

## ***CURRICULUM VITAE: GAIL L. PATRICELLI***

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### **EDUCATION**

- 1995 – 2002 Ph.D. in Biology; University of Maryland, College Park, MD, Advisor: Dr. Gerald Borgia  
1995 – 2001 M.S. in Biology; University of Maryland, College Park, MD, Advisor: Dr. Gerald Borgia  
1989 – 1993 B.A. in Biology with Honors and Studio Art; Whitman College, Walla Walla, WA
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### **PROFESSIONAL EXPERIENCE**

- 2017 – present Chair, Animal Behavior Graduate Group, University of California, Davis  
2014 – present Professor, Dept. of Evolution and Ecology, University of California, Davis  
2010 – 2014 Associate Professor, Dept. of Evolution and Ecology, University of California, Davis  
2004 – 2010 Assistant Professor, Dept. of Evolution and Ecology, University of California, Davis  
2002 – 2004 NSF Postdoctoral Fellow in Biological Informatics, Cornell Laboratory of Ornithology, Cornell University, NY. Advisor: Professor Jack W. Bradbury
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### **SELECTED HONORS, AWARDS & FELLOWSHIPS**

- 2019 Elected Fellow of the American Ornithological Society  
2018 Quest Award for outstanding seminal contribution, Animal Behavior Society  
2018 Elected Fellow of the Animal Behavior Society  
2017 UC Davis Academic Senate Distinguished Teaching Award  
2016 UC Davis College of Biological Sciences Faculty Teaching Award  
2016 Elected Member of the American Ornithological Society  
2015 UC Davis ADVANCE Scholar Award for outstanding research activity and mentorship  
2014 UC Davis Chancellor's Fellow (2014-2019)  
2012 UC Davis Chancellor's Award for Excellence in Mentorship of Undergraduate Research  
2010 Outstanding New Investigator Award, Animal Behavior Society  
2002 NSF Postdoctoral Fellowship in Biological Informatics, Cornell University  
2002 NIH-NRSA Postdoctoral Fellowship, University of Kentucky (declined)  
2002 Warder Clyde Allee Award for best student paper, 2002 Meeting of the Animal Behavior Society, Indiana University  
1993 Graduation with Honors in Biology, Whitman College, Walla Walla, WA  
1992 Hughes Fellowship for Undergraduate Research (with Dr. Joel G. Kingsolver), University of Washington, Seattle, WA

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## PUBLICATIONS

- Uy, J. Albert C., Gail L. Patricelli & Gerald Borgia. 2000. Dynamic mate-searching tactic allows female satin bowerbirds to reduce searching. *Proceedings Royal Society of London, Ser. B.* 267: 251-256
- Uy, J. Albert C., Gail L. Patricelli & Gerald Borgia. 2001. Loss of preferred mates forces female satin bowerbirds (*Ptilonorhynchus violaceus*) to increase mate searching. *Proceedings of the Royal Society of London, Ser. B.* 268: 633-638
- Uy, J. Albert C., Gail L. Patricelli & Gerald Borgia. 2001. Complex Mate Searching in the Satin Bowerbird *Ptilonorhynchus violaceus*. *American Naturalist.* 158: 530-542
- Patricelli, Gail L., J. Albert C. Uy, Gregory Walsh & Gerald Borgia. 2002. Sexual selection: Male displays adjusted to female's response. *Nature.* 415: 279-280
- Patricelli, G. L., J. Albert C. Uy & Gerald Borgia. 2003. Multiple male traits interact: attractive physical displays facilitate attractive behavioral displays in satin bowerbirds. *Proceedings Royal Society of London, Ser. B.* 270: 2389-2395
- Patricelli, Gail L., J. Albert C. Uy & Gerald Borgia. 2004. Female signals enhance the efficiency of mate assessment in satin bowerbirds (*Ptilonorhynchus violaceus*). *Behavioral Ecology.* 15: 297-304
- Coleman, Seth W., Gail L. Patricelli & Gerald Borgia. 2004. Variable Female Preferences Drive Complex Male Displays. *Nature.* 428: 742-745 (With accompanying New & Views article; selected as one of the most influential papers of the year by The Faculty of 1000)
- Borgia, Gerald, Marc Egeth, J. Albert C. Uy & Gail L. Patricelli. 2004. Juvenile infection and male display: testing the bright male hypothesis across individual life histories. *Behavioral Ecology.* 15: 722-728
- Patricelli, Gail L., Seth W. Coleman & Gerald Borgia. 2006. Male satin bowerbirds (*Ptilonorhynchus violaceus*) reduce their display intensity when their displays startle females: an experiment with robotic females. *Animal Behaviour.* 71: 49-59
- Patricelli, Gail L. and Jessica L. Blickley. 2006. Overview: Avian communication in urban noise: the causes and consequences of vocal adjustment. *The Auk.* 123: 639-649
- Patricelli, Gail L., Marc S. Dantzker and Jack W. Bradbury. 2007. Differences in acoustic directionality among vocalizations of the male red-winged blackbird (*Agelaius phoeniceus*) are related to function in communication. *Behavioral Ecology & Sociobiology.* 61: 1099-1110
- Sheila M. Reynolds, Katie Dryer, Jonathan Bollback, J. Albert C. Uy, Gail L. Patricelli, Timothy Robson, Gerald Borgia and Michael J. Braun. 2007. Behavioral paternity predicts genetic paternity in satin bowerbirds (*Ptilonorhynchus violaceus*), a species with a non-resource-based mating system. *The Auk* 124: 857-867
- Seth W. Coleman, Gail L. Patricelli, Brian Coyle, Jennifer Siani and Gerald Borgia. 2007. Female preferences drive the evolution of mimetic accuracy in male sexual displays. *Biology Letters.* 3: 463-466

- Patricelli, Gail L., Marc S. Dantzker and Jack W. Bradbury. 2008. Directionality of red-winged blackbird (*Agelaius phoeniceus*) song relates to amplitude and singing behaviors. *Animal Behaviour*, 76: 1389-1401
- Reynolds, Sheila M., Mary C. Christman, J. Albert C. Uy, Gail L. Patricelli, Michael J. Braun and Gerald Borgia. 2009. Lekking satin bowerbird males aggregate with relatives to mitigate aggression. *Behavioral Ecology* 20: 410-5
- Krakauer, Alan H., Maura Tyrell, Kenna Lehmann, Neil Losin, Franz Goller and Gail L. Patricelli. 2009. Vocal and anatomical evidence for a two-voiced syrinx in the greater sage-grouse *Centrocercus urophasianus*. *Journal of Experimental Biology*. 212: 3719-3727
- Patricelli, Gail L. and Alan H. Krakauer. 2010. Tactical allocation of display effort reduces trade-offs among multiple sexual signals in greater sage-grouse: an experiment with a robotic female. *Behavioral Ecology* 21: 97-106
- Yorzinski, Jessica and Gail L. Patricelli. 2010. Birds adjust acoustic directionality to beam their antipredator calls to predators and conspecifics. *Proceedings Royal Society of London, Ser. B*. 277: 923-932
- Blickley, Jessica L. and Gail L. Patricelli. 2010. Impacts of Anthropogenic Noise on Wildlife: Research Priorities for the Development of Standards and Mitigation. *Journal of International Wildlife Law and Policy*. 13: 274-292
- Patricelli, Gail L., Alan H. Krakauer and Richard McElreath. 2011. Assets and tactics in a mating market: economic models of negotiation offer insights into animal courtship dynamics. *Current Zoology* 57: 225-236
- Blumstein, D. T., D. J. Mennill, P. Clemins, L. Girod, K. Yao, G. Patricelli, J. L. Deppe, A. H. Krakauer, C. Clark, K. A. Cortopassi, S. F. Hanser, B. McCowan, A. M. Ali and A. N. G. Kirschel. 2011. Acoustic monitoring in terrestrial environments using microphone arrays: applications, technological considerations and prospectus. *Journal of Applied Ecology*. 48: 758-767
- Blickley, Jessica L., Diane Blackwood and Gail L. Patricelli. 2012. Experimental evidence for the effects of chronic anthropogenic noise on abundance of Greater Sage-Grouse at leks. *Conservation Biology*. 26: 461-471
- Blickley, Jessica L. and Gail L. Patricelli. 2012. Potential acoustic masking of greater sage-grouse display components by chronic industrial noise. *Ornithological Monographs*. 74: 23-25
- Iglesias, Teresa L., Richard McElreath and Gail L. Patricelli. 2012. Western scrub jay funerals: cacophonous aggregations in response to dead conspecifics. *Animal Behaviour*. 84: 1103-1111
- Blickley, Jessica L., Karen S. Word, Alan H. Krakauer, Jennifer L. Phillips, Sarah N. Sells, John C. Wingfield, Gail L. Patricelli. 2012. Experimental chronic noise exposure is related to elevated fecal corticosteroid metabolites in lekking male greater sage-grouse (*Centrocercus urophasianus*). *PLoS ONE*. 7 (11): e50462. doi:10.1371/journal.pone.0050462
- Crino, Ondi L., Erin E. Johnson, Jessica L. Blickley, Gail L. Patricelli and Creagh W. Breuner. 2013. The effects of experimentally elevated traffic noise on nestling white-crowned sparrow stress

