

CHRISTOPHER P. KOZAKIEWICZ

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EDUCATION AND PROFESSIONAL APPOINTMENTS

- 2023–pres. Assistant Professor.** Kellogg Biological Station, Department of Integrative Biology, Michigan State University, USA.
- 2021–2022 Postdoctoral Fellow.** Department of Microbiology, Immunology, and Pathology, Colorado State University, USA
Mentor: Dr. Sue VandeWoude
- 2019–2021 Postdoctoral Research Associate.** School of Biological Sciences, Washington State University, USA.
Mentor: Dr. Andrew Storfer
- 2015–2019 Ph.D.** School of Natural Sciences, University of Tasmania, Australia.
Thesis title: Landscape factors shaping host connectivity and pathogen dynamics in urban bobcats (*Lynx rufus*).
Advisors: Dr. Scott Carver (primary) and Dr. Christopher Burrridge
- 2015–2017 Visiting Scholar.** Department of Biology, Colorado State University, USA.
Host: Dr. W. Chris Funk
- 2014–2015 Research Assistant.** University of Tasmania, Australia.
Advisor: Dr. Christopher Burrridge
- 2013–2014 Bachelor of Science with First Class Honours** (10-month research thesis). School of Zoology, University of Tasmania, Australia.
Thesis title: Landscape genetics of a highly vagile raptor: the Tasmanian wedge-tailed eagle (*Aquila audax fleayi*).
Advisors: Dr. Christopher Burrridge (primary) and Dr. Scott Carver
- 2007–2010 Bachelor of Science (Zoology).** School of Zoology, University of Tasmania, Australia.

PUBLICATIONS

18 published/accepted, 2 in review/revision; citations: 218, h-index: 9 ([Google Scholar](#), Jan. 2023)

18. **Kozakiewicz CP**, Burrridge CP, Lee JS, Kraberger SJ, Fountain-Jones NM, Fisher RN, Lyren LM, Jennings MK, Riley SPD, Serieys LEK, Craft ME, Funk WC, Crooks KR, VandeWoude S, and Carver S (2022). Habitat connectivity and host relatedness influence virus spread across an urbanising landscape in a fragmentation-sensitive carnivore. *Virus Evolution*.
17. Moskaluk A, Darlington L, Kuhn S, Behzadi E, Gagne RB, **Kozakiewicz CP**, and VandeWoude S (2022). Genetic characterization of *Microsporium canis* clinical isolates in the United States. *Journal of Fungi* 8: 676.
16. Beer MA[#], Kane R[#], Micheletti S, **Kozakiewicz CP**, and Storfer A (2022). Landscape genomics of the streamside salamander: Implications for species management in the face of climate change. *Evolutionary Applications* 15: 220–236. [#] student mentee
15. **Kozakiewicz CP**, Fraik AK, Patton AH, Ruiz-Aravena M, Hamilton DG, Hamede R, McCallum H, Hohenlohe PA, Margres MJ, Jones M, and Storfer A (2021). Spatial variation in gene expression of Tasmanian devil facial tumors despite minimal host transcriptomic response to infection. *BMC Genomics* 22: 698.
14. **Kozakiewicz CP** and Funk WC (2021). Bat signal (of selection) summons evolutionary hope in face of epidemic disease: an example of the power and promise of genetic monitoring. *Molecular Ecology* 30: 5624–5627.

