

# Tamika J. Lunn

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## Education

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- 2017–2021      **Ph.D.**, School of Environment and Science, Griffith University, Australia  
*Thesis*: Flying-fox ecology and transmission dynamics of Hendra virus  
*Advisors*: Prof. Hamish McCallum, Dr. Alison Peel, Assoc. Prof. Raina Plowright  
Submitted for review 22<sup>nd</sup> January 2021 | Conferred 25<sup>th</sup> June 2021
- 2015            **BSc. Hons with First Class Honors**, School of Biological Sciences, University of Tasmania, Australia  
*Thesis*: Causal modelling of platypus stream use
- 2012–2014     **BSc.**, School of Biological Sciences, University of Tasmania, Australia  
Bachelor of Science; double major in Zoology and Environmental Science, minor in Microbiology

## Professional Appointments

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- 2024–            **Assistant Professor**, Odum School of Ecology, University of Georgia, USA  
*Allocation of Effort*: 60% Research (0.449 EFT), 33% Teaching (0.248 EFT), 7% Service (0.053 EFT)  
*Tenure Status*: Tenure-track  
*Graduate Faculty Status*: Current
- 2021–2023     **Postdoctoral Research Fellow**, Department of Biological Sciences, University of Arkansas, USA  
*Project*: Empirical and mathematical modelling of bat-ebolavirus ecology in East Africa  
*Advisor*: Dr. Kristian Forbes ([Fayetteville Disease Ecology Laboratory](#))
- 2021–2023     **Casual Research Fellow**, Centre for Planetary Health and Food Security, Griffith University, Australia  
*Project*: Empirical modelling of Hendra virus in Australian flying-foxes to infer transmission dynamics and spillover risk  
*Advisor*: Dr. Alison Peel, in collaboration with the [BatOneHealth](#) research team
- 2019            **Visiting Researcher/Endeavour Fellow**, Department of Veterinary Medicine, University of Cambridge, UK  
*Host*: Dr. Olivier Restif
- 2016–2017     **Research Associate**, School of Biological Sciences, University of Tasmania, Australia  
*Project*: Empirical modelling of fire on wet sclerophyll forest dynamics, and population modelling of the short-beaked echidna (*Tachyglossus aculeatus*)  
*Advisor*: Prof. Barry Brook
- 2016            **Science Graduate Intern**, Australian Wildlife Conservancy, Australia  
*Project*: Endangered fauna monitoring programs at remote wildlife sanctuaries (New South Wales, South Australia and the Northern Territory)  
*Advisor*: Felicity L'Hotellier

## Student Mentorship

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### Theses directed

- 2025– **Katherine McFerrin** | Ph.D. Ecology, University of Georgia. “*RFID-based monitoring of bat building use and movement networks in Kenya*”
- 2025– **Marisa Mizzoni** | Ph.D. Ecology, University of Georgia. “*Bat health and migration dynamics in southeastern Georgia*”
- 2024– **Nikole Castleberry** | Ph.D. Ecology, University of Georgia (joint supervision with Dr M. Yabsley). “*Human, domestic animal and bat interactions in domestic shared spaces*”
- 2024– **Nuzha Baksh** | Ph.D. Ecology, University of Georgia. “*Viral communities and foraging in *Rousettus aegyptiacus* bats in Kenya*”
- 2020– **Anecia Gentles** | Ph.D. Ecology (IDEAS program), University of Georgia (joint supervision with Dr N. Gottdenker). “*Community perceptions and pathogens of Malagasy bats*”
- 2022–2023 **Reilly Jackson** | Ph.D. Biology, University of Arkansas (joint supervision with Dr K. Forbes; unofficial co-advisor). “*Human-bat interactions in a disease emergence hotspot: implications for human health and bat conservation*”
- 2019 **Remy Brooks** | B.Sc. Hons (First Class) Environmental Science, Griffith University (joint supervision with Dr A. Peel; unofficial co-advisor). “*Habitat characteristics within Australian flying fox roosts*”
- 2016–2017 **Melissa Gerwin** | B.Sc. Hons (First Class) Biological Sciences, University of Tasmania (joint supervision with Dr B. Brook; unofficial co-advisor). “*Impact of disturbance on the structure and composition of wet-eucalypt forests*”

### Thesis committees

- 2024– **Charlotte Hovland** | Ph.D. Odum School of Ecology UGA (advisor: Sonia Altizer)
- 2024– **Jillian Goodrich** | Ph.D. Institute of Bioinformatics UGA (advisor: Olivia Ginn)
- 2022– **Isabella Deanglis** | Ph.D. Biological Sciences, University of Arkansas (advisor: Kristian Forbes)