physiology, immune function, and life-history. *Journal of Experimental Biology*. 216: 2055-2062

- Yorzinski, Jessica L., Gail L. Patricelli, Jason S. Babcock, John M. Pearson and Michael L. Platt. 2013. Through their eyes: selective attention in peahens during courtship. *Journal of Experimental Biology*. 216: 3035-3046. (Highlighted in *Inside JEB*)
- Gibson, Daniel V., Erik J. Blomberg, Gail L. Patricelli, Alan H. Krakauer, Michael T. Atamian and James S. Sedinger. 2013. Effects of radio collars on male sage-grouse survival and lekking behavior. *Condor*. 115(4):769–776
- Pellis, Sergio M., Melissa A. Blundell, Heather C. Bell, Vivien C. Pellis, Alan H. Krakauer, Gail L. Patricelli. 2013. Drawn into the vortex: The facing-past encounter and combat in lekking male greater sage-grouse (*Centrocercus urophasianus*). *Behaviour*. 150:1567-1599
- Patricelli, Gail L., Jessica L. Blickley and Stacie L. Hooper. 2013. Recommended management strategies to limit anthropogenic noise impacts on greater sage-grouse in Wyoming. *Journal of Human-Wildlife Interactions*. 7(2): 230–249
- Iglesias, Teresa L., Regina Stetkevitch and Gail L. Patricelli. 2014. Dead heterospecifics as cues of risk in the environment: a size-based rule of thumb? *Behaviour*. 151: 1-22
- Reynolds, Sheila M., J. Albert C. Uy, Gail L. Patricelli, Seth W. Coleman, Michael J. Braun and Gerald Borgia. 2014. Tests of the kin selection model of mate choice and inbreeding avoidance in satin bowerbirds. *Behavioral Ecology*. 25: 1005-1014
- Taff, Conor C., Patricelli, G. L., & Freeman-Gallant, C. R. 2014. Fluctuations in neighbourhood fertility generate variable signalling effort. *Proceedings Royal Society of London, Ser. B*. 281: 20141974
- Koch, Rebecca; Alan H. Krakauer, Gail L. Patricelli. 2015. Investigating female mate choice for mechanical sounds in the male Greater Sage-Grouse. *The Auk* 132: 349-358
- Ríos-Chelén, Alejandro A., Gavin Lee and Gail L. Patricelli. 2015. Acoustic and visual signals in red-winged blackbirds: different communication channels to deal with urban noise? *Behavioral Ecology & Sociobiology* 69: 1139-1151.
- Yorzinski, Jessica L., Gail L. Patricelli, Michael L. Platt, and Michael F. Land. 2015. Eye and head movements shape gaze shifts in Indian peafowl. *Journal of Experimental Biology* 218: 3771-3776
- Krakauer, Alan H., Melissa A. Blundell, Tawny N. Scanlan, Michelle S. Wechsler, Emily A. McCloskey, Jennifer H. Yu, Gail L. Patricelli. 2016. Successful male sage-grouse show greater laterality in courtship and aggressive interactions. *Animal Behaviour* 111: 261–267
- Patricelli, Gail L., A. H. Krakauer, C. C. Taff. 2016. Variable signals in a complex world: Shifting views of within-individual variability in sexual display traits. *Advances in the Study of Behavior* 48: 319-386
- Patricelli, Gail L. and Eileen A. Hebets. 2016. New Dimensions in Animal Communication: The case for complexity. *Current Opinions in Behavioral Sciences* 12: 80-89

- Ríos-Chelén, Alejandro A., Gavin Lee and Gail L. Patricelli. 2016. Experimental test of plasticity in red-winged blackbird vocal and visual behaviors in response to noise and a comparison on two methods for measuring minimum frequency. *Behaviour* 153: 1445 – 1472
- Ríos-Chelén, Alejandro A., Ambria N. McDonald, Ayala N. Berger, Anna C. Perry, Alan H. Krakauer, and Gail L. Patricelli. 2017. Do birds vocalize at higher pitch in noise, or is it a matter of measurement? *Behavioral Ecology & Sociobiology* 71: 29. doi:10.1007/s00265-016-2243-7
- Fremgen, Marcella R., Daniel Gibson, Rebecca L. Ehrlich, Alan H. Krakauer, Jennifer S. Forbey, Erik J. Blomberg, Jim S. Sedinger, Gail L. Patricelli. 2017. Necklace-style radio-transmitters are associated with changes in display vocalizations of male Greater Sage-grouse. *Wildlife Biology*: wlb.00236. doi.org/10.2981/wlb.00236
- Forbey, Jennifer S., G. L. Patricelli, D. M. Delparte, A. H. Krakauer, P. J. Olsoy, M. R. Fremgen, J. D. Nobler, L. P. Spaete, L. A. Shipley, J. L. Rachlow, A. K. Dirksen, A. Perry, B.A. Richardson, N.F. Glenn. 2017. Wildlife Biology. Emerging Technology to Measure Habitat Quality and Behavior of Grouse. *Wildlife Biology*: wlb.00238. doi: 10.2981/wlb.00238
- Yorzinski, Jessica L., Gail L. Patricelli, Siarhei Bykau and Michael L. Platt. 2017. Selective attention in peacocks during assessment of rival males. *Journal of Experimental Biology*: 220: 1146-115
- Injaian, Allison S. C. C. Taff, G. L. Patricelli. 2018. Experimental anthropogenic noise impacts avian parental behaviour, and nestling growth and oxidative stress. *Animal Behaviour*. 136: 31-39. doi: 10.1016/j.anbehav.2017.12.003
- Injaian, Allison S., Lauren Y. Poon, Gail L. Patricelli. 2018. Effects of experimental anthropogenic noise on avian settlement patterns and reproductive success, *Behavioral Ecology*, 29: 1181–1189. <https://doi.org/10.1093/beheco/ary097>
- Injaian, Allison S., Conor C. Taff, Kira L. Pearson, Michelle M.Y. Gin, Gail L. Patricelli, Maren N. Vitousek. 2018. Effects of experimental chronic traffic noise exposure on adult and nestling corticosterone levels, and nestling body condition in a free-living bird, *Hormones and Behavior*. 106: 19-27. Doi: 10.1016/j.yhbeh.2018.07.012
- Patricelli, Gail L., Eileen A. Hebets, Tamra C. Mendelson. 2019. Book review of, Prum, Richard O. “The evolution of beauty: How Darwin's forgotten theory of mate choice shapes the animal world—and us” (2017). *Evolution*, <https://doi.org/10.1111/evo.13629>
- Injaian, Allison S., Paulina L. Gonzalez-Gomez, Conor C. Taff, Alicia K. Bird, Alexis D. Ziur, Gail L. Patricelli, Mark M. F. Haussmann and John C. Wingfield, 2019. Traffic noise exposure alters nestling physiology and telomere attrition through direct, but not maternal, effects in a free-living bird. *General and Comparative Endocrinology* 176: 14-21
- Perry, Anna C., Alan H. Krakauer, Richard McElreath, David J. Harris, Gail L. Patricelli. 2019. Hidden Markov models reveal tactical adjustment of temporally-clustered courtship displays in response to the behaviors of a robotic female. *The American Naturalist* 194: 1-16. doi: 10.1086/703518
- Sih, Andrew, David L. Sinn and Gail L. Patricelli. 2019. On the importance of consistent individual differences in behavioural skill. *Animal Behaviour* 155: 307-317

