. Iwamura** (2023) Climate change maladaptation for health: Agricultural practice against shifting seasonal rainfall affects snakebite risk for farmers in the tropics. *iScience*. **26**, 105946.
7. E.S. Saager, **T. Iwamura**, T. Jucker, and K.A. Murray (2023) Deforestation for oil palm increases microclimate suitability for the development of the disease vector *Aedes albopictus*, *Scientific Reports*. **13** (1), 9514
8. T. Raz, Y. Kiat, K.J. Kardynal, Y. Aharon-Rotman, G. Perlman, K.A. Hobson and **T. Iwamura** (2023) Stopover-site feather isotopes uncover African non-breeding grounds of migratory passerines, *J. of Ornithology*. 1-15
9. N. Shumway..., N. Ben-Moshe, **T. Iwamura**..., and Martine Meron (2023) Exploring the risks and benefits of flexibility in biodiversity offset location in a case study of migratory shorebirds, *Conservation Biology*. **37** (2) e14031
10. N. Ben-Moshe, M. Rosensaft, and **T. Iwamura** (2023) Land-use changes interact with geology to facilitate dispersal of the rock hyrax (*Procavia capensis*) and leishmaniasis across Israel and the West Bank, *Ecology and Evolution*. **13** (3), e9915
11. G. Martín, J. Erinjery, D. Ediriweera, H.J. de Silva, D.G. Lalloo, **T. Iwamura**, and K.A. Murray (2022) A mechanistic model of snakebite as a zoonosis: Envenoming incidence is driven by snake ecology, socioeconomics and its impacts on snakes, *PLOS Neglected Tropical Diseases*. doi.org/10.1371/journal.pntd.0009867
12. A. Lewin, J. Erinjery, D. Nissim, **T. Iwamura** (2022) Social-ecological cascade effects of land use on vertebrate pest dynamics in arid agricultural communities. *Ecological Applications*, e2804.
13. G. Martin, J. Erinjery, R. Gumbs, R. Somaweera, D.S. Ediriweera, P.J. Diggle, A. Kasturiratne, D. Lalloo, H.J. de Silva, **T. Iwamura**, and K. Murray (2022) 'Integrating snake distribution, abundance and expert-derived behavioural traits predicts snakebite risk, *J. of Applied Ecology*.
14. A. Lewin, J. Erinjery, Y.L.W. Polain, E. Tripler, and **T. Iwamura** (2021) Evaluating the role of agricultural regimes on predator-prey interactions in a hyperarid region of Israel, *J. of Arid Env.* 192, 104547.
15. G. Martin, C. Yáñez-Arenas, R. Rangel-Camacho, K.A. Murray, E. Goldstein, **T. Iwamura**, and X. Chiappa-Carraraa (2021) Implications of global environmental change for the burden of snakebite, *Toxicon*: X. 100069,
16. D.S. Ediriweera, A. Kasthuriratne, A. Pathmeswaran, ... **T. Iwamura**, ..., and P.J. Diggle (2021) Evaluating spatiotemporal dynamics of snakebite in Sri Lanka: Monthly incidence mapping from a national representative survey sample, *PLOS Neglected Tropical Diseases*. **15** (6)
17. Y. Aharon-Rotman, T. Raz, G. Perlman, Y. Kiat, A. Balaban and **T. Iwamura** (2021) Limited flexibility in departure timing of migratory passerines at the East-Mediterranean flyway, *Scientific Report*
18. E. Goldstein, J. Erinjery, G. Martin, Ediriweera, D.S., A. Kasturiratne, H. Janaka de Silva, Peter Diggle, D.G. Lalloo, K. Murray, and **T. Iwamura** (2021) Estimating snakebite risks with Agent-based modeling of snake-farmer interactions, *PLOS Neglected Tropical Diseases* **15** (1), e0009047
19. **T. Iwamura**, A. Guzmán-Holst, and K.A. Murray (2020) Accelerating invasion potential of disease vector *Aedes aegypti* under climate change, *Nature Communications* **11** (1), 1-10

