# JOHN (ALEX) ALEXANDER ERWIN, J.D., PH.D.

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#### ACADEMIC APPOINTMENTS

# Florida International University College of Law, Miami, FL

Assistant Professor [2022 - ]

- Teaching:
  - o LAW 5700 Torts [F22; F23]
  - o LAW 6470 Natural Resources Law [Sp23; Sp24]
  - o LAW 6471 Environmental Law [F23]
- Committee Assignments:
  - o Academic Culture [2022-2024]
  - o Curriculum [2022-2024]
  - o Diversity and Inclusion [2022-2023]

## Elisabeth Haub School of Law at Pace University, White Plains, NY

Visiting Assistant Professor in Environmental Law [2021-2022]

- Teaching:
  - o LAW 856 Environmental Law Survey [Sp21; Sp22]
  - o LAW 775 Conservation Law [F21]
  - o LAW 802 Science for Environmental Lawyers [F21]

## University of Arizona, James E. Rogers College of Law, Tucson, AZ

*Teaching Fellow and Professor of Practice* [2018-2020]

- Teaching:
  - o HNRS 395H From the Laboratory to Capitol Hill: Science and Policy [F19]
  - o LAW 402A/502A Common Law I [Sp19; F19; Sp20; F20]
  - o LAW 402B/502B Common Law II [F18; Sp19; F19; Sp20; F20]
  - o LAW 454/554 Environmental Law and Policy, [F18; Sp19; Su19; F19; Sp20; Su20; F20]
  - o GENE 570L Conservation Genetics Laboratory [F16; F18]

#### **EDUCATION**

# University of Arizona, James E. Rogers College of Law, Tucson, AZ

Juris Doctor – magna cum laude, May 2018 (GPA: 3.871/4.0, Top 10% (#12/123))

- Certificate: Environmental Law, Science, and Policy
- <u>Journal</u>: Arizona Journal of Environmental Law and Policy Articles Editor
- Awards: Order of the Coif; Sol Resnick Water Resources Fellow; Agnese Nelms Haury Social
  Justice Law Fellow; Carson Scholars Institute of the Environment Fellow; CALI Awards for
  highest course grade in: Civil Procedure (Fall 2015), Property (Spring 2016), Animal Law
  (Fall 2016), and Professional Responsibility (Spring 2018); Distinguished Scholar
  Scholarship (full tuition); Dean's List (each semester)
- Clinic: International Environmental Law Clinic Yaqui Human Rights Project
- Research Fellow: Sol Resnick Fellow for Professor Robert Glennon
- Activities: Environmental Law Society, Christian Legal Society, Volunteer Lawyer Program

# University of Arizona, Graduate Interdisciplinary Department in Genetics, Tucson, AZ

Doctorate of Philosophy in Genetics, December 2020 (GPA: 4.0/4.0)

• Dissertation: The Use of Conservation Genomics to Inform Law and Policy

- Minor: Ecology and Evolutionary Biology
- <u>Awards</u>: GIDP Graduate College Fellowship, Graduate College Dean's Tuition Award (2013 2014), GIDP Tuition Scholarship
- <u>Committee</u>: Dr. Melanie Culver (advisor), Dr. John Koprowski, Dr. Michael Barker, and Dr. Ken Logan

### Washington and Lee University, Lexington, VA

Bachelor of Science, double major in Biology and Biochemistry, June 2013

- Honors: Dean's List, Albemarle Corporation Honor Scholarship
- Activities: W&L Rugby, Phi Gamma Delta, Outing Club

