# Dr Kristina M Ramstad

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## **RESEARCH INTERESTS**

Conservation Genomics • Molecular Ecology • Applied Species Management • Traditional Ecological Knowledge

#### **EDUCATION**

PhD	1999-2006	<b>Organismal Biology and Ecology</b> , University of Montana, Missoula, MT, USA Ecological genetics of salmonids and integration of conservation biology and indigenous traditional ecological knowledge, Dr Fred Allendorf – Advisor.
MSc	1995-1998	Aquatic and Fishery Sciences, University of Washington, Seattle, WA, USA
BA	1989-1993	Biological Sciences, Wellesley College, Wellesley, MA, USA

## **EMPLOYMENT & ACADEMIC APPOINTMENTS**

2021-present	Associate Professor, Department of Biological, Environmental and Earth Sciences, University of South Carolina Aiken, USA
2018-present	Graduate Faculty, Department of Biological Sciences, University of South Carolina Columbia, USA
2019-2022	Affiliate Faculty, Department of Biological Sciences, Florida Atlantic University, USA
2015-2021	Assistant Professor, Department of Biological, Environmental and Earth Sciences, University of South Carolina Aiken, USA
2010-2014	Research Fellow – Conservation Genomics, Victoria University of Wellington, New Zealand
2006-2010	Postdoctoral Fellow – Biodiversity Research & Links to Māori, Victoria University of Wellington, New Zealand

## **GRANTS & AWARDS**

Major Grants	
2021-2024	<b>EArly-concept Grants for Exploratory Research (EAGER), National Science Foundation</b> , \$199,921 for project entitled <i>Testing for genes associated with migratory behavior in a peripatetic species</i>
2010-2014	<b>Postdoctoral Research Fellowship</b> , <b>New Zealand Ministry of Business, Innovation, and</b> <b>Employment</b> , \$277,500NZ, for project entitled <i>Saving the rarest kiwi: using forefront genomic</i> <i>technology to manage inbreeding effects in rowi</i>
2006-2010	Postdoctoral Fellowship, Allan Wilson Centre for Molecular Ecology and Evolution, \$250,000NZ, Māori and community outreach and biodiversity research
1999-2004	<b>Doctoral Research Grant, US Geological Survey</b> , \$235,500, tuition and research costs in support of ecological genetics research of sockeye salmon