20. N. Ben-Moshe and **T. Iwamura** (2020) Shelter availability and human attitudes as drivers of rock hyrax (*Procapra capensis*) expansion along a rural-urban gradient, *Ecology and Evolution* **10** (9), 4044-4065
21. K.A. Murray, G. Martin, and **T. Iwamura** (2020) Focus on snake ecology to fight snakebite, *Lancet* **395** (10220), e14
22. D.S. Ediriweera, A. Kasturiratne, N.K. Gunawardena, **T. Iwamura**, K.A. Murray, P.J. Diggle, D.G. Lalloo, and H.J. de Silva (2019) Adjusting for spatial variation when assessing individual-level risk: a case-study in the epidemiology of snake-bite in Sri Lanka, *PLoS One* **14** (10), e0223021
23. S. Giakoumi, V. Hermoso, S.B. Carvalho, V. Markantonatou, M. Dagys, **T. Iwamura**, W.N. Probst, R.J. Smith, K.L. Yates, V. Almpnidou, T. Novak, N. Ben-Moshe, *et al.* (2019) Conserving European biodiversity across realms. *Conservation Letters*
24. **T. Iwamura**, Y.L.W. Polain, and M. Mascia (2018) Incorporating people into conservation planning: insights from Land System Science. *Frontiers in Ecology and Environment*
25. U. Roll, **T. Iwamura**, and O. Berger-Tal (2018) National conservation science conferences as a means of bridging conservation science and practice. *Conservation Biology* **32**(5):1200-1202
26. N.J. Murray, P.P. Marra, R.A. Fuller, ... **T. Iwamura**, ..., and C.E. Studds (2018) The large-scale drivers of population declines in a long-distance migratory shorebird, *Ecography* **41** (6) 867-876
27. L.M. Barr, J.E.M. Watson, H.P. Possingham, **T. Iwamura**, and R.A. Fuller (2016) Progress in improving the protection of species and habitats in Australia. *Biological Conservation*. **200**: 184-191
28. **T. Iwamura**, E. F. Lambin, K. M. Silvius, J. B. Luzar, and J. M. Fragaoso (2016) Socio-environmental sustainability of indigenous lands: Simulating the impacts of external pressures and livelihood change in the Guyanese Amazon. *Frontiers in Ecology and the Environment*. **14** (2) 77-83
29. Nicol, S., R.A. Fuller, **T. Iwamura**, and I. Chadès (2015) Adapting environmental management to uncertain but inevitable change, *Proceedings of Royal Society B*. **282**: 20142984
30. Butt, N., K. Epps, H. Overman, **T. Iwamura**, and J.M.V. Fragaoso (2015) Assessing carbon stocks using indigenous peoples' field measurements in Amazonian Guyana, *Forest Ecology and Management*. **338** 191-199
31. **T. Iwamura**, E. Lambin, K.M. Silvius, J.B. Luzar, and J.M.V. Fragaoso (2014) Agent-based modeling of hunting and subsistence agriculture on indigenous lands: understanding interactions between social and ecological systems, *Environmental Modelling & Software*. **58** 109-127
32. O. Venter, R.A. Fuller, D.B. Segan, J. Carwardine, T. Brooks, S.H.M. Butchart, M. Di Marco, **T. Iwamura**, L. Joseph, D. O'Grady, H.P. Possingham, C. Rondinini, R.J. Smith, M. Venter, and J.E.M. Watson (2014) Targeting global protected area expansion for imperiled biodiversity, *PLoS Biology*. **12** (6): e1001891
33. **T. Iwamura**, R.A. Fuller, and H.P. Possingham (2014) Optimal management of a multispecies shorebird flyway under sea-level rise, *Conservation Biology*. DOI:10.1111/cobi.12319
34. Watson J.E.M., **T. Iwamura***, and N. Butt (2013) Mapping vulnerability and conservation action in a time of climate change. *Nature Climate Change*. **3** 989-944 ***Credited as a leading author**
35. **T. Iwamura**, A. Guisan, K.A. Wilson, and H.P. Possingham (2013) How robust are global conservation priorities to climate change? *Global Environmental Change*. **23** 1277-1284
36. **T. Iwamura**, H.P. Possingham, I. Chadès, C. Minton, N.J. Murray, D.I. Rogers, E. Treml, and R.A. Fuller (2013) Migration magnifies the impact of sea level rise on coastal shorebirds. *Proceedings of Royal Society B*. **280** : 20130325
37. **T. Iwamura**, K.A. Wilson, O. Venter, and H.P. Possingham (2010) A climatic stability approach to prioritizing global conservation investments. *PLoS ONE* **5** (11): e15103

38. Venter, O., W.F. Laurence, **T. Iwamura**, K.A. Wilson, R.A. Fuller, and H.P. Possingham (2009) Harnessing carbon payments to protect biodiversity. *Science* **326** (5958):1368-1368
39. Carwardine, J., K.A. Wilson, G. Ceballos, P.R. Ehrlich, R. Naidoo, **T. Iwamura**, S. Hajkiewicz, and H.P. Possingham (2008) Cost-effective priorities for global mammal conservation. *Proceedings of the National Academy of Sciences of the United States of America* **105** (21): 11446-11450
40. Bode M., J.E.M. Watson, **T. Iwamura**, and H.P. Possingham (2008) The cost of conservation: Letter in response to Kremen et al. *Science* **321** (5887): 340-340
41. R. Naidoo, and **T. Iwamura** (2007) Global-scale mapping of economic benefits from agricultural lands: implication of conservation priorities. *Biological Conservation* **140**: 40-49

Under review

42. T. Smith, N. Kodama, N. Ray and **T. Iwamura** (*under review*) AI-assisted systematic review reveals biases in human-wildlife conflict research trends at global scale.