- Marcella R. Fremgen-Tarantino, Peter J. Olsoy, Graham G. Frye, John W. Connelly, Alan H. Krakauer, Gail L. Patricelli, Jennifer Sorensen Forbey. 2021. Assessing accuracy of GAP and LANDFIRE land cover datasets in winter habitats used by greater sage-grouse in Idaho and Wyoming, USA, *Journal of Environmental Management*, 280: 111720. doi.org/10.1016/j.jenvman.2020.111720
- Logsdon, Ryane M. Alan H. Krakauer, Anne Hylback, Kimberly Mitchell, Britt Dryer, Jennifer S. Forbey, Gail L. Patricelli. 2021. Social information use in greater sage-grouse in response to habitat structure and social network. *Integrative and Comparative Biology*, 61: E539-E540
- Ríos-Chelén, Alejandro A., Jennifer N Phillips, Gail L. Patricelli, D.M. Dominoni. 2022. Effects of Artificial Light at Night on Organisms: From Mechanisms to Function. *Frontiers in Ecology and Evolution* 10, 896460. <https://doi.org/10.3389/fevo.2022.896460>
- Snow, Samuel S., Gail L. Patricelli, Carter T. Butts, Alan H. Krakauer, Anna C. Perry, Ryane Logsdon, Richard O. Prum. 2022. Fighting isn't sexy in lekking Greater Sage-grouse (*Centrocercus urophasianus*). *BioRxiv* 2022.08.26.505294
- Dantzer, B, K.E. Mabry, J.R. Bernhardt, R.M. Cox, C.D. Francis, C.K. Ghalambor, K.L. Hoke, S. Jha, E. Ketterson, N.A. Levis, K.M. McCain, G.L. Patricelli, S.H. Paull, N. Pinter-Wollman, R.J. Safran, T.S. Schwartz, H.L. Throop, L. Zaman, L.B. Martin, Understanding Organisms Using Ecological Observatory Networks, *Integrative Organismal Biology*, Volume 5, Issue 1, 2023, obad036, <https://doi.org/10.1093/iob/obad036>
- Patricelli, G.L. 2023. Behavioral ecology: New technology enables a more holistic view of complex animal behavior. *PLoS Biology* 21 (8), e3002264
- Mendelson, T.C., G.L. Patricelli, E.A. Hebets. 2023. Could sexual selection be driven by the mistaken inferences of young females? *PLoS Biology* 21 (10), e3002321

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## UNPUBLISHED REPORTS

- Ambrose, Skip, Gail L. Patricelli, and Holly Copeland. Review of noise protocols for sage-grouse in the BLM Approved Resource Management Plan Amendment for Sage-Grouse (9-Plan) and Wyoming Governor's Executive Order 2015-4 and recommendations for revisions. May 2016. Report to the Bureau of Land Management and Wyoming Game and Fish Department. 8 pp.
- Piquette, Daniel, Andy Keck, Nathan Seward, Brian P. Magee, Patrick A. Magee, and Gail L. Patricelli. Acoustic soundscapes in the Gunnison Basin and effects of anthropogenic noise on Gunnison Sage-grouse (*Centrocercus minimus*) in the Gunnison basin, Colorado. April 2014. Report submitted to Colorado Parks and Wildlife. 27 pp.
- Patricelli, Gail L., Jessica L. Blickley and Stacie L. Hooper. 2012. The impacts of noise on greater sage-grouse: A discussion of current stipulations in Wyoming with recommendations for further research and interim stipulations. Report prepared for the Bureau of Land Management and Wyoming Game and Fish Department. 24 pp.
- Blickley, Jessica L. and Gail L. Patricelli. 2012. Noise monitoring recommendations for greater sage-grouse habitat in Wyoming. Prepared for: Pinedale Anticline Project Office and Wyoming Game and Fish, Pinedale Office. 18 pp.

Blickley, Jessica L. and Gail L. Patricelli. 2007. Measuring the masking potential of noise from energy development for mountain plover (*Charadrius montanus*) vocalizations. Report prepared for the Bureau of Land Management. 43 pp.

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## OTHER ARTICLES

Patricelli, Gail L. 2019. Use of Robotics in the Study of Animal Behavior. *Encyclopedia of Animal Behavior* (Second Edition). pp. 535-545. <https://doi.org/10.1016/B978-0-12-809633-8.01240-1>

Patricelli Gail L. 2017. Robotics in the Study of Animal Behavior. *Reference Module in Life Sciences*, Elsevier. <https://doi.org/10.1016/B978-0-12-809633-8.01240-1>

Forbey, Jennifer, Gail L. Patricelli, Donna Delparte, Alan Krakauer, Peter Olsoy, Marcella Fremgen, Jordan Nobler, Nancy Glenn, Lucas Spaete, Bryce Richardson, Lisa Shipley and Jessica Mitchell. 2016. Overview of a Workshop to Expand the Use of Emerging Technology to Understand the Ecology of Grouse in a Changing Climate, *Grouse News*, 52: 7-18

Krakauer, Alan H., Sarah E. Heimbach, Ryane M. Logsdon and Gail L. Patricelli. 2016. Use of camera traps to record activity on sage-grouse leks, *Grouse News*, 52: 19-23

Patricelli Gail L. 2010. Robotics in the Study of Animal Behavior. In: Breed M.D. and Moore J., (eds.) *Encyclopedia of Animal Behavior*, volume 3, pp. 91-99. Academic Press.

“Courtship Display of Male Bowerbirds”, in *Biology*, 8<sup>th</sup> edition by Sylvia S. Mader, McGraw Hill 2003; used again in 9<sup>th</sup> edition 2006. A 2-page summary of my research, used as an example of the experiment method in animal behavior research.

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## EXTRAMURAL RESEARCH SUPPORT

Directionality of acoustic communication in passerines. PI: Gail L. Patricelli, National Science Foundation, Postdoctoral fellowship in Biological Informatics, **\$100,000** (2002-2004)

Investigations into Effects of Gas Field Development Noise on Sage Grouse Mating Behavior  
PI: Gail L. Patricelli, Wyoming Community Foundation, Tom Thorne Sage-Grouse Conservation Fund research grant, **\$10,600** (February 1, 2006 to January 31, 2007)

Examining the effects of noise from energy exploration and development on the breeding biology of the greater sage-grouse (*Centrocercus urophasianus*). PI: Gail L. Patricelli, State of Wyoming, Wyoming Sage-Grouse Conservation Fund grant, **\$20,000** (December 12, 2005 to June 30, 2006)

The role of the acoustic environment in shaping the courtship display of male greater sage grouse (*Centrocercus urophasianus*). PI: Gail L. Patricelli, National Science Foundation, Research Starter grant, **\$50,000** (March 1, 2005 to February 28, 2007)

