

Kenro Kusumi, PhD
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EDUCATION

Massachusetts Institute of Technology PhD (Biology) Thesis: <i>Positional Cloning and Characterization of the Mouse Pudgy Locus.</i> Advisor: Eric S. Lander	1997
Harvard Medical School/ Massachusetts Institute of Technology Health Sciences and Technology Program <i>Completed medical school years 1-2 and passed USMLE Step 1 Exam</i>	1988-1997
Harvard College, Harvard University AB (Biochemical Sciences, magna cum laude) Honors Thesis: <i>Identification of a Cytoplasmic Myosin-Like Protein in the Nematode C. elegans.</i> Advisors: Dan Stinchcomb & Daniel P. Kiehart	1988

POSTDOCTORAL TRAINING

National Institute for Medical Research, London, UK Hitchings-Elion Fellow of the Burroughs Wellcome Fund Advisor: Robb Krumlauf	1998-2000
Whitehead Institute for Biomedical Research, Cambridge, MA Research Scientist Advisor: Eric S. Lander	1997-1998

LEADERSHIP POSITIONS

Arizona State University, The College of Liberal Arts and Sciences	
Dean of Natural Sciences	Jul 2021-present
Director, School of Life Sciences	Jul 2019-Jun 2021
Interim Director, School of Life Sciences	Jan 2019-Jun 2019
Associate Dean of Strategic Partnerships	Jan 2019-Jun 2021
Associate Dean of Research and Digital Initiatives	Jul 2018-Jun 2019
Associate Dean of Research and Graduate Initiatives	Mar 2016-Jun 2018
Associate Dean of Graduate Programs	Jan 2013-Feb 2016
Interim Associate Director of Graduate Programs, School of Life Sciences	Jul 2012-Dec 2012
The Children's Hospital of Philadelphia, Division of Orthopaedic Surgery	Jun 2001-May 2006
Director of Pediatric Orthopaedic Basic Research	

ACADEMIC APPOINTMENTS

Professor School of Life Sciences, Arizona State University, Tempe, AZ	Aug 2014–present
Associate Professor Dept. of Basic Medical Sciences, University of Arizona College of Medicine – Phoenix, in Partnership with Arizona State University, Phoenix, AZ	Jul 2006–Jun 2010
Associate Professor (with tenure) School of Life Sciences, Arizona State University, Tempe, AZ	Jun 2006–Jul 2014
Assistant Professor Dept. of Pediatrics (tenure track appointment) and Dept. of Cell and Developmental Biology (secondary appointment), University of Pennsylvania School of Medicine, Philadelphia, PA	Feb 2001–May 2006
Assistant Professor Divisions of Human Genetics and Orthopaedic Surgery, The Children’s Hospital of Philadelphia, Philadelphia, PA	Feb 2001–May 2006

OTHER ACADEMIC APPOINTMENTS

Adjunct Faculty, Neurogenomics Division, Translational Genomics Research Institute, Phoenix, AZ	2006–present
Volunteer Faculty, Alix School of Medicine, Mayo Clinic, Scottsdale, AZ	2019
Sabbatical Visitor, Victor Chang Cardiac Research Institute, Sydney, Australia	2015
Associate (Adjunct Faculty), Department of Basic Medical Sciences, University of Arizona College of Medicine – Phoenix, Phoenix, AZ	2010–2023

BOARD APPOINTMENTS

Trustee, Board of Trustees, Bermuda Institute of Ocean Sciences, Bermuda	2022–present
Trustee, Board of Trustees, Arizona Science Center, Phoenix, AZ	2022–present
Member, Board of Directors, LGBTQ Leaders in Higher Education	2023–present