#### SELECTED PUBLICATIONS

# Law Review Articles and Essays - SSRN

- **John A. Erwin**, Building Better Species: Assisted Evolution, Genetic Engineering, and the Endangered Species Act, 108 CORNELL L.R. 1117 (2023). SSRN
  - Winner of SEALS 2023 Call for Papers Award
  - Chosen for presentation at the 2023 Harvard | Stanford | Yale Junior Faculty Forum
- **John A. Erwin,** So You Want to Be an Environmental Law Professor ...: An Empirical Analysis of the Environmental Law Hiring Market from 2011 2022, 49 ECOLOGY L. CURRENTS 37 (2022), LINK
- John A. Erwin & Robert Glennon, Feeding the World: How Changes in Biotech Regulation Can Jump Start the Second Green Revolution and Diversify the Agricultural Industry 44 Wm. & MARY ENVTL. L. & POL'Y REV. 327 (2020). - SSRN
- **John A. Erwin**, *Hybridizing Law: A Policy for Hybridization Under the Endangered Species Act*, 47 ENVTL. L. REP. NEWS & ANALYSIS 10615 (2017). SSRN
  - Designated an Honorable Mention and republished in the 2018 Environmental Law and Policy Annual Review (ELPAR) as one of the top environmental policy-relevant articles from 2016-2017 John A. Erwin, Hybridizing Law: A Policy for Hybridization Under the Endangered Species Act (Abstract), 48 ENVTL. L. REP. NEWS & ANALYSIS 10740 (2018).

#### **Peer-Reviewed Scientific Publications – Research Gate**

- Erwin, J.A., Logan, K.A., Trumbo, D., Funk, W.C., Culver, M., *The Effects of Harvest on the Sexual Structure and Genetic Diversity of a Puma Population*. MOLECULAR ECOLOGY (2023), https://doi.org/10.1111/mec.17237.
- Payne, N., **Erwin, J.A.**, Morrison, J., Dwyer, J., Culver, M., *Genomic insights into isolation of the threatened Florida crested caracara* (Caracara planicus). 115 JOURNAL OF HEREDITY 45 (2024), <a href="https://doi.org/10.1093/jhered/esad057">https://doi.org/10.1093/jhered/esad057</a>.
- Teal, C.N., Coykendal, D.K., Campbell, M.R., Delomas, T.A., Eardley, D.L., **Erwin, J.A.**, Schill, D.J., Bauder, J.M., Bonar, S.A., Culver, M, *The development of genetic sex identification markers and evidence of a male heterogametic sex determination system in red shiner* (Cyprinella lutrensis) 85 NORTH AMERICAN JOURNAL OF AQUACULTURE 74 (2023), https://doi.org/10.1002/naaq.10274.
- **Erwin, J.A.**, Fitak, R.R., Culver, M. 2021. *PumaPlex100: An Expanded Tool for Puma SNP Genotyping with Low-yield DNA*. 13 CONSERVATION GENETICS RESOURCES 341 (2021), https://doi.org/10.1007/s12686-021-01206-7.

- Erwin, J.A., Vargas, K., Blais, B.R., Bennett, K., Muldoon, J., Findysz, S., Christie, C., Heffelfinger, J.R., Culver, M. *Genetic Assessment of a Bighorn Sheep Population Expansion in the Silver Bell Mountains, Arizona.* PEERJ 6:e5978 (2018), https://doi.org/10.7717/peerj.5978.
- Erwin, J.A., Fitak, R.R., Dwyer, J.F., Morrison, J.L., Culver, M., *Molecular Detection of Bacteria in the Families* Rickettsiaceae *and* Anaplasmataceae *in Northern Crested Caracaras* (Caracara cheriway), 7 TICKS AND TICK-BORNE DISEASES 470 (2016), <a href="http://dx.doi.org/10.1016/j.ttbdis.2016.01.015">http://dx.doi.org/10.1016/j.ttbdis.2016.01.015</a>.

#### **Books**

BIODIVERSITY LAWS, POLICIES, AND SCIENCE IN EUROPE, THE UNITED STATES AND CHINA (Eds. Giovanni Antonelli, Tianbao Qin, and **John A. Erwin**) (Forthcoming 2024).