- Examining Effects of Energy Development Noise. PI: Gail L. Patricelli, National Fish and Wildlife Foundation (NFWF), Sagebrush Conservation Fund Grant, **\$88,000** (December 1, 2005 to May 31, 2008)
- Examining the effects of noise from energy exploration and development on the breeding biology of the greater sage-grouse (*Centrocercus urophasianus*). PI: Gail L. Patricelli, State of Wyoming, Wyoming Sage-Grouse Conservation Fund grant, **\$78,028** (March 1, 2007 to December 31, 2009)
- Examining the effects of noise from energy development on the breeding biology of the greater sage-grouse (*Centrocercus urophasianus*). PI: Gail L. Patricelli, Bureau of Land Management, Cooperative Ecosystems Study Unit (CESU) research work contract, **\$ 580,916** (April 1, 2005 to March 31, 2012)
- Energy Noise Impacts on Mountain Plovers (*Charadrius montanus*). PI: Gail L. Patricelli, Bureau of Land Management, CESU research work contract, **\$7,000** (April 1, 2005 to March 31, 2010)
- Measuring the stress response of greater sage-grouse to chronic and intermittent noise disturbance  
PI: Gail L. Patricelli, Wyoming Community Foundation, Tom Thorne Sage-Grouse Conservation Fund research grant, **\$17,089** (February 28, 2008 to February 28, 2010)
- The stress response of greater sage-grouse to chronic and intermittent noise disturbance. PI: Gail L. Patricelli, National Parks Service, Cooperative Ecosystems Study Unit (CESU) research work contract **\$28,700.24** (June 1, 2008 to May 31, 2010)
- Developing a computer program to predict the effects of noise from energy development on lekking greater sage-grouse (*Centrocercus urophasianus*). PI: Gail L. Patricelli, State of Wyoming, Wyoming Sage-Grouse Conservation Fund grant, **\$51,205** (October 1, 2008 to September 30, 2010)
- An economic view of reproductive decisions in a model species. PI: Gail L. Patricelli, CO-PI: Alan H. Krakauer, National Science Foundation, **\$375,000** (August 1, 2009 to July 31, 2013)
- Establishing ambient noise levels and noise measurement protocols for the Pinedale Anticline Project Area. PI: Gail L. Patricelli, Pinedale Anticline Project Office work contract, **\$10,433** (March 28, 2011 to March 27, 2012)
- Estimating noise impacts from natural gas development for habitat-selection modeling; PI: Gail L. Patricelli, State of Wyoming, Wyoming Sage-Grouse Conservation Fund grant, **\$49,335** (June 1, 2011 to September 31, 2012)
- Determining the impact of noise on greater sage-grouse using noise propagation simulations. PI: Gail L. Patricelli, State of Wyoming, Wyoming Sage-Grouse Conservation Fund grant, **\$41,626** (June 1, 2013 to September 31, 2014)
- Determining the impact of noise on greater sage-grouse (*Centrocercus urophasianus*) using noise propagation simulations and habitat-selection modeling. PI: Gail L. Patricelli, Bureau of Land Management, CESU research work contract, **\$ 50,000** approved for 2012-2013; up to \$188,266 over 5 years (October 1, 2012 to September 31, 2017)
- Workshop to Expand the Use of Emerging Technology to Understand the Ecology of Avian Herbivores in a Changing Climate. PI: Jennifer S. Forbey (Boise State University), co-PIs: Gail Patricelli and Donna Delparte (Idaho State University). National Science Foundation, **\$7,800** (July 1, 2015 to June 30, 2016)



Courtship negotiation in a life-history context: interaction between on- and off-lek tactics in sage-grouse. PI: Gail L. Patricelli, CO-PIs: Alan H. Krakauer and Jennifer S. Forbey (Boise State University), National Science Foundation, **\$470,000** (March 1, 2013 to April 31, 2017)

Mapping greater sage-grouse leks to link habitat structure and lek behaviors. PI: Gail L. Patricelli, State of Wyoming, WY Sage-Grouse Conservation Fund grant, **\$15,000** (Nov 1, 2016 to Sept 31, 2018)

The interaction between restoration, foraging ecology, and mating behavior in Greater Sage-Grouse. PI: Gail L. Patricelli, Wildlife Heritage Account grant from Nevada Department of Wildlife, **\$65,848** (July 1, 2020 to June 30, 2022)

The interaction between restoration, foraging ecology, and mating behavior in Greater Sage-Grouse (Phase 2). PI: Gail L. Patricelli, Wildlife Heritage Account grant from Nevada Department of Wildlife, **\$69,521** (July 1, 2021 to June 30, 2023)

The interaction between restoration, foraging ecology, and mating behavior in Greater Sage-Grouse (Phase 3). PI: Gail L. Patricelli, Wildlife Heritage Account grant from Nevada Department of Wildlife, **\$65,855** (July 1, 2022 to June 30, 2024)

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## PRESENTATIONS AND WORKSHOPS AT PROFESSIONAL MEETINGS

- 2023** Winter Animal Behavior Conference, Steamboat Springs, CO
- 2022** Winter Animal Behavior Conference, Steamboat Springs, CO  
Keynote Lecture, North American Meeting of Applied Ethologists, Davis, CA  
NSF Research Coordination Network meeting on the use of data from the National Ecological Observatory Network (NEON) in organismal biology
- 2021** Society for Integrative and Comparative Biology symposium on Statiotemporal Dynamics in Animal Communication, online
- 2020** Winter Animal Behavior Conference, Steamboat Springs, CO
- 2019** Winter Animal Behavior Conference, Steamboat Springs, CO  
Fellows Plenary Lecture, Animal Behavior Society, Chicago IL  
American Ornithological Society, Invited speaker, symposium *Breaking through biases: what we've learned from female birds*, Anchorage, AK  
Western Section of the Wildlife Society, Symposium *Merging practice & life-history theory for gamebird populations: Applied and basic solutions to complex management problems*, Reno, NV
- 2018** Winter Animal Behavior Conference, Steamboat Springs, CO  
Animal Behavior Society, Milwaukee, WI  
Intl. Ornithological Congress, Vancouver, BC Canada  
International Grouse Symposium, Logan UT
- 2017** Winter Animal Behavior Conference, Steamboat Springs, CO  
*Bird Sense: Bird Behaviour in a Changing World*, Symposium at the London Zoo, UK  
Keynote speaker, Gamma Chapter of Tri-Beta Biological Honor Society Convention  
Western Section of the Wildlife Society, Sage-grouse conservation workshop
- 2016** Winter Animal Behavior Conference, Steamboat Springs, CO  
Western Assoc. Fish and Wildlife Agencies (WAFWA) Conference on Sage and Columbian Sharp Tailed Grouse Conservation  
*The Symbolic Animal: Evolution and Neuroethology of Aesthetics* workshop at the Ettore Majorana Foundation and Center for Scientific Culture, Erice Sicily

- 2015** Winter Animal Behavior Conference, Steamboat Springs, CO  
 International Grouse Symposium, Reykjavík, Iceland  
 Co-organizer: *Workshop to Expand the Use of Emerging Technology to Understand the Ecology of Avian Herbivores in a Changing Climate*, Intl. Grouse Symposium, Reykjavík, Iceland
- 2014** Winter Animal Behavior Conference, Steamboat Springs, CO  
 WAFWA Conference on Sage and Columbian Sharp Tailed Grouse Conservation  
 Intl. Soc. Behavioral Ecology, Hunter College, NY  
 Animal Behavior Society, Princeton, NJ
- 2013** Winter Animal Behavior Conference, Steamboat Springs, CO  
 Animal Behavior Society, Boulder, CO
- 2012** Winter Animal Behavior Conference, Steamboat Springs, CO  
 The Wilderness Society Meeting, Sacramento, CA  
 WAFWA Conference on Sage and Columbian Sharp Tailed Grouse Conservation
- 2011** Winter Animal Behavior Conference, Steamboat Springs, CO
- 2010** Intl. Ornithological Congress, Campos do Jordão, Brazil  
 Animal Behavior Society, College of William and Mary, VA  
 WAFWA Conference on Sage and Columbian Sharp Tailed Grouse Conservation
- 2009** Animal Behavior Society, Pirenópolis, Brazil  
*Keynote Address*, American Ornithologists' Union, Philadelphia  
*Invited presentation*, "Our Planet and its Life: Origins and Futures", AAAS, Chicago, IL.
- 2008** *Invited presentation*, NSF-sponsored workshop on the use of acoustic arrays in research, UCLA  
 Intl. Soc. Behavioral Ecology, Cornell University  
 Winter Animal Behavior Conference, Steamboat Springs
- 2006** *Invited symposium presentation*, Intl. Ornithology Congress, Hamburg, Germany  
 Intl. Ornithology Congress, Hamburg, Germany  
 Intl. Soc. Behavioral Ecology, Tours, France  
 Winter Animal Behavior Conference, Steamboat Springs
- 2004** Animal Behavior Society, Oaxaca, Mexico  
 Assoc. Field Ornithologists, Cornell Univ.
- 2003** Animal Behavior Society, Boise State Univ.  
 Acoustical Society America, Univ. of Maryland, College Park
- 2002** *Warder Clyde Allee competition*, Animal Behavior Society, Indiana Univ.
- 2001** American Ornithologists' Union, Univ. of Washington, Seattle  
 Intl. Soc. Behavioral Ecology, Univ. of Zürich, Switzerland
- 2000** Society for the Study of Evolution, Indiana Univ.
- 1999** Animal Behavior Society, Bucknell Univ.