### Undergraduate mentorship

- 2025– **Henry Traynor**: *Mathematical modelling of virus dynamics in anthropogenic bat roosts, Kenya* (research credit)
- 2025– **Madeleine Branche**: *Systematic review of global bat migration* (research credit)
- 2025– **Hannah Brown**: *Camera monitoring of bat box use in Athens-Clarke and Oconee counties, Georgia* (research assistant)

### Student fellowships, scholarships & prizes

- 2025 **Presidential Graduate Fellow Award**, University of Georgia. Student: Katherine McFerrin [US\$150,100]
- 2025 **Communication of Research and Scholarship Graduate Student Grant**, University of Georgia. Student: Nikole Castleberry [US\$1,000]
- 2025 **Laerm Academic Support Award**, Georgia Museum of Natural History. Student: Nuzha Baksh [US\$1,000]
- 2025 **CURO Research Award**, University of Georgia. Student: Hannah Brown [US\$1,000]
- 2025 **Love of Learning Award**, Honor Society of Phi Kappa Phi. Student: Nikole Castleberry [US\$1,000]

- 2024            **Presidential Graduate Fellow Award**, University of Georgia. Student: Nuzha Baksh [US\$150,100]
- 2024            **CURO Research Award**, University of Georgia. Student: Henry Traynor [US\$1,000]

## Teaching

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*ECOL 3530 Conservation Biology (3 credit hours)*

Spring: 2024 (50% effort)

Fall: 2024 (100% effort), 2025 (100% effort)

Typical enrolment: 35-90

*Average rank of 4.4/5 across 5-pt criteria in Student Course Evaluations*

*ECOL 4450/6450-4450L/6450L GIS for Ecologists (3 credit hours, 100% effort)*

Fall: 2025

Typical enrolment: 26

*Average rank of 4.4/5 across 5-pt criteria in Student Course Evaluations*

### Other Teaching

- 2024            Guest lecturer, University of Georgia, USA
- ECOL1000 Ecological Basis of Environmental Issues (Fall 2024)
  - FYOS 1001 First Year Odyssey Seminar (Fall 2024)
- 2023            Guest lecturer, University of Georgia, USA
- FYOS 1001 First Year Odyssey Seminar (Fall 2023)
- 2022            Guest lecturer, University of Arkansas, USA
- BIOL 3863 General Ecology (Spring 2022)
- 2018–2019      Co-instructor of practical classes, Griffith University, Australia  
Taught undergraduate-level statistics using R statistical software:
- 3241ENV Quantitative Ecology, 10 credit points, 22 students enrolled (2018)
    - *Ranked in the top quartile across all criteria in Student Evaluations of Teaching. Nominated for a teaching award by two students*
  - 3241ENV Quantitative Ecology, 10 credit points, 32 students enrolled (2019)
    - *Ranked in the top quartile across all criteria in Student Evaluations of Teaching. Nominated for a teaching award by two students*
- 2015–2017      Field trip leader, University of Tasmania, Australia  
Led teaching activities introducing students to field ecology and data collection:
- KPZ211 Population and Community Ecology, 12.5 credit points, ~120 students enrolled
- 2015            Teaching assistant (practical classes), University of Tasmania, Australia  
Taught undergraduate-level courses for Plant Science and Zoology majors:
- KPZ164 Cell Biology, Genetics and Evolution, 12.5 credit points, ~120 students enrolled
  - KZA161 Biology of Animals, 12.5 credit points, ~120 students enrolled
- 2013–2014      Tutor (Peer Assisted Study Session Leader), University of Tasmania, Australia  
Designed and facilitated group learning activities for academic enhancement sessions, for students taking historically difficult undergraduate-level courses:
- KZA161 Biology of Animals, 4-22 student participants per week
    - *Achieved an average rank of 4.4/5 across criteria in Student Evaluations of Teaching*
  - KPZ163 Ecology, 6-23 student participants per week
    - *Achieved an average rank of 4.3/5 across criteria in Student Evaluations of Teaching*

### Recognition for Excellence in Teaching

- 2025–2026 **Service-Learning Fellow** (one of 9 faculty selected into a 1-year program for excellence in service-learning pedagogy and community engagement)
- 2024–2025 **Teaching Academy Early Career Fellow** (one of 25 faculty selected into a 1-year program for excellence in instruction)