## GRANTS & AWARDS (CONT.)

Additional grants			
2023-2024	<b>Probe Grants</b> , <b>IDeA Networks of Biomedical Research Excellence (INBRE),</b> three awards totaling \$6000 to support undergraduate research in functional genomics and bioinformatics		
2018-2023	Summer Scholars Institute Awards, University of South Carolina Aiken, six awards totaling \$41,000 (including \$18,000 for student salaries), to support summer undergraduate research		
2016-2023	Magellan Scholarships, University of South Carolina, 9 awards totaling \$22,100 to support undergraduate student research on avian genomics and field research		
2007-2021	<b>Research Contracts, New Zealand Department of Conservation</b> , six awards totaling \$47,200NZ, for genetic analyses of little spotted kiwi (\$34,000), rowi (\$7000) and tuatara (\$6200)		
2020	<b>ASPIRE-I Grant</b> , University of South Carolina, \$15,000, with Drs Mike Miller (UC Davis), Gordon Luikart (U of Montana), and April DeLaurier (USC Aiken) to research the genomic basis of red body color in sockeye salmon ( <i>Oncorhynchus nerka</i> )		
2016-2020	<b>RISE Grants, University of South Carolina</b> , five awards totaling \$29,900 for kiwi and wood stork genomics research		
2018	High Impact Teaching Award, USC Aiken Center for Teaching Excellence, \$2500		
2016	<b>ASPIRE-I Grant, University of South Carolina</b> , \$15,000, with Larry Bryan and Dr Stacey Lance (U of Georgia, Savannah River Ecology Lab) for wood stork genomics research		
2015	<b>Legacy Grant, Allan Wilson Centre for Molecular Ecology and Evolution</b> , \$10,000NZ, with Drs Helen Taylor and Neil Gemmell (U of Otago, New Zealand) for kiwi genome re-sequencing		
2014	<b>Research Grant, Birdlife International</b> , \$8000NZ, laboratory consumables for genetic analysis of great spotted kiwi		
2013-2014	<b>Research Grants, Allan Wilson Centre for Molecular Ecology and Evolution</b> , \$13,000NZ, Genetic diversity and demography of great spotted kiwi		
2013	Marsden Development Fund Grant, Victoria University of Wellington, \$9500NZ, support for proposal titled Testing the generality of molecular adaptation among New Zealand's avifauna		
2011-2013	Flagship Project Award, New Zealand Genomics Ltd and Illumina Australia, \$25,000NZ in sequencing and bioinformatics support, Using next generation transcriptomics to discover genes associated with reproductive success in kiwi		
2010-2011	<b>Equipment Grant</b> s, <b>Allan Wilson Centre for Molecular Ecology and Evolution</b> , \$21,700NZ, for laboratory equipment to support kiwi genomics research		
2010	<b>Research Grant, Allan Wilson Centre for Molecular Ecology and Evolution</b> , \$105,000NZD, scholarship to support a PhD student (awarded to HTaylor)		
2007-2009	<b>Research Grants</b> , <b>Bank of New Zealand Save the Kiwi Trust</b> , \$32,000NZ total, co-PI with H Robertson and R Colbourne, awards in three consecutive years for genetic marker development in little spotted kiwi (\$10,000 in 2007, \$6000 in 2008, \$16,000 in 2009)		

#### **PUBLICATIONS** <u>undergraduate student</u>, graduate student

#### Major publications

- Flamio, R, Jr and **KM Ramstad**. 2023. Chromosome-level genome of the wood stork (*Mycteria americana*) provides insight into avian chromosome evolution. **Journal of Heredity** 115(2):230-239. DOI:10.1093/jhered/esad077