## **Book Chapters**

- **John A. Erwin,** *Predator Law in the United States, in* BIODIVERSITY LAWS, POLICIES, AND SCIENCE IN EUROPE, THE UNITED STATES AND CHINA (Eds. Giovanni Antonelli, Tianbao Qin, Maria Vittoria Ferroni, and **John A. Erwin**) (Forthcoming 2024). SSRN
- **John A. Erwin**, Changing Genes for a Changing Climate: Genetic Intervention as a Tool for Biodiversity Conservation in the Era of Climate Change, in RESEARCH HANDBOOK ON CLIMATE CHANGE AND BIODIVERSITY LAW (Eds. Richard Caddell and Phillipa McCormack) (Forthcoming 2024). <u>SSRN</u>

#### **Works-in-Progress**

- John A. Erwin, Litigating Predator Management (forthcoming UTAH L.R. 2025)
- **John A. Erwin,** *Interspecific Genetic Variation and the ESA* (work in progress)
- Erwin, J.A., Fitak, R.R., Culver, M., Using Genomics to Delineate Subspecies and Inform Translocations of Black-Tailed Prairie Dogs (In prep.).
- Vargas, K., **Erwin, J.A.**, Culver, M., *Argali Sheep Population Subdivision and Barriers to Dispersal in the Khangai and Altai regions of Mongolia* (In prep.).
- **Erwin, J.A.**, Vargas, K., Stoltze, L., Fitak, R.R., Culver, M., *The Molecular Detection of Rocky Mountain Spotted Fever*, Rickettsia rickettsia, *and Other Rickettsial Bacteria in* Dermacentor parumapertus (In prep.).

# **Reports and Other Publications**

- **Erwin, J.A.**, *PumaPlex: A Tool for the Genetic Analysis of Pumas*, Wild Felid Monitor (2016), Vol. 9, Issue 1.
- **Erwin, J.A.**, Fitak, R.R., Myers, T., Culver, M., *Genetic Analysis of Anodonta californiensis from the Rio Bavispe: A Recommendation for Reintroduction into the San Bernardino River Subbasin*. Arizona Game and Fish Report (2016) (peer reviewed).
- **Erwin, J.A.**, Culver, M., *Historical Connectivity of Black-tailed Prairie Dog Populations in the Southwest*. Arizona Game and Fish Report (2016) (peer reviewed).

#### **Blogs and Popular Press**

Sackett v. EPA – AKA See Rapanos (plurality opinion), PrawfsBlawg (May 30, 2023), <a href="https://prawfsblawg.blogs.com/prawfsblawg/2023/05/sackett-v-epa-aka-see-rapanos-plurality-opinion.html">https://prawfsblawg.blogs.com/prawfsblawg/2023/05/sackett-v-epa-aka-see-rapanos-plurality-opinion.html</a>

An Empirical Analysis of the Environmental Law Hiring Market – Erwin Guest Post, PrawfsBlawg (Sept. 16, 2022), <a href="https://prawfsblawg.blogs.com/prawfsblawg/2022/09/an-empirical-analysis-of-the-environmental-law-hiring-market-erwin-guest-post.html">https://prawfsblawg.blogs.com/prawfsblawg/2022/09/an-empirical-analysis-of-the-environmental-law-hiring-market-erwin-guest-post.html</a>

# GRANTS, FELLOWSHIPS, AND AWARDS

- FIU SBA Megan A. Fairlie Professor of the Year Award [2024]
- Young Scholar of the Year at the Wallace Stegner Center at the S.J. Quinney College of Law at the University of Utah [2023]
- SEALS Call for Paper Award for Building Better Species: Assisted Evolution, Genetic Engineering, and the Endangered Species Act [2023]
- University of Arizona Grad Slam Finalist [2019]
- Presidential Award for the University of Arizona 27<sup>th</sup> Student Showcase [2019]
- Honorable Mention in the 2018 *Environmental Law and Policy Annual Review* (ELPAR) as one of the top environmental policy-relevant articles from 2016-2017 for *Hybridizing Law: A Policy for Hybridization Under the Endangered Species Act* [2018]
- Genetics Representative for the GIDP Research Showcase [2018]
- 2<sup>nd</sup> Place -2017 Endangered Species Law Student Writing Competition for *Canis rufus is Dead! Long Live the Red Wolf!* [2017]
- Sol Resnick Water Resources Fellow [2017]
- Agnese Nelms Haury Social Justice Law Fellow [2017]
- Graduate and Professional Student Council Travel Grant [2017]
- Carson Scholarship, Institute of the Environment Fellow [2016]
- Graduate and Professional Student Council Research Grant 2014]