### Research Grants

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- 2025–2026 **UGA Center for the Ecology of Infectious Diseases Seed Grant**, University of Georgia. “*Cross-Species Contact and Zoonotic Risk in Novel Anthropogenic Ecosystems*”. PI: T.J. Lunn, Co-PI: M. Yabsley. [Total awarded USD\$25k]
- 2025–2026 **International Research Collaboration Grant**, University of Georgia. “*Advancing global biosurveillance and primary pandemic prevention in zoonotic spillover hotspots*”. PI: O. Ginn, Co-PI: T.J. Lunn. [Requested USD\$15k]
- 2024–2027 **National Institutes for Health**, Research Project Grant Program (R01). “*Beyond discovery: bat behavior and virus shedding as drivers of spillover risk*”. PI: K. Forbes, Co-PIs: T.J. Lunn, D.J. Becker, A. Park. [Total awarded USD\$2.5M, amount to Lunn: USD\$500k]
- 2024–2025 **UGA Center for the Ecology of Infectious Diseases Seed Grant**, University of Georgia. “*Aerosol sampling to advance biosurveillance and primary pandemic prevention*”. PI: O. Ginn, Co-PI: T.J. Lunn. [Total awarded USD\$25k]
- 2022–2023 **Research and Equipment Grant**, Arkansas Biosciences Institute. “*Evaluating the ecology and risk of coronaviruses from bats in East Africa*”. PI: K. Forbes (written by T. J. Lunn; faculty PI required by policy). [Total awarded USD\$50,000]

### Peer-reviewed Publications

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Citations: 939, h-index: 11, i10-index: 14 (Google Scholar, January 2026)

(\*=graduate student; \*\*=undergraduate student; +=postdoc)

30. Yinda, C.K., E. Prates, A. Vlot, S.L Anzick, J. Wang, K. Halpin, B. Borremans, **T.J. Lunn**, K. Barbian, B. Greene, K.D Meade-White, T. Bushmaker, C. Falvo, D. Crowley, D.N Jones, M. Shah, M. Pavicic, W. Carr, C. Martens, D. Jacobson, R.K Plowright, A. Peel, V.J. Munster (**accepted, in press**). Spatio-temporal dynamics of Hendra virus in Pteropus bats in Australia reveals stable maintenance of diverse viral clades. *Nature Microbiology*
29. Crowley, D., C.A. Falvo, C.K. Grant, B.B. Borremans, **T.J. Lunn**, M. Ruiz-Aravena, E. Benson, C.D. McKee, D. Becker, D.N. Jones, T. Bushmaker, Y.T. Yu, M. Michie, A.S. Dale, L. Yan, S. Sterling, C. Broder, L.B. Goodman, R. Petraitytė-Burneikienė, E. Laing, I. Smith, V.J. Munster, A. Rynda-Apple, A.J. Peel, R.K. Plowright (**accepted, in press**). Cohorts of immature *Pteropus* bats show interannual variation in Hendra virus serology. *Journal of Animal Ecology*
28. Jones, B.D, C.A Falvo, C. Burwell, **T.J Lunn**, D.N Jones-Slobodian, E. Benson, C.D McKee, A. Rynda-Apple, R.K. Plowright, D.J Becker, K.L Clark, H. McCallum, N. Clark, A.J. Peel (**accepted, in press**). Asynchronous seasonal dynamics of Nycteribiid bat flies and *Bartonella* in Australian flying foxes (*Pteropus* spp.). *Parasites & Vectors*
27. Pulkkinen, E., R. Jackson, R. Joensuu, E.M. Korhonen, M.M. Masika, O. Anzala, J.G. Ogola, P.W. Webala, **T.J. Lunn**, K.M. Forbes, O. Vapalahti, T. Kinnunen, T. Sironen, A.J. Jääskeläinen (**accepted, in press**). New parajeilongviruses detected in bats but not in humans - assays for screening and diagnostic purposes. *Archives of Virology*
26. Ogola, J., H. Alburkat, T. Smura, L. Kareinen, R. Kant, E.M. Korhonen, **T.J. Lunn**, M. Masika, P.W. Webala, P. Nyaga, O. Anzala, O. Vapalahti, K.M. Forbes, T.A. Sironen (**2025**). Detection and genetic characterization of alphacoronaviruses in co-roosting bat species, southeastern Kenya. *PLOS Neglected Tropical Diseases*, 19(11): e0012805. DOI: [10.1371/journal.pntd.0012805](https://doi.org/10.1371/journal.pntd.0012805)