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## INVITED LECTURES AND SEMINARS

- 2023** Department of Zoology, University of Wyoming  
 Centre for Research in Animal Behaviour, University of Exeter, UK (Zoom)  
 Department of Biology, Cal Poly San Luis Obispo
- 2021** Tufts University, Department of Biology (Feb)
- 2020** Claremont Colleges, W.M. Keck Science Department (Feb)
- 2019** Harry Hann Endowed Lecturer in Ornithology, Michigan Biological Station (a research presentation and a public presentation) (July)  
 Department of Ecology and Evolutionary Biology and The Robotics Interfaces seminar series (co-sponsored), University of Michigan, Ann Arbor, MI (Sept)

**2018** Department of Biology, San Diego State University (Feb)  
Ecology, Evolution & Conservation colloquium, University of Nevada, Reno (May)  
Department of Evolution, Ecology, & Organismal Biology, UC Riverside (May)  
Department of Biology, San Francisco State University (Sept)  
Paul C. Mundinger Distinguished Lectureship, Cornell Laboratory of Ornithology (Oct)

**2017** Department of Biology, Western State Colorado University (April)

**2016** Department of Biology, Auburn University, Alabama  
Department of Biology, Colorado State University

**2015** Odum School of Ecology, University of Georgia

**2014** Department of Evolution and Ecology, Tulane University  
Museum of Vertebrate Zoology, UC Berkeley  
Behavioral Ecology Group, Cambridge University, UK

**2013** Ecosystem Restoration Seminar, University of Wyoming, Laramie

**2012** California Academy of Sciences, San Francisco, California  
John T. Emlen Lecturer, Zoology Department, University of Wisconsin-Madison  
Department of Zoology, Michigan State University  
BEACON Center for the Study of Evolution in Action, Michigan State University  
Division of Biological Science, University of Missouri  
Department of Biology, Reed College, Oregon  
Department of Biology, Sacramento State University, California

**2011** Division of Biology, Kansas State University  
University of Texas, Austin

**2010** Department of Biology, University of Montana

**2009** Department of Biology, California State University Chico  
Evolution and Ecology Seminar Series, UC Davis  
Department of Biology, UC Riverside  
Department of Biology, University of Nevada, Reno

**2008** Neurobiology and Behavior Department, Cornell University, NY  
Dept. of Ecology & Evolutionary Biology, University of Arizona, Tucson  
Section of Ecology, Behavior & Evolution, UC San Diego  
School of Biological Sciences, Univ. of Nebraska, Lincoln

**2007** Evolution, Ecology and Behavior Seminar series, Indiana University, Bloomington  
Wildlife Conservation, Law and Policy Seminar Series, UC Davis

**2006** Department of Biology, University of Windsor, Canada  
Department of Animal Sciences, UC Davis  
Department of Ecology and Environmental Biology, UC Santa Cruz  
Department of Ecology and Evolution, University of Chicago

**2005** Faculty Spotlight Lecture, Section of Evolution and Ecology, UC Davis

**2004** Department of Ecology and Environmental Biology, UCLA  
Environmental Science, Policy and Management, University of California, Berkeley  
Department of Ecology and Evolutionary Biology, Rice University  
Department of Biology, University of Massachusetts, Amherst  
Center for Population Biology, UC Davis  
Department of Biology, SUNY Binghamton, NY  
Department of Biology, University of Maryland, Baltimore County  
Department of Biology, University of Puget Sound

**2003** Department of Biology, Syracuse University, NY  
Department of Biology, Whitman College, Walla Walla, WA  
Cornell Laboratory of Ornithology, Cornell University, Ithaca, NY

2002 Department of Psychology, University of Washington, Seattle, WA  
Neurobiology and Behavior Department, Cornell University, NY  
Department of Psychology, CUNY Brooklyn College, NY  
Division of Biology, University of California, San Diego, CA  
Department of Psychology, University of Washington, Seattle, WA

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## TEACHING AT UC DAVIS

**Sex in the Natural World** (EVE13; 3-credit lower-division course). Developed to teach evolution and the scientific method to non-majors. Taught 2016, 2018, 2020, and 2022

**Principles of Animal Communication** (EVE107; 4-credit upper-division undergrad course). Developed to address a major area of animal behavior research; the course combines evolutionary theory, information theory, economic theory, physics and physiology to understand the spectacular forms of animal signals. Taught 2005, 2006, 2007, 2009, 2011, 2013, 2015, 2017, 2019, 2021, 2023.

**Introductory Biology** (BIS2B; 4-credit undergrad course; co-taught in 2008 and 2010).

**Foundations of Animal Behavior** (ANB218a and 218b; 5-credit graduate core course). 12 hours of lectures yearly on Animal Communication and Sexual Selection. Co-instructor in winter 2022.

**Methods of Animal Behavior** (ANB201, 3-credit graduate course). Helps students prepare for their qualifying exams by developing questions, hypotheses and predictions, research frameworks and concept maps for their dissertation projects. Co-instructor Spring 2021, 2022. Instructor spring 2023.

**Academic Professional Development** (ANB290; 2-credit grad seminar; co-taught with Professors John Wingfield in 2009 and Tom Hahn in 2013). Developed to help graduate students prepare for the job market and academic careers. (Typically every other year in odd years: 2009, '13, '15, '17, '19, '21)

**Animal Behavior Seminar Series** (EVE198 and ANB290; 1-credit undergrad and grad seminar). Developed to increase undergrad and grad attendance at research seminars on campus; students from 10+ majors enroll in the course. 2005-2017, 2021.

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## MENTORSHIP

### Postdoctoral researchers:

Dr. Diane Blackwood (2005-2006). Currently working for Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute.

Dr. Sean Hanser (2009-2010). Currently Natural Resources Management Specialist for Marine Mammals at the Naval Facilities Engineering Command, Hawaii.

Dr. Alejandro Ríos-Chelén (UC MEXUS Postdoctoral fellow; 2012-2013). Currently a postdoctoral researcher at the Universidad Nacional Autónoma de México

Dr. Dustin Reichard (NSF Math-Bio Postdoctoral Fellow; 2013-2015). Currently an Assistant Professor at Ohio Wesleyan University.

Dr. Stacie Hooper (2010-2015). Currently a visiting Assistant Professor at the University of the Pacific

Dr. Alan Krakauer (co-PI on two NSF grants; 2005-2018)

### Graduate students:

Jessica Yorzinski (Ph.D.; 2006-2012), ABGG, *NSF Graduate Fellowship*. Currently an Assistant Professor at Texas A&M University

Teresa Iglesias (Ph.D.; 2004-2012), ABGG, *Gates Foundation Fellowship*. Currently a postdoc at the Okinawa Institute of Science and Technology (OIST)

Melissa Blundell (M.S.; 2010-2012), ABGG, *NSF Graduate Fellowship*. Currently a consultant with Dudek Environmental & Engineering.

Jessica Blickley (Ph.D.; 2005-2012), GGE  
Currently an Instruction and Research Science Specialist, Occidental College.