- Schweizer, RM, N Saarman, KM Ramstad, BR Forester, JL Kelley, BK Hand, RL Malison, AS Ackiss, M Watsa, TC Nelson, A Beja-Pereira, RS Waples, WC Funk, and G Luikart. 2021. Big data in conservation genomics: boosting skills, hedging bets, and staying current in the field. Journal of Heredity 112:313-327. DOI: 10.1093/jhered/esab019
- Shepherd, LD, AJD Tennyson, HA Robertson, RM Colbourne, and **KM Ramstad**. 2021. Hybridisation in kiwi (*Apteryx*; Apterygidae) requires taxonomic revision for great spotted kiwi. **Avian Research** 12:24. DOI:10.1186/s40657-021-00257-6
- Taylor, H, HA Robertson, AL Carter, and KM Ramstad. 2021. The conservation management implications of isolation by distance and high genetic diversity in great spotted kiwi (*Apteryx haastii*). Emu Austral Ornithology Special issue: Conservation Genetics. 121:10-22. DOI:10.1080/01584197.2021.1888126
- Ramstad, KM and LT Dunning. 2020. Population genomics advances and opportunities in conservation of kiwi (*Apteryx* spp). Pages 493-521 *in* OP Rajora & P Hohenlohe (eds.), **Population Genomics: Wildlife**. Springer Publishing, New York, NY.
- *Taylor, HR*, RM Colbourne, HA Robertson, NJ Nelson, FW Allendorf, and **KM Ramstad**. 2017. Cryptic inbreeding depression in a recovering long-lived species. **Molecular Ecology** 26:799-813. DOI:10.1111/mec.13977 (Cover)
- Ramstad, KM, HC Miller, and G Kolle. 2016. Sixteen kiwi (*Apteryx* spp) transcriptomes provide a wealth of genetic markers and insight into sex chromosome evolution in birds. BMC Genomics 17:410. DOI: 10.1186/s12864-016-2714-2
- *Taylor, HR, M Kardos,* **KM Ramstad** and FW Allendorf. 2015. Valid estimates of individual inbreeding coefficients from marker-based pedigrees are not feasible in wild populations with low allelic diversity. **Conservation Genetics** 16:901-913. DOI:10.1007/s10592-015-0709-1.
- Ramstad, KM, RM Colbourne, HA Robertson, FW Allendorf, and CH Daugherty. 2013. Genetic consequences of a century of protection: serial founder events and survival of the little spotted kiwi (*Apteryx owenii*).
   Proceedings of the Royal Society B: Biological Sciences 280:20130576.
- HC Miller, <u>G Bowker-Wright</u>, <u>M Kharkang</u>, and **K Ramstad**. 2011. Characterization of class II B MHC genes from a ratite bird, the little spotted kiwi (*Apteryx owenii*). **Immunogenetics** 63:223–233.
- **Ramstad, KM**, CA Woody, and FW Allendorf. 2010. Recent local adaptation of sockeye salmon to glacial spawning habitats. **Evolutionary Ecology** 24:391-411.
- Ramstad, KM, NJ Nelson, G Paine, D Beech, A Paul, P Paul, FW Allendorf, and CH Daugherty. 2007. Species and cultural conservation in New Zealand: Māori traditional ecological knowledge of tuatara. Conservation Biology 21:455–464.
- **Ramstad, KM,** CA Woody, GK Sage, and FW Allendorf. 2004. Founding events influence genetic population structure of sockeye salmon (*Oncorhynchus nerka*) in Lake Clark, Alaska. **Molecular Ecology** 13:277-290.
- Ramstad, KM, CJ Foote, JB Olsen, and D Rogers. 2003. Genetic and phenotypic evidence of reproductive isolation between seasonal runs of sockeye salmon in Bear Lake, Alaska. Transactions of the American Fisheries Society 132:997-1013.