25. Peel, A.J., M. Ruiz-Aravena, K. Kim, B. Scherting, C.A. Falvo, D. Crowley, V.J. Munster, E. Annand, K. Plain, D. Jones, **T.J. Lunn**, A. Dale, A. Hoegh, J-S Eden, R.K. Plowright (**2025**). Synchronized seasonal excretion of multiple coronaviruses in Australian *Pteropus* spp is associated with co-infections in juvenile and sub-adult bats. *Nature Communications*, 16(6579). DOI: [10.1038/s41467-025-61521-7](https://doi.org/10.1038/s41467-025-61521-7)
24. Verrett, T.B., C.A. Falvo, E. Benson, D.N. Jones-Slobodian, D.E. Crowley, A.S. Dale, **T.J. Lunn**, M. Ruiz-Aravena, A. Rynda-Apple, C.D. McKee, K.L. Clark, A.W. Gofton, A.J. Peel, R.K. Plowright, D.J. Becker, Bat One Health Consortium (**2025**). *Borrelia* lineages adjacent to zoonotic clades in black flying foxes (*Pteropus alecto*), Australia, 2018–2020. *Emerging Infectious Diseases*, 31(7):1415-1420. DOI: [10.3201/eid3107.241864](https://doi.org/10.3201/eid3107.241864)
23. **Lunn, T.J.**, R.T. Jackson\*, P.W. Webala, J. Ogola, K.M. Forbes (**2024**). Modern building structures are a landscape-level driver of bat–human exposure risk in Kenya. *Frontiers in Ecology and the Environment*, e2795. DOI: [10.1002/fee.2795](https://doi.org/10.1002/fee.2795)
22. Roffler, A.A., D.P. Maurer, **T.J. Lunn**, T. Sironen, K.M. Forbes, A.G Schmidt (**2024**) Bat humoral immunity and its role in viral pathogenesis, transmission, and zoonosis. *Frontiers in Immunology*, 15:1269760. DOI: [10.3389/fimmu.2024.1269760](https://doi.org/10.3389/fimmu.2024.1269760)
21. Uusitalo, R., R.T. Jackson\*, T.J. Lunn, E.M. Korhonen, J. Ogola, P. Webala, T. Sironen, K.M. Forbes (**2024**). Current and future environmental suitability for bats hosting potential zoonotic pathogens in rural Kenya. *Ecography*, 14:e11572. DOI: [10.1002/ece3.11572](https://doi.org/10.1002/ece3.11572)
20. Jackson, R.T.\*, **T.J. Lunn**, I. DeAnglis\*, J. Ogola, P.W. Webala, K.M. Forbes (**2024**). Frequent and intense human-bat interactions occur in buildings of rural Kenya. *PLOS Neglected Tropical Diseases*, 18(2):e0011988 . DOI: [10.1371/journal.pntd.0011988](https://doi.org/10.1371/journal.pntd.0011988)
19. Sánchez, C.A., K.L. Phelps, H.K. Frank, M. Geldenhuys, M.E. Griffiths, D.N. Jones, G. Kettenburg, **T.J. Lunn**, K.R. Moreno, M. Mortlock, A. Vicente-Santos, L.R. Viquez, R.C. Kading, W. Markotter, D.M. Reeder, K.J. Olival (**2024**). Advances in understanding bat health and infection dynamics. *Proceedings of the Royal Society B: Biological Sciences*, 291(2018):20232823. DOI: [10.1098/rspb.2023.2823](https://doi.org/10.1098/rspb.2023.2823)
18. **Lunn, T.J.**, R.T. Jackson\*, P.W. Webala, J. Ogola, K.M. Forbes (**2024**). Kenyan free-tailed bats demonstrate seasonal birth pulse asynchrony with implications for virus maintenance. *EcoHealth*. DOI: [10.1007/s10393-024-01674-x](https://doi.org/10.1007/s10393-024-01674-x)
17. Jackson\*, R.T, P.W. Webala, J.G. Ogola, **T.J. Lunn**, K.M. Forbes (**2023**). Roost selection by synanthropic bats in rural Kenya: implications for human-wildlife conflict and zoonotic pathogen spillover. *Royal Society Open Science*, 10: 230578. DOI: [10.1098/rsos.230578](https://doi.org/10.1098/rsos.230578).
16. Ruiz-Aravena, M., C. McKee, A. Gamble, **T.J. Lunn**, A. Morris, C.E. Snedden, C.K. Yinda, J.R. Port, D.W. Buchholz, Y.Y. Yeo, C. Faust, E. Jax, L. Dee, D. Jones, M. Kessler, C. Falvo, D. Crowley, N. Bharti, C.E. Brook, H.C. Aguilar, A.J. Peel, O. Restif, T. Schountz, C.R. Parrish, E.S. Gurley, J.O. Lloyd-Smith, P. Hudson, V.J. Munster, R.K. Plowright (**2022**). Ecology, evolution, and spillover of coronaviruses from bats. *Nature Reviews Microbiology*, 20:299-314. DOI: [10.1038/s41579-021-00652-2](https://doi.org/10.1038/s41579-021-00652-2)
15. Peel, A.J., K.C. Yinda, E.J. Annand, A.S. Dale, P. Eby, J. Eden, D.N. Jones, M.K. Kessler, **T.J. Lunn**, T. Pearson, J.E. Schulz, I.L. Smith, V.J. Munster, R.K. Plowright, Bat One Health Group (**2022**). Novel Hendra virus variant circulating in black flying foxes and grey-headed flying foxes, Australia. *Emerging Infectious Diseases*, 28(5):1043-1047. DOI: [10.3201/eid2805.212338](https://doi.org/10.3201/eid2805.212338)
14. **Lunn, T.J.**, J.C. Buettel, S.C. Nicol, B.W. Brook (**2022**). Population modelling of the Tasmanian Echidna (*Tachyglossus aculeatus*). *Australian Journal of Zoology*, 69(3): 80–91. DOI: [10.1071/ZO21037](https://doi.org/10.1071/ZO21037)
13. Hansen, D., B.E. Hunt, C.A. Falvo, M. Ruiz-Aravena, M.K. Kessler, J. Hall, P. Thompson, K. Rose, D.N. Jones, **T.J. Lunn**, A.S. Dale, A.J. Peel, R.K. Plowright (**2022**). Morphological and quantitative analysis of leukocytes in free-living Australian black flying foxes (*Pteropus alecto*). *PLoS ONE*, 17(5): e0268549. DOI: [10.1371/journal.pone.0268549](https://doi.org/10.1371/journal.pone.0268549).
12. **Lunn, T.J.**, A.J. Peel, H. McCallum, P. Eby, M.K. Kessler, R.K. Plowright, O. Restif (**2021**). Spatial dynamics of pathogen transmission in communally roosting species: impacts of changing habitats on bat-virus dynamics. *Journal of Animal Ecology*, 90:2609–2622. DOI: [10.1111/1365-2656.13566](https://doi.org/10.1111/1365-2656.13566). [**Shortlisted for the 2022 Elton Award**]