#### SELECTED CONFERENCES AND WORKSHOPS

### **Litigating Predator Management**

- Willamette University College of Law Faculty Workshop [April 2024]
- Mike Pappas' Online Environmental Workshop [March 2024]
- Wallace Stegner Center Young Scholar Lecture at the S.J. Quinney College of Law at the University of Utah (available here: https://www.youtube.com/watch?v=az-p9hZ2Yr8) [November 2023]
- SEALS New Scholars Workshop Environmental Law and Housing Justice Panel [July 2023]
- Works-in-Progress Session at the Natural Resources Law Teachers Institute [June 2022]

#### **Interspecific Variation and the ESA**

- SEALS Your Next article (New Scholars Workshop) [July 2023]
- 2nd Starved Rock Environmental Law Workshop at Loyola Chicago Law School [October 2022]

# **Building Better Species: Assisted Evolution, Genetic Engineering, and the Endangered Species Act**

- SEALS Call for Papers Award Presentation [July 2023]
- Harvard | Stanford | Yale Junior Faculty Forum [June 2023]
- University of Miami Law Legal Theory Workshop [April 2023]
- Northwestern, Penn, and Stanford 5<sup>th</sup> Junior Faculty Forum for Law and STEM [October 2022]

- University of Baltimore School of Law Faculty Research and Development Series [March 2022]
- Twelfth Annual Colloquium on Environmental Scholarship at Vermont Law School [September 2021]
- 2021 Future Environmental Law Professors Workshop at Pace University [September 2021]
- Works-in-Progress Session at the Natural Resources Law Teachers Institute [June 2021]
- 8th Sabin Colloquium on Innovative Environmental Law Scholarship at Columbia University [May 2021]

#### Innovation for the Next 50 Years: ESA at 50

• Florida International University 2nd Annual Environment Forum [March 2023]

#### Wildlife and Infrastructure Conflict

• University of Florida Public Interest Environmental Law Conference [February 2023]

#### **Integrating Science and Law Through the Lens of Conservation Genetics**

• University of Central Florida Biology Department Seminar [November 2022]

# Feeding the World: How Changes in Biotech Regulation Can Jump-Start the Second Green Revolution and Diversify the Agricultural Industry

- 2020 Future Environmental Law Professors Workshop at Pace University [September 2020] Shepherding Students from the Lab to Publication: Teaching Students Conservation Genetics in the Laboratory Setting with Actual Case Studies
- 2020 Joint Meeting AZ and NM American Fisheries and Wildlife Society [February 2020] Using Genomics to Delineate Subspecies and Inform Translocations of Black-Tailed Prairie Dogs
  - University of Arizona Grad Slam Finals [April 2019]
  - University of Arizona 27<sup>th</sup> Student Showcase [February 2019]
  - University of Arizona Graduate Interdisciplinary Program Showcase [December 2018]
  - University of Arizona Science Café Series at Borderlands Brewery [November 2017]
  - The Wildlife Society's 24th Annual Meeting, Albuquerque, NM [September 2017]

#### PumaPlex100: An Expanded Tool for Puma SNP Genotyping with Low-yield DNA

- 2016 Joint Meeting AZ and NM American Fisheries and Wildlife Society [February 2016]
- Graduate and Professional Student Council (GPSC) Grant Winner's Expo [October 2015]
- 11th Mountain Lion Workshop, [May 2014]

## The Effects of Harvest on the Sexual Structure and Genetic Diversity of a Puma Population

• 2016 NSF EID Interdisciplinary Retreat [August 2016]

#### UCLA LaKretz Conservation Genomics Workshop, [March 2015]

• Accepted and attended on invitation

#### PROFESSIONAL SERVICE

# Future Environmental Law Professors Workshop at the Haub School of Law at Pace University [2022-2023]

• Invited to participate on the panel and serve as an interviewer for mock interviews and job talks for prospective environmental law professors currently on the market.

#### Big Ideas, Interdisciplinary Thinking Faculty Learning Community [2019]

• Member of a FLC for rethinking general education courses with emphasis on developing interdisciplinary courses based around "big ideas."