## **PUBLICATIONS (CONT.)** <u>undergraduate student</u>, graduate student

#### Additional peer-reviewed publications

- Ramstad, KM, GC Gibb, HA Robertson, RM Colbourne, <u>EE Doran</u>, and LD Shepherd. 2021. Recent extinctions among Little Spotted Kiwi (*Apteryx owenii*) and the origin of extant populations. Emu Austral Ornithology Special issue: Conservation Genetics 121:23-32. DOI:10.1080/01584197.2020.1840926
- Jia X-Y, Li W, **KM Ramstad**, B Tu, and J Yan. 2021. Microsatellite records for volume 13, issue 1. Twenty-three novel microsatellite loci cross amplify and determine sex in two clades of New Zealand's endemic kiwi (Family Apterygidae). **Conservation Genetic Resources** 13:107-109.
- *Geary, AF,* NJ Nelson, G Paine, W Mason, *D Dunning*, SE Corin and **KM Ramstad**. 2019. Māori traditional harvest, knowledge and management of sooty shearwaters (*Puffinus griseus*) in the Marlborough Sounds, New Zealand. **New Zealand Journal of Ecology** special issue: Mātauranga Māori shaping ecological futures 43:1-7.
- *Taylor, HR*, NJ Nelson, and **KM Ramstad**. 2019. The first recorded interaction between two species separated for centuries suggests they were ecological competitors. **New Zealand Journal of Ecology** 43:3361.
- *Taylor, HR*, NJ Nelson, and **KM Ramstad**. 2014. Chick Timer<sup>™</sup> software proves an accurate, disturbanceminimizing tool for monitoring hatching success in little spotted kiwi (*Apteryx owenii*). **New Zealand Journal of Zoology** 41:139-146.
- Shepherd, LD, TH Worthy, AJD Tennyson, RP Scofield, **KM Ramstad**, and DM Lambert. 2012. Ancient DNA analyses reveal contrasting phylogeographic patterns amongst kiwi (*Apteryx* spp.) and a recently extinct lineage of spotted kiwi. **PLoS ONE** 7:e42384.
- **Ramstad, KM**, JA Moore, and JM Refsnider. 2012. Intrasexual aggression in tuatara: males and females respond differently to same-sex intruders. **Herpetological Review** 43:19-21.
- **Ramstad, KM,** M Pfunder, HA Robertson, RM Colbourne, FW Allendorf, and CH Daugherty. 2010. Fourteen microsatellite loci cross-amplify in all five kiwi species (*Apteryx* spp.) and reveal extremely low genetic variation in little spotted kiwi (*A. owenii*). **Conservation Genetics Resources** 2:333-336.
- Ramstad, KM and L Faulkner. 2010. Tikanga & technology: a new net goes fishing. Pages 248-254 in JS Te Rito & S Healy (eds), Proceedings of the Traditional Knowledge Conference 2008 "Te tatau pounamu: The greenstone door, Traditional knowledge and gateways to balanced relationships". University of Auckland, New Zealand.
- Ramstad,KM, G Paine, *DL Dunning*, *AF Geary*, SN Keall, and NJ Nelson. 2009. Effective partnerships between universities and indigenous communities: a case study in tuatara conservation in Aotearoa. Journal of the Royal Society of New Zealand 39:229-231.
- Whyte, ALH, JJ Bell, **KM Ramstad**, and JPA Gardner. 2008. An indigenous-led community challenge to fisheries management in New Zealand: the revival of regional scale management practices? **Pacific Conservation Biology** 14:248-249.
- Ramstad, KM, CA Woody, C Habicht, GK Sage, JE Seeb, and FW Allendorf. 2007. Concordance of nuclear and mitochondrial DNA markers in detecting a founder event in Lake Clark sockeye salmon. Pages 31-50 in CA Woody (ed), Sockeye salmon evolution, ecology, and management. American Fisheries Society, Symposium 54, Bethesda, Maryland.
- Ramstad, KM, and CA Woody. 2003. Radio tag retention and mortality of adult sockeye salmon. North American Journal of Fisheries Management 23:978-982.
- Woody, CA, J Nelson, and **KM Ramstad**. 2002. Clove oil as an anesthetic for migrating sockeye salmon: field trials. **Journal of Fish Biology** 60:340-347.

## **PUBLICATIONS (CONT.)** <u>undergraduate student</u>, graduate student

#### Popular articles

Taylor, H and KM Ramstad. 2012. Five kiwi that saved a species. Forest & Bird 346:16-20.

- Ramstad, KM, and ALH Whyte. 2008. Protecting our mahinga kai: how genetics research can help in managing mātaitai, taiāpure, and rāhui. Kai Korero 2:15-17.
- Ramstad, KM, NJ Nelson, G Paine, D Beech, A Paul, P Paul, FW Allendorf, and CH Daugherty. 2007. Tuatara our living ancient taonga. Mana Magazine 76:18-21.

## **TEACHING EXPERIENCE**

*Current and recent courses – Undergraduate, University of South Carolina Aiken* 

- BIOL 122 Biological Sciences II (4 credits), since Fall 2015
- BIOL 316 Vertebrate Zoology (4 credits), since Spring 2017
- BIOL 350 Fundamental Genetics (3 credits), since Fall 2017 Fall 2022
- BIOL 352 Applied Population Genomics (4 credits), since Fall 2019
- BIOL 520 Swamp Ecology (4 credits), since Maymester 2018
- BIOL 525 Conservation Biology (3 credits), since Fall 2016
- EXSC 190 Camping (1 credit), since Spring 2024

#### Previous courses – Guest Lecturer or Teaching Assistant

- New Zealand Conservation Biology (BIOL 495), 2005-2006, University of Montana
- Conservation Genetics (BIOL 480), 2002-2004, University of Montana
- Conservation Ecology (BIOL 495), 2003, University of Montana
- Aquatic Vertebrate Ecology (BIOL 456), 2002, University of Montana
- Biology and Management of Fishes (BIOL 308), 2002, University of Montana
- Gondwana Revisited (IA 240), 2012 & 2015, Lewis & Clark College/Victoria University of Wellington
- Genetics and Evolution (BIOL 223), 2001-2006, University of Montana