LEADERSHIP TRAINING AND PROFESSIONAL DEVELOPMENT MEETINGS

LGBTQ Leadership Inst., S. Connecticut State Univ., New Haven, CT, Oct 19-20	2023
LGBTQ Leadership Inst., Pasadena City College, Pasadena, CA, June 15-16	2022
Launching Leaders Program, Cohort II, Office of the Provost, Arizona State Univ.	2019-2020
ASU Advanced Leadership Initiative, a 6-month immersive, high-level leadership initiative dedicated to developing leaders	2018
PAC12+3 Arts and Sciences Deans Meeting, University of Utah, March 23-24	2023
PAC12+3 Arts and Sciences Deans Meeting, Arizona State Univ., Feb. 21-23	2019
PAC12+3 Arts and Sciences Deans Meeting, Oregon State Univ., Apr. 29-May 1	2018
PAC12+3 Arts and Sciences Deans Meeting, University of Colorado, April 10-12	2016
PAC12+3 Arts and Sciences Deans Meeting, Univ. of Hawaii, Manoa, Feb. 27-28	2014
PAC12+3 Arts and Sciences Deans Meeting, Arizona State Univ. Feb. 28-Mar. 1	2013
ASU+GSV Summit 2023, San Diego, CA, April 17-19	2023
ASU+GSV Summit XII, San Diego, CA, April 4-6	2022
ASU+GSV Summit XI, August 8-11	2021
ASU+GSV Summit X, San Diego, CA, April 8-10	2019
American Council on Education (ACE), Philadelphia, PA, March 8-12	2019
American Council on Education (ACE), Washington, DC, March 10-13	2018

Science-Technology-Engineering-Math Conference in Vietnam (STEMCON), Higher Engineering Education Alliance Program, Hanoi, Vietnam, March 1-2	2017
Association of Public and Land Grant Universities, Austin, TX, Nov. 13-15	2016
Council of Graduate Schools, Scottsdale, AZ, December 6-9	2017
Council of Graduate Schools, Seattle, WA, December 2-5	2015
Council of Graduate Schools, Washington, DC, December 3-6	2014
Council of Graduate Schools, Washington, DC, December 3-6	2014
Council of Graduate Schools New Deans Institute and Summer Workshop, San Juan, Puerto Rico, July 13-17	2013

HONORS AND AWARDS

Roberts C. Stebbins Research Award, Desert Tortoise Council	2023
Invited Faculty Speaker, Rainbow LGBTQ Convocation Fall 2018, Arizona State Univ.	2018
Joseph Stokes, Jr. Investigator, Children's Hospital of Philadelphia	2001-2006
Young Investigator Award, Mental Retardation & Developmental Disability Research Center, Children's Hospital of Philadelphia	2001
Florence R.C. Murray Fellowship, Children's Hospital of Philadelphia	2001
Hitchings-Elion Fellowship, Burroughs Wellcome Fund, Faculty Award	2000
Hitchings-Elion Fellowship, Burroughs Wellcome Fund, Postdoctoral Award	1998
National Winner, NASA Space Shuttle Student Involvement Project	1983

RESEARCH

Grants

Total of **\$4,933,728** in funding awarded as PI or co-PI/co-investigator.

Current

Subcontract Grant M2201311, Kusumi (PI) Texas Parks & Wildlife Dept. Conservation genomics and disease ecology of the Texas tortoise, <i>Gopherus berlandieri</i> Role: ASU Subcontract PI	1/1/22-12/31/24 \$54,765 total costs (total grant \$177,181)	NA
Grant 2107975, DeNardo (PI) NSF-IOS <i>IMAGiNE: Testing multi-level controls on an aridity tolerance phenotype over time through physiogenomic data integration</i> Integrate whole-genome, epigenome, and transcriptome sequencing data for adaptation to desert climes. Role: Co-PI	9/1/21-8/31/24 \$869,404 total costs	NA
Collaborative Grant 1925535, Dolby (PI) NSF-IES <i>Collaborative Research: Testing Evolutionary Pseudocongruence Along the Baja California Peninsula Through Integration of Geologic and Genomic Data</i> Geo-genomic analysis of taxa across the Baja peninsula to test mid-peninsular barrier hypothesis. Role: Co-PI and ASU subcontract PI	10/1/19-9/30/24 \$838,431 total costs	0.2 mo.