# **Genetics GIDP Executive Committee** [2018-2020]

• Student representative on the Genetics GIDP executive committee that is responsible for running the department, departmental seminars, and student recruiting.

#### OTHER WORK EXPERIENCE

# EarthJustice, Anchorage, AK

Summer Law Clerk – Alaska Regional Office [June 2017 – August 2017]

Provided research on a wide variety of environmental and administrative legal issues, drafted comments and complaints, and specifically worked to utilize scientific data and the law to further advocate for our clients.

## Albemarle Corporation, Baton Rouge, LA,

Intern – Microbiology Research [May 2012 – August 2012]

Grew biofilms of multiple bacteria for biocide testing in the Food Safety Lab.

*Intern - Chemical Process Engineering,* [May 2011 – August 2011]

Designed and managed process for silicon encapsulation of an organophosphate pesticide.

#### Undergraduate Research, Lexington, VA

*Undergraduate researcher - Bioengineering* [2011 – 2013]

Designed and constructed a sensor array for measuring electric fields in an aquatic environment based on the ampullae of Lorenzini found in sharks under the direction of Dr. Jon Erickson.

*Undergraduate researcher – Salamander Ecology*, [2010]

Investigated ecological and morphological differences between *Plethodon sherando* and *Plethodon cinerus* under the direction of Dr. David Marsh.

#### STUDENT ADVISING

#### LL.M. Theses

- Craig Simmonds The Sacrifice Zones of the Southeast: Siting Prisons on Remediated Mountaintop Removal Sites in Appalachia (2022)
- Erica Peralta Save the Plants to Save the Planet: How Genetic Engineering Provided the Science but Current Regulations Inhibit the Process (2022)

#### **MEDIA**

- Angela Nicoletti, What the recent Supreme Court ruling could mean for U.S. wetlands, FIU
  News (June 14, 2023), <a href="https://news.fiu.edu/2023/supreme-court-ruling-sackett-v-epa-what-it-means-for-wetlands">https://news.fiu.edu/2023/supreme-court-ruling-sackett-v-epa-what-it-means-for-wetlands</a>
- Kylie Mohr, *Is the Recovering America's Wildlife Act ready for climate action?*, HIGH COUNTRY NEWS (Aug. 31, 2022), <a href="https://www.hcn.org/articles/north-wildlife-is-the-recovering-americas-wildlife-act-ready-for-climate-action">https://www.hcn.org/articles/north-wildlife-is-the-recovering-americas-wildlife-act-ready-for-climate-action</a>
- Alejandra Cardenas Cuestas, Endangered or Not? JD/PhD Student Gains Recognition for Work Hybridizing Law and Biology, JAMES E. ROGERS COLLEGE OF LAW NEWS (Feb. 14, 2018), <a href="https://law.arizona.edu/news/2018/02/endangered-or-not-jdphd-student-gains-recognition-work-hybridizing-law-and-biology">https://law.arizona.edu/news/2018/02/endangered-or-not-jdphd-student-gains-recognition-work-hybridizing-law-and-biology</a>

#### **OUTREACH**

# **Volunteer Lawyer Program**

Volunteer, VLP Service Center [2016]

Assisted volunteer lawyers at the Service Center on family court issues.

## Mentor for high school interns

Amy Pierce, Tucson High Magnet School [2015]

Amy worked on developing a SNP chip for pumas as her SARSEF science fair project.

Meagan Bethel, Tucson High Magnet School [2015]

Meagan worked on puma diet analysis as her SARSEF science fair project.

Luke Kim, BASIS North Tucson [2018]

Luke worked on a project titled Molecular Detection of *Rickettsiaceae* Bacteria in Antelope and Black-tailed Jackrabbits (*Lepus alleni* and *Lepus californicus*) for the Keys Internship.

# **BAR ADMISSIONS**

Arizona

New York

# PEER REVIEWER AND JOURNAL EDITOR

Climate Risk Management section of Frontiers in Climate – Review Editor People and Nature – Associate Editor and Reviewer PLOS One - Reviewer