## **STUDENT SUPERVISION & MENTORING**

#### Undergraduate students

Have supervised a total of 25 undergraduate research students at USC Aiken (2016 to present) including:

- 9 Magellan Scholars, 4 Summer Institute Scholars and 3 INBRE Scholars
- 6 co-supervised with researchers at the Savannah River Ecology Lab and studying toxin bioaccumulation, genetics and behavior of reptiles, amphibians and mammals

## Previously supervised 4 undergraduate Honors research projects (1997 to 2013) on kiwi genetics at Victoria University of Wellington and salmonid ecology at the Universities of Montana and Washington

#### Graduate students

2019 – 2022Kate Shlepr (advisory committee member)PhD in Biological Sciences, Florida Atlantic UniversityPrimary advisor: Dr Dale GawlikProject: Population-level impacts of potential adaptation by wood storks to the Everglades

## STUDENT SUPERVISION & MENTORING (CONT.)

Graduate students	cont.
2018 – 2019	<ul> <li>Melissa Groleau (advisory committee member)</li> <li>MSc in Biological Sciences, University of South Carolina Columbia</li> <li>Primary advisor: Dr Timothy Mousseau</li> <li>Project: Radioactive contamination and human disturbance on the mammals of Fukushima, Japan</li> </ul>
2011-2014	Helen Taylor (co-supervisor Dr Nicola Nelson) PhD in Conservation Biology, Victoria University of Wellington, New Zealand Project: Inbreeding and reproductive success in bottlenecked populations of kiwi Currently the Conservation Program Manager, Royal Zoological Society of Scotland
2007-2010	<ul> <li>Amelia Geary (co-supervisor Dr Nicola Nelson)</li> <li>MSc in Conservation Biology, Victoria University of Wellington</li> <li>Project: Mātauranga Māori and sustainable harvest: muttonbirding on Motungārara Island</li> <li>Currently an Environmental Analyst for Synapt Consulting, Wellington, New Zealand</li> </ul>
2006	<ul> <li>Hannah Rainforth (co-supervisor Dr Nicola Nelson)</li> <li>MSc in Conservation Biology, Victoria University of Wellington</li> <li>Project: Protecting our freshwater shellfish: status &amp; restoration options for kākahi in the Whanganui area</li> </ul>
2008-2009	<b>Dawson Dunning</b> (Fulbright Student, co-supervisor Dr Nicola Nelson) <b>MFA in Science and Natural History Filmmaking</b> , Montana State University, USA Project: <i>Tuatara and tītī: cultural significance and conservation in Aotearoa</i> Founder and Director of 3 Bears Media, Montana, USA

#### **SELECTED PRESENTATIONS** \*presenter, <u>undergraduate student</u>, graduate student

Invited seminars (of 32 total)

- 2022 Chromosome-level genome assembly for a stork: testing for genes associated with migratory behavior. R Flamio & \*KM Ramstad. **Genomes of Animals & Plants Conference**. (virtual)
- 2022 The secret and swampy lives of American wood storks. \*KM Ramstad. **Seabrook Island Birders** Association, Seabrook Island, SC.
- 2021 The role of bioinformatics in conservation genomics. \*KM Ramstad. Science on Tap, USC Aiken and Savannah River National Lab, Aiken, SC. (virtual)
- 2020 Genetic signatures of selection, dispersal, and drift in kiwi (*Apteryx* spp). \*KM Ramstad. Department of Natural Resource Ecology and Management, **Iowa State University**, Ames, IA (virtual).
- 2020 Rapture of the storks Panmixia and parasitism in American wood storks. \*KM Ramstad. **Charleston Natural History Society**, Charleston, SC.
- 2019 Lessons from the Swamp: High Impact Teaching in a Wild Setting. \*KM Ramstad. Center for Teaching Excellence, University of South Carolina Aiken.
- 2018 Behavior, inbreeding, and fitness in the Red-cockaded woodpeckers of Hitchcock Woods. \*KM Ramstad, Mark Pavlosky Jr, James Garabedian. **Hitchcock Woods Board of Trustees**, Aiken, SC.
- 2017 Founder effects and inbreeding: the Noah's Ark effect in the little spotted kiwi. \*KM Ramstad. **The Citadel**, Charleston, SC.
- 2015 Recent genetic research in rowi, great spotted kiwi and little spotted kiwi. \*KM Ramstad & *H Taylor*. **New Zealand Department of Conservation**, Wellington, New Zealand.