Conor Taff (Ph.D.; 2007-2013), ABGG, *NSF Graduate Fellowship*, *NSF Doctoral Dissertation Improvement Grant*, *2013 UCD Dissertation Year Fellowship*; *2014 Merton Love Award for best dissertation in Evolution and Ecology*. Currently a Postdoctoral Fellow at Cornell University.

Jennifer Phillips (Ph.D.; 2008-2016), ABGG, *2013-5 UCD ARCS Fellow*. Currently Science Director at the Western Great Lakes Bird and Bat Observatory

Anna Perry (Ph.D.; 2010-2017), ABGG, *NSF Graduate Fellowship*

Allison Injaian (Ph.D.; 2014-2018), ABGG, *2015-6 UCD ARCS Fellow*. Currently Lecturer, Odum School of Ecology, University of Georgia

Sarah Jennings (Ph.D.; 2017-2021), GGE, currently postdoctoral fellow at Cal Poly SLO

Mary Clapp (Ph.D.; 2013-2022), GGE, *NSF Graduate Fellowship*, Currently Acoustic Biologist, Institute for Bird Populations

Ryane Logsdon (Ph.D.; 2014-2022), ABGG, *NSF Graduate Fellowship*, Currently Ambassador Program Manager, Wildcare

Alicia Bird (Ph.D.; 2015-2022), GGE, Currently Wildlife Biologist, Cal Department of Fish & Wildlife

Melanie Talavera-Arbonies (M.S.; 2021-2022), ABGG

Eric Tymstra (Ph.D.; 2015-present), GGE

Carly Hawkins (Ph.D.; 2018-present), ABGG, *2021 & 2022 UCD ARCS Fellow*

Maria Ospina (Ph.D.; 2018-present), GGE, *NSF Graduate Fellowship*

Jessica Schaefer (Ph.D.; 2019-present), ABGG (co-advised with Tom Hahn)

Sage Madden (Ph.D.; 2021-present), GGE, *NSF Graduate Fellowship*

Ian Haliburton (PhD.; 2022-present), ABGG

Nicole Lindenauer (M.S.; 2022-present), GGE

Belle Malley (M.S.; 2023-present), GGE

### **Undergraduates:**

355 UC Davis undergraduates have gained research experience by working in my lab; 61 of these students have been under-represented minorities, and 282 have been women. Students have learned about avian biology, animal behavior, and evolution, and have received hands-on experience with data collection and analysis. Many have applied to graduate and professional schools; I provided advice and letters of recommendation to many of these students. All students are invited to take part in lab meetings where my lab discusses current research and literature. Students are encouraged to present their results at professional meetings, and at the UC Davis Undergraduate Research Conference. Fourteen undergraduates are lead author or co-author on manuscripts published or submitted.

2014, 2016 Undergraduates from my lab, Ciara Main and Lauren Poon, were awarded the Turner Award for participation in the Animal Behavior Society conference; Lauren Poon won the Genesis Award for Outstanding Poster Presentation (2016), and Ciara Main received honorable mention (2015)

2006-current Mentored five senior practicum research projects through the Animal Biology major, involving independent research and a thesis

Summer 2007 and 2008, mentored two under-represented minority (URM) high school students (one international), through the UC Davis Young Scholars Program  
2008-2009, mentored two URM undergraduates through the UC Davis Biological Undergraduate Scholars Program (BUSP)  
Summer 2012-Spring 2013, mentored a URM student through the Howard Hughes FASTER program and CAMP (California Alliance for Minority Participation)  
Summer 2013, mentoring a URM undergraduate through the EEGAP (Howard University Evolution and Ecology Graduate Admissions Pathways program)  
Summer 2007 and 2014, mentored URM undergraduates through the McNair Scholars Program

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## PROFESSIONAL SERVICE

Editorial Board, *PLOS Biology*, 2019-current

Associate Editor, *Proceedings of the Royal Society, Series B*. November 2017-December 2020

Director, Organizer and facilitator, "Weaving the Future of Animal Behavior (WFAB)". An NSF-sponsored professional development program to help prepare postdoctoral scholars and young faculty for success in academia. Panelist at 2-day workshop in Scottsdale, Arizona (44 attendees; June 2019); Co-organizer and facilitator at a pre-conference workshop at the Animal Behavior Society meeting, University of Illinois, Chicago (~60 attendees; August 2019) and Portland, OR (~25 attendees; July 2023). I have been Director of WFAB since January 2024.

Editor, *Animal Behaviour*, October 2014-2017

Elected Member-at-Large of the Executive Committee of the Animal Behavior Society, 2011-2014

Host and organizer of the Winter Animal behavior Meeting in Steamboat Springs, CO, January 2014

Reviewer for Journals: *American Naturalist*, *Animal Behaviour*; *Acta Ethologica*; *The Auk*; *Behavioral Ecology*; *Behavioral Ecology and Sociobiology*; *Bioacoustics*, *Biological Journal of the Linnean Society*; *Biological Reviews*, *Biology Letters*; *Canadian Journal of Zoology*; *Current Biology*; *Current Zoology*; *Ecology*; *Ecology Letters*; *Emu*; *Environmental Management*; *Environmental Modelling & Software*; *Ethology Ecology & Evolution*; *Evolution*; *Frontiers in Ecology and the Environment*; *Ibis*; *Journal of Ethology*; *Journal of Applied Ecology*; *Journal of Experimental Biology*; *Journal of Experimental Zoology*; *Landscape Ecology*; *Molecular Ecology*; *Nature Communications*; *Nature Evolution & Ecology*; *Naturwissenschaften*; *Oecologia Brasiliensis*; *PLoS ONE*; *PNAS*; *Proceedings of the Royal Society of London*; *Science*; *Science Advances*; *Wildlife Biology*

Reviewer and panelist for Granting Agencies: National Science Foundation (Behavioral Systems, Evolutionary Processes and Bioinformatics programs and the International Research Fellowship Program; served on Doctoral Dissertation Improvement Grant and IOS Behavioral Systems panels), National Geographic Society Explorer Grants, Animal Behavior Society Student Research Grants (2004, 2012, 2013 and 2014), Animal Behavior Society Latin American Travel Award and Developing Nations Research Awards (2013), Cooper Ornithological Society Mewaldt-King Student Research Awards (2010).

Judge for the Founder's Award student poster competition at the 2012 Meeting of the Animal Behavior Society; Judge for the Warder Clyde Allee Awards at the 2010 meeting of the Animal Behavior Society; Judge for the Pitelka award for best student presentation at the International Society for Behavioral Ecology Congress Cornell University 2008

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## SELECTED PUBLIC SERVICE

Unpaid consultation about the measurement of noise-pollution and its impacts on wildlife:

***State and Federal Government Agencies:*** California Dept. of Fish and Game; Colorado Parks and Wildlife; Oregon Dept. Fish and Wildlife; Nevada Dept. of Wildlife; South Dakota Department of Game, Fish and Parks; Utah Division of Wildlife Resources; Washington State Dept. of Fish and Wildlife; Bureau of Land Management (offices in California, Wyoming, Nevada, Idaho, Colorado and Utah); U.S. Geological Survey; U.S. Fish and Wildlife Service; National Parks Service; National Resource Conservation Service (USDA); Saskatchewan National Parks (Canada); Dept. Environment & Conservation, Newfoundland & Labrador (Canada)

***Non-Governmental Organizations:*** Acoustic Ecology Institute; HawkWatch, Biodiversity Conservation Alliance; SkyTruth; Acoustic Ecology Institute; Powder River Basin Resource Council; Upper Green River Alliance; Renewable Northwest Project; Oregon Natural Desert Association; Advocates for the West; Environmental Defense Fund; Western Watersheds; Wild Utah; The Wilderness Society; Alberta Sustainable Resource Development (Canada); Pheasants Forever, Inc.; Quail Forever

***Industry and Environmental Consulting Companies:*** Western EcoSystems Technology, Inc.; North Wind Inc.; H.T. Harvey & Associates Ecological Consultants; Cardno ENTRIX; Taylor Environmental Consulting; Hayden-Wing Consulting LLC; A CIRI Company; Big Horn Environmental Consultants; North Wind, Inc.; Tetra Tech; T. H. Harvey Ecological Consultants; Environmental Planning Group (EPG); ORMAT; Big Sky Acoustics, LLC; Sound Solutions consulting; Grouse Mountain Environmental Consultants