11. **Lunn, T.J.**, A.J. Peel, P. Eby, R. Brooks\*, R.K. Plowright, M.K. Kessler, H. McCallum (2021). Counterintuitive scaling between population abundance and local density: implications for modelling transmission of infectious diseases in bat populations. *Journal of Animal Ecology*, 91:916-932. DOI: [10.1111/1365-2656.13634](https://doi.org/10.1111/1365-2656.13634)
10. **Lunn, T.J.**, P. Eby, R. Brooks\*, H. McCallum, R.K. Plowright, M.K. Kessler, A.J. Peel (2021). Conventional wisdom on roosting behaviour of Australian flying foxes – a critical review, and evaluation using new data. *Ecology and Evolution*, 11:13532–13558. DOI: [10.1002/ece3.8079](https://doi.org/10.1002/ece3.8079).
9. Carver, S., **T. Lunn** (2020). When are pathogen dynamics likely to reflect host population genetic structure? *Molecular Ecology*, 29(5): 859-861. DOI: [10.1111/mec.15379](https://doi.org/10.1111/mec.15379)
8. **Lunn, T.J.**, O. Restif, A.J. Peel, V.J. Munster, E. de Wit, S. Sokolow, N. van Doremalen, P. Hudson, H. McCallum (2019). Dose-response and transmission: the nexus between reservoir hosts, environment, and recipient hosts. *Philosophical Transactions of the Royal Society B*, 374(1782): 20190016. DOI: [10.1098/rstb.2019.0016](https://doi.org/10.1098/rstb.2019.0016)
7. Becker, D.J., G.F. Albery, M.K. Kessler, **T.J. Lunn**, C.A. Falvo, G.Á. Cziráj, L.B. Martin, R.K. Plowright (2019). Macroimmunology: the drivers and consequences of spatial patterns in wildlife immune defense. *Journal of Animal Ecology*, 89(4): 972-995. DOI: [10.1111/1365-2656.13166](https://doi.org/10.1111/1365-2656.13166). **[Winner of the 2020 Sidnie Manton Award]**
6. Kessler, M.K., D.J. Becker, A.J. Peel, N.V. Justice, **T. Lunn**, D.E. Crowley, D.N. Jones, P. Eby, C.A. Sanchez, R.K. Plowright (2018). Changing resource landscapes and spillover of henipaviruses. *Annals of the New York Academy of Sciences*, 1429(1):78-99. DOI: [10.1111/nyas.13910](https://doi.org/10.1111/nyas.13910).
5. **Lunn, T.**, M. Gerwin\*, J. Buettel, B. Brook (2018). Impact of intense disturbance on the structure and composition of wet-eucalypt forests: A case study from the Tasmanian 2016 wildfires. *PLoS ONE*, 13(7): e0200905. DOI: [10.1371/journal.pone.0200905](https://doi.org/10.1371/journal.pone.0200905)
4. **Lunn, T.**, S. Munks, S. Carver (2017). Impacts of timber harvest on stream biota – an expanding field of heterogeneity. *Biological Conservation*, 213:154-166. DOI: [10.1016/j.biocon.2017.06.025](https://doi.org/10.1016/j.biocon.2017.06.025).
3. Peel, A., P. Eby, M. Kessler, **T. Lunn**, A. Breed, R. Plowright (2017). Hendra virus spillover risk in horses: heightened vigilance and precautions being urged this winter. *Australian Veterinary Journal*, 95(7):20-21. DOI: [10.1111/avj.197](https://doi.org/10.1111/avj.197)
2. **Lunn, T.**, J. Macgregor, S. Munks, S. Carver (2016). *Dermatophilus congolensis* infection in platypus (*Ornithorhynchus anatinus*), Tasmania, Australia, 2015. *Journal of Wildlife Diseases*, 52(4): 965-967. DOI: [10.7589/2016-02-030R](https://doi.org/10.7589/2016-02-030R)
1. Carver, S., S. N. Bevins, M. R. Lappin, E. E. Boydston, L. M. Lyren, M. Alldredge, K. A. Logan, L. L. Sweanor, S. P. D. Riley, L. E. K. Serieys, R. N. Fisher, T. W. Vickers, W. Boyce, R. McBride, M. C. Cunningham, M. Jennings, J. Lewis, **T. Lunn**, K. R. Crooks, and S. VandeWoude (2016). Pathogen exposure varies widely among sympatric populations of wild and domestic felids across the United States. *Ecological Applications*, 26(2):367-381. DOI: [10.1890/15-0445](https://doi.org/10.1890/15-0445)