### **SELECTED PRESENTATIONS (CONT.)** \*presenter, <u>undergraduate student</u>, graduate students

#### Invited seminars cont.

- 2014 Biogeography, ecology and conservation of New Zealand's kiwi. Ramstad, KM. Wellesley College, Wellesley, MA.
- 2012 Causes and consequences of reduced genetic diversity in kiwi. \*KM Ramstad. New Zealand Ornithological Society, Wellington, New Zealand
- 2011 Using genomics to manage inbreeding effects in New Zealand's rarest kiwi. \*KM Ramstad, H Robertson, R Colbourne, D Kaye, OA Ryder, H Miller, C Daugherty, and FW Allendorf. International Congress for Conservation Biology, Auckland, New Zealand.
- 2009 Working with indigenous communities in research: lessons learnt through failure and success. \*KM Ramstad. Australasian Research Management Society, Christchurch, New Zealand.
- 2008 Salmon, kiwi, and iwi: conservation tales from two temperate zones. \*KM Ramstad. Zoology Lecture Series, **University of Hawaii Manoa**, Honolulu, USA.
- 2008 Tikanga and technology: a new net goes fishing.\*KM Ramstad and \*L Faulkner. Science Communicators Association of New Zealand, Dunedin, New Zealand.

#### Contributed presentations (of 128 total, including 66 with students)

- 2023 Genomic population structure of the peripatetic wood stork. <u>M Zimmerman</u>, R Flamio Jr, NJ Bayona-Vásquez, SN Del Lama and \*KM Ramstad. **Waterbird Society**, Fort Lauderdale, FL.
- 2023 Reproductive Integration of Gopher Tortoises Following Multiple Population Augmentations. \*TD Tuberville, KM Ramstad, TA Edwards, AM Grosse, JW Dillman, RK McKee, H Young, and KA Buhlmann. Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles, Charleston, SC.
- 2023 Assessing the genomic basis of local adaptation in glacial sockeye salmon (*Oncorhynchus nerka*). \*KM Ramstad, R Flamio, A DeLaurier, G Luikart and <u>N Richardson</u>. **Society for the Study of Evolution**, Albuquerque, NM.
- 2023 Post-translocation fitness and social structure in a recently founded red-cockaded woodpecker population. \*<u>B Taylor</u>, J Garabedian, M Pavlosky, and KM Ramstad. **Society for the Study of Evolution**, 21-25 June 2023, Albuquerque, NM (poster)
- 2022 Female biased dispersal promotes fine-scale genetic structure in the flightless rowi. \*KM Ramstad. **50** Years of Conservation Genetics: A Symposium in Honor of Fred Allendorf. Missoula, MT.
- 2022 Not all who wander are lost: Testing for genes associated with migratory behavior in a peripatetic species. \*KM Ramstad. **Wood Stork Monitoring and Management meeting**. (virtual)
- 2021 Can drones be used to estimate the hatching success of WOST? \*<u>H Mayo</u> and KM Ramstad. **South Carolina Chapter of The Wildlife Society** (virtual).
- 2020 Genomic population structure of American wood storks how many populations are there? \*KM Ramstad, NJ Bayona-Vásquez, SN Del Lama, SL Lance, and AL Bryan. North American Ornithological Conference (virtual).
- 2019 Effects of herbicide Triclopyr on the behavior and physiology of juvenile frogs. \*<u>A McFall</u>, J Ziemba, GRodriguez, KM Ramstad, and S Lance. **Society of Environmental Toxicology and Chemistry** North America Annual Meeting, Toronto, Canada.
- 2018 Can wood stork nests be monitored with camera traps? \*<u>R Saxon</u>, <u>M Day</u>, L Bryan & KM Ramstad. **Wood Stork Research and Monitoring Working Group** Annual Meeting, Jacksonville, FL.
- 2017 Signatures of positive selection in a basal avian lineage (*Apteryx* spp). \*KM Ramstad, LT Dunning. Conference on Conservation of Adaptive Potential and Functional Diversity, Durham, UK.

