AUSTIN H. PATTON

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School of Biological Sciences
Washington State University
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EDUCATION

Washington State University, Pullman, Washington
Ph.D. Student, Biology
GPA 4.00/4.00

Warren Wilson College, Asheville, North Carolina
B.S., Biology & Environmental Studies, concentration in Conservation Biology
GPA 3.59/4.00

EXPERIENCE

TEACHING

2012 **Teaching assistant (Field ornithology) – Warren Wilson College**

2013 **Teaching assistant (Conservation Genetics) – Warren Wilson College**
2014,

2016 - 17 **Teaching assistant (Biology for Non-majors) – Washington State University**

2015-2016 **Teaching assistant (Ecology) – Washington State University**

2017-2018 **Teaching assistant (Biology for Non-majors) – Washington State University**

GENERAL

2013-2014 **Genetics lab manager, Warren Wilson College**

2013 **National Science Foundation Research Experience for Undergraduates – Samford University**

2012 **Rotating field intern, Project Puffin, Audubon Society**

AWARDS & GRANTS

***Undergraduate:* †**

2019 ***Brislawn Graduate Fellowship in Biological Sciences – Washington State University Graduate Program committee*** ($3000)

2018 ***King Graduate Scholarship – Washington State University Graduate Program committee*** ($2000)

2015, 2016, 2017, 2018, 2019 ***Elling Foundation Award for Off-Campus Training and Research Washington State University*** ($3221, $4677, $1190, $2000, $218, Co-PI A. Storfer)

2013 ***Research Experience for Undergraduates† – National Science Foundation*** ($4200)

2013 ***Yarborough Grant† – North Carolina Academy of Sciences*** ($567)

2012, 2013 ***Pugh Endowed Fund for Undergraduate Research in the Division of Natural Science & Math† – Warren Wilson College*** ($854, $2000, Co-PI J.J. Apodaca)

PUBLICATIONS

PUBLISHED

***Undergraduate:* †**

Margres, M.J., **Patton, A.H.**, Wray, K.P., Hassinger, A.T., Ward, M.J., Lemmon, E.M., Lemmon, A.R. and Rokyta, D.R., 2018. Tipping the Scales: The Migration–Selection Balance Leans toward Selection in Snake Venoms. *Molecular biology and evolution*, *36*(2), pp.271-282.

Margres, M.J., Ruiz-Aravena, M., Hamede, R., Jones, M.E., Lawrance, M.F., Hendricks, S.A., **Patton, A.H.**, Davis, B.W., Ostrander, E.A., McCallum, H. and Hohenlohe, P.A., 2018. The genomic basis of tumor regression in Tasmanian devils (Sarcophilus harrisii). *Genome biology and evolution*, *10*(11), pp.3012-3025.

Storfer, A., **Patton, A.H.**, & Fraik, A. K. (2018). Navigating the interface between landscape genetics and landscape genomics. *Frontiers in genetics*, *9*, 68.

Storfer, A., Hohenlohe, P.A., Margres, M.J., **Patton, A.H.**, Fraik, A.K., Lawrance, M., Ricci, L.E., Stahlke, A.R., McCallum, H.I. and Jones, M.E., 2018. The devil is in the details: genomics of transmissible cancers in Tasmanian devils. *PLoS pathogens*, *14*(8), p.e1007098.

Marsh, D.M., Cosentino, B.J., Jones, K.S., Apodaca, J.J., … **Patton, A.H.**†, … Vonesh, J.R. 2017. Effects of roads and land use on frog distributions across spatial scales and regions in the Eastern and Central United States. *Diversity and Distributions*, *23*(2), pp.158-170.