INTERNATIONAL CONFERENCES:

1. T. Smith, N. Kojima, N. Ray, **T. Iwamura** (2024) Harnessing ChatGPT towards Developing a Global Database on Human-Wildlife Conflict, 7th European Congress of Conservation Biology, Bologna
2. **T. Iwamura** (2022) Putting land-use actors in focus for improved conservation planning and effectiveness, 6th European Congress of Conservation Biology, Prague
3. **T. Iwamura** (2022) Modeling human-wildlife interactions in rural landscapes: Agent-based modeling approach 13th International Congress of Ecology (INTECOL), Geneva
4. A. Lewin, J. Erinjery and **T. Iwamura** (2019) The impacts of governance in agricultural land use on biodiversity in Arava Valley, International Congress of Conservation Biology
5. **T. Iwamura** (2019) Insights from land system science for conservation (Session abstract), International Congress of Conservation Biology
6. **T. Iwamura** (2019) How to avoid conservation leakage? – Systematic conservation planning incorporating people's decision making, 4th Open Science meeting, Global LAND Program
7. Raz, T., K. Hobson, G. Perlman, Y. Kiat, and **T. Iwamura** (2019) Identifying the African wintering habitats of Israeli migratory birds, International Bird Observatory Conference, Eilat
8. **T. Iwamura** (2018) International biennial conference on Drylands, Deserts, and Desertification
9. **T. Iwamura**, Y. Rotman, Y. Kiat, Y. Lenard, G. Perlman (2017) A mixed approach based on field data and remote sensing for the Afro-Eurasian migratory bird flyways, International Congress for Conservation Biology, Cartagena, Columbia
10. **T. Iwamura** (2016) Invasive modeling for Colorado Potato beetle, Society of Conservation Biology Asia meeting (Conservation Asia), Singapore, Singapore
11. **T. Iwamura** (2015) A novel approach for analyzing migratory species, International Congress for Conservation Biology, Montpellier, France, 2015
12. **T. Iwamura** (2013) Agent-based modeling for indigenous land management, Association of American Geographer Annual Meeting, Los Angeles, USA
13. **T. Iwamura** (2011) Evaluation of protected areas under climate change, International Congress for Conservation Biology, Auckland, New Zealand (Student award finalists)
14. **T. Iwamura** (2011) The impacts of sea-level rise on migratory shorebirds, International Conference of Spatial Ecology & Conservation, Birmingham, UK, 2011
15. **T. Iwamura** (2009) Global conservation planning under climate change, European Congress of Conservation Biology, Prague, Czech
16. **T. Iwamura** (2008) Conservation prioritization for climate stability, Society of Conservation Biology annual meeting, Chattanooga, USA

ENVIRONMENTAL SECTOR EXPERIENCE:

- 2012 Consultant for Wildlife Conservation Society, NY. Climate change adaptation.
- 2009 Consultant, Greenpeace. Conduct geospatial analyses for REDD in Indonesia
- 2006 Research assistant, Conservation Science Program, World Wildlife Fund, Washington DC
- 2005 Intern, Conservation Science Program, World Wildlife Fund, Washington DC
- 2004 Field volunteer, Research on tree frogs in cloud forest, Bilsa nature reserve, Ecuador

OTHER QUALIFICATIONS:

- Language: English (Fluent); French (Intermediate); Hebrew (Intermediate); Japanese (Native).
- Computational skills: Programming (R, Python, NetLogo, Java, C++, etc); GIS (ArcGIS/QGIS), Remote sensing (ENVI); MS Office

REFEREES CONTACTS:

- Eric Lambin, Professor at Stanford University (elambin@stanford.edu)
- Mike Masia, former Head of Betty & Gordon Moore Centre for Science, Conservation International & Research Fellow, Sanford School for Public Policy, Duke University (michael.mascia@duke.edu)
- Hugh Possingham, The University of Queensland (h.possingham@uq.edu.au)