### Manuscripts in review or revision for publication (preprints available on request)

31. **Lunn, T.J.**, B. Borremans, D.N. Jones, M.K. Kessler, A.S. Dale, K.C. Yinda, M. Ruiz-Aravena, C.A. Falvo, D. Crowley, J. O. Lloyd-Smith, V.J. Munster, P. Eby, H. McCallum, P. Hudson, O. Restif, L.P. McGuire, I.L. Smith, Bat One Health Group, R.K. Plowright, A.J. Peel (in review). Periodic shifts in viral load increase risk of Hendra virus spillover from *Pteropus* bats. *Science Advances*

## Conference Presentations and Posters

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### Conference presentations

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| 2025 | Periodic shifts in viral load increase risk of spillover from bats. <i>Fourth International Infectious Diseases of Bats meeting</i> , University of Chicago. <b>[Invited speaker]</b> |
| 2024 | Periodic shifts in viral load increase risk of spillover from bats. <i>Hendra@30 Henipavirus International Conference</i> , Geelong, Australia. <b>[Invited speaker]</b>              |
| 2024 | Modern Homes, Unexpected Guests: Meeting Kenya's Free-Tailed Bats. <i>Georgia Bat Working Group Meeting</i> , Columbus, United States   |

- 2023 Ecology of ebolavirus (Bombali virus) in Kenyan molossid bats. *Annual Review Meeting 2023 University of Nairobi STD/HIV/SRH Collaborative Research Group*, Nairobi, Kenya.
- 2022 Henipavirus Dynamics and Transmission in Pteropus Bats. *19th International Bat Research Conference / 50th Annual North American Symposium on Bat Research*, Austin, TX, United States. **[Invited speaker]**
- 2021 Review and evaluation of conventional wisdom on the roosting of flying foxes. *6th Annual National Flying-fox Forum*, online
- 2021 Spatial dynamics of pathogen transmission in communally roosting Pteropodids: implications for bat-virus dynamics under Anthropogenically induced ecological change. *6th International Berlin Bat Meeting*, online
- 2020 Spatial dynamics of pathogen transmission in communally roosting species: Hendra virus dynamics within flying-fox roosts. *Griffith University - Modelling Spatial Data Symposium*, Brisbane, Australia
- 2019 Bats, disease, and dynamic densities: Investigating community structure as a driver of viral dynamics in flying-foxes. *International Bat Research Conference*, Phuket, Thailand. **[Invited speaker]**
- 2019 Interactions between land use change, Pteropodid (flying-fox) ecology and Hendra virus dynamics in Australia. *British Ecological Society Annual Conference*, Belfast, Northern Ireland
- 2019 Interactions between land use change, flying-fox ecology and Hendra virus dynamics in Australia. *Annual Public Health@Cambridge Network Showcase 2019: Planetary Health*, Cambridge, England
- 2017 Flying-fox ecology and the dynamics of Hendra virus. *One Health Day, Griffith University*, Australia