13. Fountain-Jones NM, **Kozakiewicz CP**, Forester BR, Landguth EL, Carver S, Charleston M, Gagne RB, Greenwell B, Trumbo DR, Mayer M, Clark NJ, and Machado G (2021). MrIML: Multi-response interpretable machine learning to model genomic landscapes. *Molecular Ecology Resources* 21: 2766–2781.
12. Patton AH, Lawrance M, Margres MJ, **Kozakiewicz CP**, Hamede R, Ruiz-Aravena M, Hamilton D, Comte S, Ricci L, Taylor R, Stadler T, Leaché A, McCallum H, Jones M, Hohenlohe P, and Storfer A (2020). A transmissible cancer shifts from emergence to endemism in Tasmanian devils. *Science* 370: eabb9772.
11. **Kozakiewicz CP**[†], Ricci L[†], Patton AH, Stahlke AR, Hendricks SA, Margres MJ, Ruiz-Aravena M, Hamilton DG, Hamede R, McCallum H, Jones ME, Hohenlohe PA, and Storfer A (2020). Comparative landscape genetics reveals differential effects of environment on host and pathogen genetic structure in Tasmanian devils (*Sarcophilus harrisi*) and their transmissible tumour. *Molecular Ecology* 29: 3217–3233. [†] contributed equally
10. Storfer A, **Kozakiewicz CP**, Beer MA[#], and Savage AE (2020). Applications of population genomics for understanding and mitigating wildlife disease. In: *Population Genomics: Wildlife*, Editors: Hohenlohe, P., and Rajora, O.P. Springer Nature, Switzerland. [#] student mentee
9. **Kozakiewicz CP**, Burrridge CP, Funk WC, Craft ME, Crooks KR, Fisher RN, Fountain-Jones NM, Jennings MK, Kraberger SJ, Lee JS, Lyren LM, Riley SPD, Serieys LEK, VandeWoude S, and Carver S (2020). Does the virus cross the road? Viral phylogeographic patterns among bobcat populations reflect a history of urban development. *Evolutionary Applications* 13: 1806–1817.
8. **Kozakiewicz CP**, Burrridge CP, Funk WC, Salerno PE, Trumbo DR, Gagne RB, Boydston EE, Fisher RN, Lyren LM, Jennings MK, Riley SPD, Serieys LEK, VandeWoude S, Crooks KR, and Carver S (2019). Urbanization reduces connectivity in bobcats (*Lynx rufus*) at both intra- and interpopulation scales. *Molecular Ecology* 28: 5068–5085.
7. Trumbo DR, Salerno P, Logan K, Alldredge M, Gagne RB, **Kozakiewicz CP**, Kraberger S, Fountain-Jones N, Craft M, Carver S, Ernest H, Crooks K, VandeWoude S, and Funk WC (2019). Rapid urbanization impacts apex predator gene flow but not diversity: Mountain lion landscape genomics across an urban-rural divide. *Molecular Ecology* 28: 4926–4940.
6. Fraik AK, Quackenbush C, Margres MJ, Comte S, Hamilton DG, **Kozakiewicz CP**, Jones M, Hamede R, Hohenlohe PA, Storfer A, and Kelley JL (2019). Transcriptomics of Tasmanian devil (*Sarcophilus harrisi*) ear tissue reveals homogeneous gene expression patterns across a heterogeneous landscape. *Genes* 10: 801.
5. Fitak RR, Antonides J, Baitchman E, Braun J, Chiu E, Dusek R, Fagre A, Forgacs D, Fountain-Jones N, Funk WC, Gagne E, Gherzi BM, Gilbertson M, Grimaldi W, Heisel S, Jardine C, Kamath P, Karmacharya D, **Kozakiewicz CP**, ..., and Pecon-Slattery J (2019). The expectations and challenges of wildlife disease research in the era of genomics: forecasting with a horizon scan-like exercise. *Journal of Heredity* 110: 261–274.
4. **Kozakiewicz CP**, Burrridge CP, Funk WC, VandeWoude S, Crooks K, Ernest HB, Craft ME, Fountain-Jones NM and Carver S (2018). Pathogens in space: advancing understanding of pathogen dynamics and disease ecology through landscape genetics. *Evolutionary Applications* 11: 1763–1778.
3. **Kozakiewicz CP**, Carver S, and Burrridge CP (2018). Under-representation of avian studies in landscape genetics. *Ibis* 160: 1–12.
2. Fountain-Jones NM, Craft ME, Funk WC, **Kozakiewicz C**, Trumbo D, Boydston EE, Lyren LM, Crooks K, Lee JS, VandeWoude S, and Carver S (2017). Urban landscapes can change virus gene flow and evolution in a fragmentation-sensitive carnivore. *Molecular Ecology* 26: 6487–6498.
1. **Kozakiewicz CP**, Carver S, Austin JJ, Shephard JM, and Burrridge CP (2017). Intrinsic factors drive spatial genetic variation in a highly vagile species, the wedge-tailed eagle *Aquila audax*, in Tasmania. *Journal of Avian Biology* 48: 1025–1034.

AWARDS, GRANTS, AND SCHOLARSHIPS

- 2022** Michigan Natural Features Inventory US\$10,000
- 2015–2018** Australian Postgraduate Award AU\$92,000
- 2016** University of Tasmania School of Biological Sciences Travel Grant AU\$1,125
- 2013** University of Tasmania Honours Scholarship AU\$4,000

INVITED PRESENTATIONS

- 2023** Western University, Department of Biology, London, ON, Canada.
- 2021** Genomics of Wildlife Disease Workshop, Fort Collins, CO, USA.
- 2021** Michigan State University, Department of Integrative Biology, East Lansing, MI, USA.
- 2020** BioLunch, Washington State University, School of Biological Sciences, Pullman, WA, USA.
- 2019** Palouse Ecology, Evolutionary Biology, and Systematics Group, Moscow, ID, USA.
- 2017** Colorado State University Field Ornithologists' Club, Fort Collins, CO, USA.