Pending

1T32GM154654-01, Stabenfeldt (Lead PI) NIH-NIGMS RESTEP in AZ: Regenerative Engineering, Science, and Technology Education Program in Arizona Role: Multi-PI	7/1/24-6/30/29 \$4,289,839	NA
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Completed

ISA, Dolby (PI) AZ Dept. of Game and Fish <i>AZGF/ASU Sonora Mud Turtle Project</i> Population survey of the Sonoran mud turtle (<i>Kinosternon sonoriense</i>) in southern Arizona. Role: Co-PI	3/26/20-12/31/25 \$25,000 total costs	NA
Grant (Dolby, PI) Desert Tortoise Council <i>Determining the geographical and physiological range limits of Gopherus agassizii</i> Population genomic analysis of Mojave desert tortoise and Sonoran desert tortoise hybridization zone. Role: Internal PI	1/1/18-2/14/20 \$11,992 total costs	NA
Heritage Fund Grant, Wilson Sayres (PI) Arizona Dept. of Game & Fish Heritage Fdn. <i>Characterizing G. morafkai through genomic analyses of hybrids and speciation</i> Population genomic analysis of Mojave desert tortoise and Sonoran desert tortoise hybridization zone. Role: Co-PI	1/1/17-12/31/19 \$33,002 total costs	NA
Blue Waters Allocation (Dolby, PI) Nat'l Center for Supercomputing Applications <i>Broadening Participation Allocation: Scalable, reproducible inference of eco-geospatial sub-patterns in large genomic datasets</i> Bioinformatic analysis of southwestern desert tortoises populations (<i>Gopherus agassizii</i> and <i>G. morafkai</i>). Role: Co-PI	4/16/18-3/31/19 75,000 node hours	NA
G17AC00034 Kusumi (PI) US Geological Survey <i>Cooperative agreement for CESU-affiliated University with USGS – Cooperative Ecosystem Studies Unit</i> Transcriptomic analysis of tortoise dietary conditions leading to upper respiratory illness. Role: PI	1/1/17-12/1/18 \$33,374 total costs	NA
Visiting Researcher Grant, Kusumi (PI) FAPESP São Paulo Research Foundation <i>Abordagens Genômicas Aplicadas ao Desenvolvimento, Evolução e Regeneração</i> <i>Genomic Approaches Applied to Development, Evolution, and Regeneration</i> Course for graduate students in Brazil, held from August 6-10, 2018, at the University of São Paulo. Role: PI	8/6/18-8/10/18 \$2,000	NA
LM9 1025 (Kusumi) Billy C. Hartman Fund for Spinal Injury Research <i>Harnessing Conserved Regenerative Mechanisms for Translational Therapies</i> Transcriptomic analysis of spinal cord regeneration and repair. Role: PI	2/1/12-12/31/16 \$30,000 total costs	NA
14071865 Kusumi (PI) Translational Genomics Research Institute <i>Genome reannotation of the African clawed frog, Xenopus laevis, for gene expression studies</i> Annotate the genome of the classic developmental model, <i>Xenopus laevis</i> . Role: PI	5/1/14-10/31/16 \$45,000 total costs	NA
R21AR064935 Kusumi (PI) NIH-NIAMS <i>Connecting the proteome and transcriptome in regeneration</i> Integrate microRNA, transcriptome and proteome in tail regeneration in the green anole. Role: PI	9/1/13-8/31/16 \$344,828 total costs	1.0 mo.