#### Conference posters

- 2022 Ecology of ebolavirus (Bombali virus) in Kenyan molossid bats. *Ecology and Evolution of Infectious Diseases conference*, Atlanta, GA, United States
- 2018 Community structure and viral dynamics in flying-fox roosts: tackling non-linearity and heterogeneity in a dynamic system. *Wildlife Disease Association Australasian Conference*, Bali, Indonesia
- 2018 Community structure and viral dynamics in flying-fox roosts: tackling non-linearity and heterogeneity in a dynamic system. *Ecological Society of Australia*, Brisbane, Australia

#### Contributed talks/posters (incomplete)

- 2025 Bacterial pathogens in Kenyan bats that share houses with humans. *Fourth International Infectious Diseases of Bats meeting*, University of Chicago [poster]
- 2024 Neglecting an itch – emphasising the role of ectoparasites in microbial community ecology. *72nd Annual Wildlife Disease Association Conference*, Canberra, ACT, Australia
- 2024 No evidence of physiological stress in bats that share houses with humans. *Ecology and Evolution of Infectious Diseases (EEID) Conference*, Palo Alto, CA, United States [Poster]
- 2022 Temporal dynamics of coronavirus circulation in Australian Pteropus bat reservoirs. *Joint UK-ICN/CSIRO Cutting Edge Virtual Symposium on Coronaviruses with "Disease X" Potential*, online
- 2022 Estimating the spatiotemporal drivers of Hendra virus spillover in Australian flying foxes [Poster]
- 2022 Diversity of black flying fox gastrointestinal microbiome is positively associated with inflammation. *19th International Bat Research Conference / 50th Annual North American Symposium on Bat Research*, Austin, TX, United States

- 2022 Building roost selection by synanthropic bats in rural southeastern Kenya. *19th International Bat Research Conference / 50th Annual North American Symposium on Bat Research*, Austin, TX, United States
- 2021 Flying-fox foraging behavior and spillover of Hendra virus. *6th International Berlin Bat Meeting*, online
- 2018 Ectoparasite and endoparasite burdens of two sympatric flying fox species in Australia: implications for Hendra virus infection. *Wildlife Disease Association Australasian Conference*, Bali, Indonesia [Poster]
- 2018 Consumption of marginal diet plants by flying foxes associated with Hendra virus spillover. *Wildlife Disease Association Australasian Conference*, Bali, Indonesia [Poster]
- 2017 Platypuses and land-use practices: Catchment-scale studies provide some insight into the effect of forestry and agriculture. *International Mammalogical Congress*, Perth, Australia

## Invited Presentations and Departmental Seminars

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- 2025 How Housing in Kenya is Shaping Human-Bat Coexistence and Patterns of Viral Transmission. *Advances in Immunology and Microbiology (AIM) Seminar Series*, Washington State University, Pullman WA, United States
- 2023 Periodic shifts in viral load increase risk of spillover from bats. *Center for the Ecology of Infectious Diseases*, University of Georgia, Athens GA, United States.
- 2023 Landscapes of risk: causes and consequences of bat-human interaction in Australia and Kenya. *Zoological Society of London*, London, England
- 2022 Preventing spillover of bat pathogens in high-risk global hotspots. *Odum School of Ecology*, University of Georgia, Athens GA, United States.
- 2021 Review and evaluation of conventional wisdom on the roosting of flying foxes. *Griffith University - Centre for Planetary Health and Food Security Seminar Series*, Brisbane, Australia
- 2020 Interactions between land use change, Pteropodid (flying-fox) ecology and Hendra virus dynamics in Australia. *Department of Veterinary Medicine*, University of Cambridge, Cambridge, England
- 2019 Investigating the dynamics of bat-borne diseases, with particular emphasis on Henipaviruses in flying foxes (fruit bats). *Rocky Mountain Laboratories*, Hamilton MO, United States
- 2019 Investigating the dynamics of bat-borne diseases, with particular emphasis on Henipaviruses in flying foxes (fruit bats). *University of Tasmania*, Sandy Bay, Australia
- 2016 Effectiveness of stream management for maintaining platypus (*Ornithorhynchus anatinus*) populations in headwaters. *Research update for the Forest Practices Authority (Monitoring the Effectiveness of the Biodiversity Provisions of the Tasmanian Forest Practices Code)*.