Peer Reviewer for the US Fish and Wildlife Service “Species Report Bi-state Distinct Population Segment of Greater Sage-Grouse”. This report reviewed the scientific literature relevant to population predictions and threats for the California-Nevada population of sage-grouse, which is currently being considered for listing under the Endangered Species Act (2019)

Research and policy presentation to the Governor’s Sage-grouse Implementation Team (SGIT), responsible for implementing the Wyoming Sage-grouse Core Area Strategy; Cheyenne Wyoming (2013)

Research presentations to Sage-grouse Conservation Local Working Groups in Lander, Casper and Pinedale, WY and Bridgeport CA (2006-2008, 2010-2013, 2015, 2017, 2018)

Served as an expert on the Grand Canyon Overflights Wildlife Expert Panel (2008-2010) to review new guidelines for reducing noise pollution in the Grand Canyon and other national parks caused by helicopter and airplane tours

Participant in the 2007 Best Management Practices Workshop in Casper, WY; discussed opportunities for pro-active sage-grouse conservation practices with energy development companies, land owners, land managers and researchers

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## SELECTED PUBLIC OUTREACH AND EDUCATION

“Gail Patricelli-Robots, Telemetry, & the Sex Lives of Wild Birds Using technology to study & protect and enigmatic bird” Invited presentation to the Nuttall Ornithological Society in Boston (virtual)

“From chemistry to community: Greater sage-grouse diet and behavior in California’s Eastern Sierra, Invited Speaker, Los Angeles Audubon Society chapter, Bishop, CA, 2019, ~30 Attendees.

Informal science talks about sage-grouse research to nerdy adults:

- Exploratorium After Dark, San Francisco (February, 2017)
- Science Café, G Street Pub, Davis (January, 2017)
- Pint of Science, Berkeley (May, 2016)
- L.A.S.E.R. (Leonardo Art Science Evening Rendezvous) UC Davis (February, 2016)
- Nerd Nite East Bay (May 2015)
- Creatures of the Nightlife, California Academy (October 2015)

Judge for [BAHfest](#) (Bad Ad Hoc Hypothesis Festival) San Francisco (October, 2017)

Citizen science project engaging students and the public to analyze images from camera traps on sage-grouse leks (Beginning Spring 2017); in collaboration with PhD student Eric Tymstra and Prof Heidi Ballard of the UCD School of Education and Center for Citizen Science. We are currently maintaining a Zooniverse site accessible to the general public ([Grouse Grooves](#)); the project continued in 2018-19 with students from Bishop and Lee Vining High Schools who visited lek sites and developed independent AP projects with the camera trap data. Involved presentations of our research to recruit students at Mammoth High School, Bishop High School, Bishop Middle School, and Lee Vining Middle School.

Helped to develop the ATLAS [Thunder Feathers](#) Art and Science outreach project (Spring, 2017). The show is currently touring Wyoming. As part of the exhibit:

- presented a robot demo and talk about sage-grouse at the show opening in Lander, WY
- Hour-long talk to the public at the Lander Public Library
- Developed and presented an hour-long, all-school assembly at the Lander Middle School focused on sage-grouse mating behaviors and conservation.

Informal science talk about sage-grouse research and robot demo, to Journalists covering energy development and wildlife in the West, [Institutes for Journalism and Natural Resources](#), Pinedale, WY (April 2014)

Speaker in an Wonder Cabinet sponsored by the New York Institute for the Humanities at NYU, “*Survival of the Beautiful: Artists and Scientists Ponder the Aesthetics of Evolution*” curated by David Rothenberg, available [online](#) (February, 2012)

Guest lecture on sage-grouse ecology with a field trip, Invited Speaker, Adults aged 20-65 years from the Shoshone and Arapaho tribes on the Wind River Reservation, Wyoming, Wind River Tribal College in Ethete, Wyoming (2012)

Presentation and workshop on teaching sexual selection to high school teachers, Invited Speaker, High School Teachers, Berkeley Evolution Institute, UC Berkeley, 40 Attendees (2012)

Unpaid consultation to Impression 5 Science Center in Lansing, Michigan, on working with engineers to develop interactive exhibits using robotics (2012)

Hands-on demonstration of robotic female sage-grouse at outreach events for the Animal Behavior Society at the WonderLab Children’s Museum (Bloomington, Indiana; July, 2011) and the University of Colorado Museum of Natural History (Boulder, Colorado; August, 2013)

Talk about sage-grouse at the Mondavi Center for the Performing Arts (June, 2011) as part of the UC Davis Concert Bands concert: *Earth Songs; Celebrating the Biological, Ecological and Agricultural Sciences*, which integrated brief research talks with related music (Saint-Saens' Carnival of the Animals)



Donation of sage-grouse footage to facilitate education and outreach by The Conservation Fund (Virginia) and the Wood River Land Trust (Idaho), and San Miguel Basin Gunnison Sage-Grouse Working Group (Colorado)

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## MEDIA & POPULAR PRESS COVERAGE

I have a strong commitment to public education and outreach. The combination of charismatic birds, robots, and sex has generated media attention for my research; I have used this attention an opportunity to explain evolution and animal behavior to the public, as well to promote the importance of basic research and an awareness of human impacts on wildlife.

- Articles in print media:
  - “Inflating animals: 7 incredible creatures that blow up like balloons” [BBC Science Focus Magazine](#), June 2022
  - “Robotic sage grouse helps study lek activity”, [Wyoming Wildlife](#) magazine, April 2019
  - Provided expert comment for "A Courting Peacock Can Shake Its Partner’s Head From Afar", Ed Yong, [The Atlantic](#), December 2018
  - “Half taxidermy, half robot: Why UC Davis built this crazy realistic robo-bird” [Digital Trends](#), June 2018
  - “Why Scientists Turned This Taxidermy Bird Into a Robot” [WIRED](#) magazine, June 2018
  - “Scientists Made a Taxidermy Bird Robot for Research”, [Popular Mechanics](#) online, June 2018
  - “Biologist uses robot bird to study sage-grouse mating”, [The Wildlife Society](#) website, June 2018
  - “Feathered Fembot Takes Scientists ‘Inside the Head’ of Mating Sage-Grouse”, [Geek.com](#), Audubon magazine, June 2018
  - Provided expert comment for “This Hummingbird's Tail Whistles, and No One's Sure Why”, [The Atlantic](#), Ed Yong, April 2018
  - “Researchers deploy cutting-edge technology to understand sage grouse and their habitat”, [Western Confluence](#) magazine, March 2018
  - “Is That a Robo-Bird or Real Lady? For Male Sage-Grouse, Either Will Do” [Audubon Magazine](#), October 2017
  - “How The 'Fembot' Helps Researchers Understand Sage Grouse”, [Boise State Public Radio](#), (Sept, 2015)
  - “How Do You Learn the Sex Secrets of Birds? Send in the Fembot”, [Live Science](#), May 2015
  - “Noise limits for grouse misguided”, [Jackson Hole News and Guide](#) (February, 2015)
  - “This Is The Mating Dance Of The Greater Sage-Grouse, An Imperiled Bird”, [io9](#) (Aug, 2014)
  - “Sex, Leks and Videotape”, [The Daily Sentinel](#), Grand Junction Colorado (July 2014)
  - “Grouse Robot: Remote-Controlled Bird Assists Conservation” [Cool Green Science](#), Nature Conservancy (April, 2014)
  - “Eye-Tracking Reveals What’s Hot, What’s Not from the Peahen’s Point of View”, [Scientific American](#) (July, 2013)
  - “Eye-tracking cameras show peahens' wandering gaze”, [Science News](#) (July, 2013)
  - “Do you think I'm sexy? Why peacock tails are attractive”, [BBC News](#) (July, 2013)
  - “What a Peahen Really Watches When a Peacock Tries to Impress Her”, [Wired Magazine](#) (July, 2013)
  - "What Does It Take to Fool a Snake? Send in the Robot: Biologists Use Mechanical Squirrels, Frogs to Study Wildlife; 'Snooki' the Bird" [Wall Street Journal](#) (December , 2012)