## **SELECTED PRESENTATIONS (CONT.)** \*presenter, <u>undergraduate student</u>, graduate students

#### Contributed presentations cont.

- 2016 Fine-scale isolation by distance and genetic bottlenecks in New Zealand's rarest kiwi. \*KM Ramstad, H Robertson, R Abbott & C Daugherty. **Society for the Study of Evolution**, Austin, TX.
- 2013 Pedigrees are ill-suited to measuring inbreeding in bottlenecked species. \**Taylor, H*, KM Ramstad, FW Allendorf, and M Kardos. **European Society for Evolutionary Biology**, Lisbon, Portugal.
- 2013 Comparative transcriptomics of kiwi: discovering genes associated with reproductive success. \*KM Ramstad and G Kolle. **Biodiversity Genomics Conference**, Canberra, Australia.
- 2012 Is measuring inbreeding depression in wild populations of highly inbred, bottlenecked species worthwhile? \**H Taylor*, KM Ramstad, and M Kardos. **European Congress of Conservation Biology**, Glasgow, Scotland.
- 2012 HiSeq transcriptomics to discover genes associated with reproductive success in kiwi. \*KM Ramstad and G Kolle. International Next Generation Sequencing Conference, Dunedin, New Zealand.
- 2009 Customary harvest and long-term viability of muttonbirds in the Marlborough Sounds, New Zealand: Implications for retaining traditional cultural heritage. \**AF Geary*, NJ Nelson and KM Ramstad. **Australasian Ornithological Conference**, New South Wales, Australia.
- 2009 Serial founder effects and population persistence of little spotted kiwi. \*KM Ramstad, HA Robertson, RM Colbourne, FW Allendorf and CH Daugherty. **Society for the Study of Evolution**, Moscow, ID.
- 2007 Fierce females: variation in intra-sexual aggression among tuatara. \*KM Ramstad, JA Moore, and JM Refsnider. **European Society of Evolutionary Biology**, Uppsala, Sweden.
- 2007 Increased weapon size and reduced visual displays: evidence for a glacial ecotype of sockeye salmon. \*KM Ramstad, CA Woody, and FW Allendorf. Society for the Study of Evolution, Christchurch, New Zealand.

## PUBLIC OUTREACH & SERVICE TO THE SCIENTIFIC COMMUNITY

- Education and Outreach Committee member, Society for the Study of Evolution, September 2023
- Student Activities Co-Chair, Annual Meeting of the Waterbird Society, September 2023
- Workshop organizer Basics in Bioinformatics and Genome-Wide Association Studies, University of South Carolina Aiken, June 2023
- **Panelist** Conserving and Restoring Biodiversity: From James River Sturgeon to New Zealand Kiwi, with Matthew Balazik and Phil Seddon, University of Richmond, November 2022
- **Review panelist** for National Science Foundation, Evolutionary Processes Cluster, Careers Panel, November 2022
- **Panelist** *Navigating the Game: Scholarship for Promotion and Tenure*, Center for Teaching Excellence, USC Aiken, October 2021
- Student presentation judge, North American Ornithological Conference, held virtually August 2020
- ICE event speaker Women in Science: Stereotypes & Reality, March 2019
- Instructor for USC Aiken Academy of Lifelong Learning, 2019
- Bioinformatics workshop organizer, held in conjunction with the INBRE Bioinformatics Core, April 2019
- Science in Action guest speaker, Ballard High School, Seattle, WA, Jan 2018
- Undergraduate diversity mentor, Annual Meeting of the Society for the Study of Evolution, June 2016
- Symposium co-organizer, Conservation Genomics, International Congress for Conservation Biology, 2011
- Pre-doctoral internship program organizer, developed and secured funding (\$150,000NZ) for a pre-doctoral internship program for Māori and indigenous students, jointly sponsored by the Allan Wilson Centre for Molecular Ecology and Evolution and Ngā Pae o te Māramatanga (Māori Centre for Research Excellence), New Zealand, 2008 2010