IN REVIEW

Undergraduate: †

Patton, A.H., Margres, M.J., Hendricks, S., Stahlke, A.R., Lewallen, K., Hamede, R.K., Ruiz-Aravena, M., Ryder, O., McCallum, H.I., Jones, M.E., Hohenlohe, P.A., and Storfer, A. Contemporary demographic reconstruction methods are robust to genome assembly quality: A case study in Tasmanian Devils. *Molecular Biology and Evolution*

Patton, A.H., Margres, M.J., Epstein, B., Eastman, J., Harmon, L.J., Storfer, A. Hybridizing salamanders experience accelerated diversification. *Evolution Letters*

Patton, AH*†, Apodaca, J.J.*, Corser, J., Wilson, C., Williams, L.A., Wake, D.B. Delimiting cryptic species in the green salamander, *Aneides aeneus,* using ecological niche models, population genetics, and phylogenetic reconstruction. *Copeia*
*Authors contributed equally

Gillespie, R.G., Bennett, G.M., De Meester, L., Fleischer, R.C., Harmon, L.J., Hendry, A., Knope, M.L., Mallet, J., Martin, C., Parent, C.E., **Patton, A.H.**, Pfennig, K.S., Rubinoff, D., Schluter, D., Seehausen, O., Shaw, K., Stacy, E., Stervander, M., Stroud, J.T., Wagner, C., Wogan, G.O.U. Comparing Adaptive Radiations Across Space, Time, and Taxa. *Journal of Heredity.*

SUBMITTED

Margres M.J., Ruiz-Aravena, M., Hamede R.K., Kusum C., **Patton, A.H.**, Lawrance, M.F., Fraik, A.K., Stahlke, A.R., Davis, B.W., Ostrander, E.A., Jones, M.E., McCallum, H., Paddison, P.J., Hohenlohe, P.A., Hockenbery, D. Storfer, A. A mechanism for natural tumour regression in a transmissible cancer. *Nature Genetics.*

Bakkegard, K.A., **Patton, A.H.**†, Ray, C.H. Chigger Mites (*Hannemania CF. dunni*) infect Northern Slimy Salamanders (*Plethodon glutinosus*) in Alabama

IN PREP

Patton, A.H., Harmon, L.J., Mahler, D.L., Herrel, A., Losos, J.B. Colonization mediated priority effects drive explosive radiation of mainland *Anolis* lizards.

Patton, A.H., Lawrance, M.F., Margres, M.J., Hamede, R.K., Ruiz-Aravena, M., McCallum, H.I., Jones, M.E., Hohenlohe, P.A., and Storfer, A. Phylodynamics of a transmissible cancer.

Kozakiewicz, C*, Ricci, L.*, **Patton, A.H.**, Hendricks, S., Brunner, J., Goldberg, C., Ruiz-Aravena, M., McCallum, H., Hamede, R.K., Jones, M.E., Hohenlohe, P.A., Storfer, A. Comparative Landscape Genetics of Tasmanian Devils and Devil Facial Tumor Disease. *Authors contributed equally

PRESENTATIONS

Undergraduate: †

2018 **American Genetics Association Symposium on the Origins of Adaptive Radiation, Waimea, Hawaii.** *Explosive early diversification of mainland anoles.*

2017 **Evolution, Portland, Oregon.** *Hybridization accelerates speciation in salamanders*

2016 **Special Highlands Conference on Plethodontid Salamander Biology, Highlands, North Carolina.** *Assessing the role of lineage hybridizability on diversification dynamics in salamander.*

2015 **6TH Conference on the Biology of Plethodontid Salamanders, Tulsa Oklahoma** *Delimiting cryptic species in the Green salamander, Aneides aeneus, using ecological niche models, population genetics and phylogenetic reconstruction.*

2014 **Southeast Partners in Amphibian and Reptile Conservation (SEPARC), Jamestown, Kentucky.**† *Delimiting cryptic species in the Green salamander, Aneides aeneus, using ecological niche models, population genetics and phylogenetic reconstruction.*

2014 **North Carolina Academy of Sciences (NCAS), Raleigh, North Carolina.**† Conservation genetics of the Green salamander (*Aneides aeneus*) in Western North Carolina

2013 **Samford University REU Final Symposium, Birmingham, Alabama.**† *Using geometric morphometric analyses to distinguish between two Slimy salamander species in Central Alabama.*

2012 **Gulf of Maine Seabird Working Group, Bremen, Maine.**† *Potential of landscape carpets for the enhancement of Tern nesting habitat*