- Interviewed by the author for Survival of the Beautiful: Art, Science, and Evolution, David Rothenberg, publication (November 2011)
- “What are scientists learning about the diversity and complexity of animal signals from the sage grouse?” Nature Watch: Hear the Answer (NSF sponsored)
- “Roboanimals in the lab”, The Scientist (September 2010).
- “Vocal abilities lost, found and drowned out”, Science News (September 2009).
- “Pump Up the Volume. Some Birds Don't Care” (interviewed as an expert commenting on others’ research), ScienceNOW Daily News (July 2009)
- “Robots That Dress Like Animals for Science”, Popular Mechanics (July 2009).
- “Animal Courtship” (Textbook for 5-8 graders; features research by G. Patricelli; involved an interview), Chelsea House Publishing (June 2009)
- “Robot used to study sage grouse” article printed in Casper Star Tribune, Billings Gazette, and Missoula.com (April 2009)
- “Robotic birds help pick out most receptive lovers”, New Scientist (February 2009)
- “Successful bird Valentinos strut with sensitivity”, Reuters; printed by (only sources available online): The Calgary Herald (Canada), The Province (Canada), The News Tribune Tacoma (WA), The Olympian (WA), San Jose Mercury News, Salt Lake City Tribune; also by Reuters UK and India. (February 2009)
- “Dispatch from AAAS—the Greater Sage Grouse Fembot”, Smithsonian.com (February 2009)
- “Animal Social Skills Examined”, WPTV, West Palm Beach News (February 2009)
- “Robobird: A mechanical bird observes a spring mating dance” (article involving an interview), **Current Science Weekly Reader**, a science magazine for children (January 2009)
- “The grouse that wouldn’t take no for an answer” (article involving an interview), **YES Mag**, a Canadian science magazine for children (September 2008)
- “Title unknown (in Chinese)” (article involving an interview), **Redwood Magazine**, a Chinese science magazine for children, 2008
- “Robo-bird lets researcher see courtship up close” (article involving an interview and online video interview and robot demo), The Sacramento Bee (July 2008)
- “Robot to the Rescue” (article involving an interview), National Wildlife Magazine (July 2008)
- “Mechanical squirrels, robot lizards jump into academic research on animal behavior” (article featuring my research), **Associated Press** and **AP Worldstream international**, printed by (only sources available online): Seattle Times, USA Today, Southtown Star (IL), Virginian Pilot (VA), Deseret News (UT) (May 2008)
- “Article: Animal amour; Males drool, females rule in examination of mating rituals on PBS” (article featuring research by G. Patricelli; coverage of press conference with G. Patricelli, other scientists and PBS Nature producers), Milwaukee Journal Sentinel (April 2008)
- “Oh, You Animal!: Mating Film Goes Beyond the Birds and the Bees” (coverage of press conference with G. Patricelli, other scientists and PBS Nature producers), The Washington Post (reprinted by The Record (NJ), Post Tribune (IN), Albany Times Union (NY), Philadelphia Daily News, Miami Herald), (April 2008).
- “4 Robots That Are Saving the World”, Discover Magazine (September 2007)
- “Field Notes: Hot Mamma”, **Audubon Magazine** (August 2007)
- “King of the Western Sage: The Life and Plight of North America’s Largest Grouse”, **Living Bird** magazine (summer 2007)
- “Article: TV gets Wired; sexy talk with PBS bird lovers” (coverage of press conference with G. Patricelli, other scientists and PBS Nature producers), Oakland Tribune (July 2007)
- “Birds do it...” (coverage of press conference with G. Patricelli, other scientists and PBS Nature producers), Milwaukee Journal Sentinel online. (July 2007)

- “The Birds and the Bees and the Gelada Baboons” (coverage of press conference with G. Patricelli, other scientists and PBS Nature producers), **The Washington Post** (July 2007)
- “Ces Robots qui Parlent aux Animaux” (article involving an interview about “la poule-bot”), **Science & Vie Junior**, a French science magazine for children (June 2007)
- “Lovebird? Researcher Creates Robot Bird to Study Grouse Mating Rituals” (cover story), Newspaper Article, **The Davis Enterprise** (February 11 2007)
- “Hot Mamma” Field Notes, [Audubon Magazine](#), (2007)
- “Undercover Robots Lift Lid on Animal Body language”, [New Scientist](#) magazine (Jan, 2007)
- “Fembot birds are hot to trot”, [Engadget.com](#) (February 2007)
- “Birds Change Songs to Suit Urban Life, Study Finds” (interviewed as an expert commenting on others’ research), [National Geographic News](#) (December 2006)
- “The Pick-up Lab: 50 Scientifically Proven Tips to Attract Female Interest” (article recklessly extrapolating my research into dating advice for humans), [50BestDatingWebsites.com](#)
- “When Robots go Wild”, April 2005 (434: 954-955), News Feature in [Nature magazine](#)
- “AIBO Robot as Research Tool” about robots in animal behavior research for [Discover Magazine](#) (March 2003):
- “Will Mr. Bowerbird Fall for a Robot?” cover story for [Science News](#), (December, 2000)
- Interviews for radio and podcast programs:
  - “Debunking Gender Roles in the Animal Kingdom” **The Takeaway** (WNYC public radio) discussed my work. [Online](#)
  - **Savage Love**, Dan Savage podcast, March 2021
  - “Beauty of the Beasts”, **Big Biology**, podcast, August 2019 [online](#)
  - **Utah Public Radio**, Science Utah, July 2019 [online](#)
  - **RadioLab**, aired February 2019 [online](#)
  - **Insight with Beth Ruyak**, a live radio program on Capitol Public Radio (January, 2017) [online](#)
  - **Colorado Public Radio**, Colorado Matters (June, 2014)
  - **Morning Edition**, National Public Radio (March, 2012)
  - **The Science Show** on ABC Radio (Australian public radio) (February, 2009)
  - **Insight**, a live radio program on Capitol Public Radio (February, 2009)
  - **Science Update**, a radio show and podcast produced by AAAS (February, 2009)
  - “Open Spaces” for **Wyoming Public Radio** (April 2008)
  - “**Imagine That!**” a radio show highlighting NSF-sponsored research (May, 2004)
  - “The Rules of Life” a **BBC Radio** special by Dr. Aubrey Manning (May, 2004)
  - “Earthwatch Radio”, a science radio program funded by SeaGrant at the University of Wisconsin, broadcast on **National Public Radio** (2002)
  - “Quirks and Quarks”, a science radio program on **Canadian Broadcast Channel** (2002)
- Interviews for television and online video:
  - “Why Scientists Turned This Taxidermy Bird Into a Robot” [WIRED](#) online, June 2018
  - “Bird Courtship” [Science Nation](#) video for the National Science Foundation (December 2009)
  - “Daily Planet” a daily science program for [Discovery Channel Canada](#) (March, 2009)
  - A 2-part [PBS NATURE](#) series on sexual selection “What Females Want and Males Will Do” that featured my work. Involved on-camera interviews at UC Davis, at my field camp in Wyoming and Los Angeles (aired April 2008)
  - MS-NBC **National Geographic Ultimate Explorer** television special on mating behaviors, (2002)999
  - “@Discovery.Canada” on **Discovery Channel Canada** television (2002)
  - “The Birds and the Bots: A Mating Tale” by Ann Kellan, [CNN](#) television (2002).

- Traveled to Australia with the **BBC** to consult on the filming of “Talking with Animals” with Charlotte Uhlenbroek, which featured my robotic bowerbird and research results. (2001).

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## **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Animal Behavior Society

International Society for Behavioral Ecology

Society for the Study of Evolution

Ecological Society of America

American Ornithologists' Society

Society for Integrative and Comparative Biology

American Association of University Women

Sigma Xi