## PUBLIC OUTREACH & SERVICE TO THE SCIENTIFIC COMMUNITY (CONT.)

- Traditional knowledge workshops, organizer
  - WAI262, Annual meeting of the Allan Wilson Centre, New Zealand 2009
  - Whakapapa and DNA, Te Wananga Pūtaiao and Ngāti Kahugnunu, New Zealand 2008
  - *Tikanga & technology: A new net goes fishing,* held jointly with the New Zealand Environmental Risk Management Authority, the Institute of Geological and Nuclear Sciences, and the Allan Wilson Centre, New Zealand, 2008
- **Peer Reviewer** for Proceedings of the Royal Society B, Journal of Ethnobiology and Ethnomedicine, Biological Conservation, Molecular Ecology, Conservation Biology, Transactions of the American Fisheries Society, Reviews in Fish Biology and Fisheries, Journal of the Royal Society of New Zealand, Fisheries, PLoS ONE, GigScience, Biodiversity and Conservation and New Zealand Journal of Zoology
- **Postgraduate thesis reviewer** for Victoria University of Wellington and University of Otago

#### **PROFESSIONAL APPOINTMENTS & AFFILIATIONS**

#### Advisory appointments

- Genetic Management Advisor, Kiwis for Kiwi and Kiwi Recovery Group, 2014 present
- Kiwi Advisor, EcoGene DNA based diagnostics, 2013 2015
- Māori Consultation Policy Advisory Group, Environmental Protection Authority, New Zealand, 2010-2011
- IUCN Commission on Environmental, Economic & Social Policy, 2007 2021
- Technical Advisory Committee, Te Tiaki Mahinga Kai (Guarding customary food) Project, 2007-2010

#### Current society memberships

- American Genetic Association, since 2020
- Waterbird Society, since 2018
- Society for Conservation Biology, since 2010
- Society for the Study of Evolution, since 2005

#### MEDIA HIGHLIGHTS

- <u>USC Aiken News</u>, USC Aiken biology team draws on genetic techniques to advance the conservation of atrisk species, Jan 2024
- NewsHub, Scientists catch fight between kiwi and tuatara on video, Jan 2019
- <u>New Zealand Herald</u>, Battle to the nest ancient foes little spotted kiwi and ancient tuatara tussle it out, Jan 2019
- Radio New Zealand, Tuatara vs Kiwi: the ultimate New Zealand showdown, Jan 2019
- Bella magazine, Women making history at USCA, March 2017
- <u>SCOOP Sci-Tech News</u>, Inbreeding threatens Long Island's little spotted kiwi, Jan 2017
- Stuff.co.nz, Kiwi colony 'seriously threatened' by severe inbreeding, Jan 2017
- **Otago Daily Times**, Inbreeding threatens once thriving kiwi population, Jan 2017
- USC Aiken Magazine, It takes a village one species may have it all figured out, Fall 2016
- <u>Science Media Centre</u>, Kiwi genetics a conservation concern, May 2013
- Dominion Post, Lack of diversity puts little spotted kiwi at risk, May 2013
- <u>Science NOW</u>, Rising numbers may not be enough to save tigers and kiwis, May 2013
- Scientific American, NZ's little spotted kiwi are in more trouble than we thought, May 2013
- Earth Times, Kiwi conservation genetics, May 2013
- **Dominion Post**, Scientists peek into Kapiti spotted kiwi, Oct 2012