CONFERENCE PRESENTATIONS

- 2020** **Kozakiewicz CP**, Ricci L, Patton AH, Stahlke AR, Hendricks SA, Margres MJ, Ruiz-Aravena M, Hamilton DG, Hamede R, McCallum H, Jones ME, Hohenlohe PA, and Storfer A. *Comparative landscape genetics of Tasmanian devils and their transmissible tumor*. Oral presentation at EVO-WIBO, Port Townsend, WA, USA. [cancelled due to COVID-19]
- 2019** **Kozakiewicz CP**, Burridge CP, Lee JS, Kraberger SJ, Fountain-Jones NM, Funk WC, Craft ME, Boydston EE, Fisher RN, Lyren LM, Jennings MK, Riley SPD, Serieys LEK, Crooks KR, VandeWoude S, and Carver S. *Phylogeography reveals reduced transmission of feline immunodeficiency virus among bobcats in an urban landscape*. Oral presentation at the 17th Annual Ecology and Evolution of Infectious Diseases meeting, Princeton, NJ, USA.
- 2018** **Kozakiewicz CP**, Burridge CP, Funk WC, Salerno PE, Trumbo DR, Gagne RB, Boydston EE, Lyren LM, Jennings MK, Riley SPD, Serieys LEK, VandeWoude S, Crooks KR, and Carver S. *Urbanisation reduces connectivity at multiple spatial scales among fragmented bobcat populations*. Oral presentation at the Hobart Molecular Ecology meeting, Hobart, Tasmania, Australia.
- 2018** **Kozakiewicz CP**, Burridge CP, Funk WC, Salerno PE, Trumbo DR, Gagne RB, Boydston EE, Lyren LM, Jennings MK, Riley SPD, Serieys LEK, VandeWoude S, Crooks KR, and Carver S. *Urbanisation reduces connectivity at multiple spatial scales among fragmented bobcat populations*. Oral presentation at the Ecological Society of America 103rd Annual Meeting, New Orleans, LA, USA.
- 2016** **Kozakiewicz CP**, Burridge C, Funk WC, VandeWoude S, Crooks K, Craft ME, and Carver S. *Review: landscape genetics of diseases*. Poster presentation at the Ecology and Evolution of Infectious Disease meeting, Ithaca, NY, USA.
- 2015** **Kozakiewicz CP**, Burridge C, Funk WC, VandeWoude S, Crooks K, and Carver S. *Landscape genomics of disease transmission in southern Californian bobcats*. Poster presentation at the Australian Mammal Society Conference, Hobart, Australia.
- 2014** **Kozakiewicz CP**, Carver S, and Burridge CP. *Wind farms and the Tasmanian wedge-tailed eagle*. Oral presentation at the Birdlife Australia Congress, Portland, Victoria, Australia.

TEACHING EXPERIENCE

- 2020, 2022** Invited guest lecturer – Ecology undergraduate class (topic: disease ecology), University of Iowa.
- 2015–2018** Lab Teaching Assistant, University of Tasmania.
 Biology of Animals, undergraduate course
 Cell Biology, Genetics, and Evolution, undergraduate course
 Population and Community Ecology, undergraduate course
- 2017** Invited guest lecturer – Introduction to Ornithology undergraduate class, Colorado State University.

STUDENT MENTORSHIP

- 2021–2022** Laura Bashor, Colorado State University Ph.D. student
- 2019–2021** Rachael Kane, Washington State University Masters student
- 2019–2021** Marc Beer, Washington State University Ph.D. student
- 2021** Megan Binegar, Washington State University undergraduate
- 2019** Emily Griffith, Washington State University undergraduate
- 2017** Miranda Wade, Colorado State University undergraduate
- 2015** Jordan Stevenson, University of Tasmania undergraduate
- 2014** Sureen Kumar Valautham, University of Tasmania undergraduate

OUTREACH, SERVICE, AND PROFESSIONAL DEVELOPMENT

- 2018–pres.** Journal peer review (number of times in parentheses)
 Conservation Genetics (3), Ecology and Evolution (4), European Journal of Wildlife Research (2), Heredity (1), Journal of Wildlife Diseases (1), Journal of Mammalogy (2), Molecular Ecology (1), PeerJ (2), Proceedings of the Royal Society B (1), Virus Evolution (2)
- 2022** Judge, College of Veterinary Medicine and Biomedical Sciences Research Day, Colorado State University
- 2020–2021** Diversity committee member, School of Biological Sciences, Washington State University
- 2020** Judge, School of Biological Sciences Graduate Student Symposium, Washington State University
- 2019–2020** External peer reviewer for the United States Geological Survey (twice)
- 2019** American Indian Math and Science summer camp, University of Montana
 Assisted with freshwater biology activities for middle school students
- 2018** University of Tasmania representative for UTAS Global Engagement
 Engaged with visiting academic representatives from partnering international institutions
- 2017** Genomics of Disease in Wildlife Workshop, Colorado State University
 Training in applying genomic techniques to the study of wildlife diseases, including genome assembly, phylogenetic reconstruction, multiple sequence alignment, adaptation and selection, population genomics, and targeted variant identification.
- 2015** Festival of Bright Ideas, Hobart, Tasmania, Australia
 Volunteered at community science event.

SOCIETY ASSOCIATIONS

- 2021–pres.** Society for the Study of Evolution
- 2018–pres.** Ecological Society of America
- 2017–pres.** Australian Society for Parasitology
- 2017–pres.** Wildlife Disease Association Australasia