### Honorariums

- 2022 Hendra virus dynamics and transmission in flying-foxes. *University of Montana Western*, Dillon, MT, United States

## Professional Service and Training

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### Service to professional societies

*Manuscript reviewer*: Nature Communications (3), Biological Conservation (2), Journal of Wildlife Diseases (3), Behavioral Ecology and Sociobiology (2), Ecology Letters (1), Science of the Total Environment (1), Pathogens and Global Health (1), Proceedings of the Royal Society B (3), PLOS One

(2), *Frontiers in Ecology and Evolution* (2), *Journal of Zoology* (1), *Royal Society Open Science* (1), *Ecology and Evolution* (1), *Bioscience* (1)

Grant reviewer: BES Review College (2023, 2024), NSF CAREER (2024), NSF GRFP (2024/2025)

Memberships: Wildlife Diseases Association, British Ecological Society, Australian Bat Society, Global South Bats

### Service within UGA

#### Standing committees

- 2024– Graduate Program Committee
- 2024– Center for the Ecology of Infectious Diseases (CEID) Advisory Committee
- 2024– Center for the Ecology of Infectious Diseases (CEID) Strategic Planning Committee

#### Ad hoc

- 2025 Co-organizer, Symposium at the International Bat Research Conference (“*Infectious Diseases in Bats – A One Health Perspective*”), August 24, 2025
- 2024 Co-organizer, Viral Traits and Infectious Disease Emergence, September 9, 2024–September 10, 2024, Athens, United States

## Awards and Honors

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- 2022 **Shortlisted for the 2022 Elton Prize**, British Ecological Society. [Best research paper in *Journal of Animal Ecology* written by an early career author]
- 2017–2021 **Research Training Program Scholarship**, Griffith University. [AUD\$81,246]
- 2021 **Publication Assistance Scholarship**, Griffith Graduate Research School. [AUD\$5,385]
- 2019 **Endeavour Postgraduate Leadership Award**, Endeavour Leadership Program. [AUD\$69,500]
- 2017 **Dean’s Summer Research Scholarship**, University of Tasmania. [AUD\$2,000]
- 2017 **Best Student Presentation**, Environmental Futures Research Institute 2017 Student Symposium. [AUD\$400]
- 2015 **Governor’s Environment Scholarship**, University of Tasmania. [AUD\$7,500]
- 2015 **Dean’s Honor Roll for the Faculty of Science, Engineering and Technology**, University of Tasmania. [Graduation with First Class Honors]
- 2014 **Ralston Trust Prize**, University of Tasmania. [Best academic performance in third-year zoology]
- 2013 **Peter Scott Prize**, University of Tasmania. [Best academic performance in second-year environmental science/geography]
- 2012–2014 **Premier of Tasmania West North-West Bursary**, University of Tasmania. [AUD\$12,000]
- 2012–2014 **Dean’s Roll of Excellence for Science, Engineering and Technology** [GPA above 6.25]
- 2012–2014 **Certificate of Excellence, Biological Science Discipline**, University of Tasmania. [Outstanding achievement in Biological Science units]

## Science Communication, Outreach, and Engagement

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### Media coverage

- [2024](#) The Hidden Disease Risks of Modern Housing Development in Rural Africa, University of Arkansas News, November 19 2024

### Student, family, and emeritus engagement

- 2025 Speaker, The Wildlife Society Meeting, Warnell School of Forestry and Natural Resources, University of Georgia
- 2024 Speaker, Family Day, Odum School of Ecology, University of Georgia
- 2024 Speaker, UGA Alumni Board meeting, Odum School of Ecology, University of Georgia
- 2024 Speaker, Emeritus Faculty Luncheon, Odum School of Ecology, University of Georgia

### Public talks

- 2025 Bats Around the World and Back Again, *Linger Longer Living Lecture*, Georgia
- 2019 The curious world of bats & their researchers. *Pint of Science*, Brisbane, Australia

### Community engagement

- 2023 *Wildlife Warrior Club, Maktau Secondary School, Taita-Taveta county, Kenya*
- 2023 *Taita Taveta Wildlife Club of Kenya Action group, Taita-Taveta county, Kenya*
- 2022 *Sagalla International Talent Academy, Taita-Taveta county, Kenya*

### Articles & blogs

- 2021 Effects of changing habitats on bat-virus dynamics. *Animal Ecology in Focus*. [Link](#)
- 2022 EEID 2022 in Review. *British Ecological Society Parasites and Pathogens newsletter*. [Link](#)