62084 Kusumi (PI) Burroughs Wellcome Fund Collaborative Research Travel Grant <i>Integrating Computational & Biomedical Approaches to Comparative Genomic Analysis</i> Bioinformatics analysis to identify regulatory networks for regeneration in amniote vertebrates. Role: PI	1/2/14-8/15/15 \$10,000	NA
1S10RR027154 (Duch) NIH-NCRR <i>Acquisition of a Leica TCS SP5 laser scanning confocal microscope</i> Leica TCS SP5 LSCM microscope acquisition. Role: Co-Investigator	5/1/11-4/30/12 \$470,658 total costs	NA
LM5 1051 KK (Kusumi) ASU-Smithsonian Tropical Research Institute <i>Adaptive evolution and regeneration in Panamanian anole lizards</i> Comparative genomic analysis of autotomy and tail regeneration in Panamanian <i>Anolis</i> species. Role: PI	4/1/11-12/31/13 \$80,000 total costs	NA
R21 RR031305 (Kusumi) NIH-NCRR <i>Developing the Anolis Lizard as a Model for Musculoskeletal Regeneration</i> Identify genes regulating musculoskeletal regeneration in the tail of the <i>Anolis carolinensis</i> lizard. Role: PI	9/15/10-8/31/13 \$412,606 total costs	1.5 mo.
Research Contract 1113 (Kusumi) Arizona Biomedical Research Commission <i>Transcriptome Analysis and Functional Anatomy of Spinal Cord Regeneration in the Anolis Lizard</i> Transcriptomic analysis of tail regeneration of the green anole lizard, <i>Anolis carolinensis</i> . Role: PI	7/16/10-6/30/13 \$337,500 total costs	1 mo.
S10 RR025646 (Smith) NIH-NCRR <i>Prairie Technologies 2-Photon Microscope</i> Prairie Technologies 2-Photon Microscope for cellular analysis of developmental processes. Role: Co-investigator	5/1/09-4/30/10 \$418,785 total costs	NA
5M01RR000240 Project 0572 (Kusumi) NIH-NCRR <i>Genetic Analysis of Congenital Vertebral Malformations</i> Patient database for congenital scoliosis and screening for disruptions in notch pathway genes. Role: PI	3/1/04-2/28/05	5%
RO1 AR050687 (Kusumi) NIH-NIAMS <i>Gene Expression Studies of Early Spinal Development</i> Microarray analysis of notch-pathway regulated cycling genes in somitogenesis and early myogenesis. Role: PI	9/29/03-8/31/09 \$1,087,170 total costs	50%
R01 DK053104 (Spinner) NIH-NIDDK <i>Molecular Analysis in Alagille Syndrome</i> Analyze <i>Jag1</i> mutations with other <i>Notch</i> pathway genes. Role: Co-investigator* (transition to collaborator on 6/30/06 due to move to ASU)	8/15/02-6/30/06* \$151,080 total direct costs	10%
Research Grant (Kusumi) Ethel Brown Foerderer Fund for Excellence <i>Genetic Analysis of Congenital Vertebral Malformations</i>	7/1/02-6/30/03 \$30,000 total costs	10%

Patient database for congenital scoliosis and screen for disruptions in notch pathway genes.

Role: PI

P01 DC02027 (Emanuel) 1/1/02-2/1/04 15%

NIH-NIDCD \$129,552 total direct costs for CoreC

Velocardiofacial Syndrome-Molecular and Clinical Studies

Embryonic analysis of normal and velocardiofacial syndrome model mutant mice.

Role: Core Director

Research Grant (Kusumi) 1/1/02-12/31/02 5%

Cervical Spine Research Society \$30,000 total costs

Genetic Analysis of Cervical Malformations in Klippel-Feil Syndrome

Identify patients with Klippel-Feil syndrome, and initiate linkage analysis mapping of disease loci.

Role: PI

Research Grant (Kusumi) 11/1/01-10/31/03 5%

The Philadelphia Foundation \$40,000 total costs

Developmental genetic analysis of the mouse models for human fetal hydrocephalus

Analyze neural development in *Notch* pathway mutants.

Role: PI

Young Investigator Award (Kusumi) 7/1/01-6/30/03 5%

Mental Retardation & Developmental Disability \$37,000 total costs

Research Center, The Children's Hospital of Philadelphia

*Developmental genetic analysis of the mouse *Dll3* neuroventricular model for human fetal hydrocephalus*

Analyze ependymal defects in the *pudgy* and knockout *Delta-like 3* mutants.

Role: PI

1000336.01 (Kusumi) 4/1/01-12/31/07 NA

Burroughs Wellcome Fund \$195,750 total costs

Notch pathway patterning of the mammalian brain and skeleton

Conduct somite genetic analysis of *Notch* pathway mouse mutants.

Role: PI

Florence R.C. Murray Fellowship (Kusumi) 2/1/01-11/30/01 5%

The Children's Hospital of Philadelphia \$30,000 total costs

Defining the Etiology of Delta-like 3 Congenital Malformations of the Spine

Identify *DLL3* mutations in human congenital vertebral malformation cases.

Role: PI

Hitchings-Elion #1152 (Kusumi) 4/1/98-3/31/00 NA

Burroughs Wellcome Fund \$110,000 total costs

Genetic analysis of Notch pathway and HOX regulation in paraxial mesoderm

Developmental genetic analysis of mouse *Dll3* and *Hox* mutants.

Role: PI

Publications

Summary of Scientific Impact (2023 analysis, Google Scholar)

- h-index **41**
- Total citations **8,319**
- Total peer-reviewed articles, reviews, edited books, and book chapters: **80**

Public database links

- [Google Scholar](#)
- ORCID: [0000-0002-1458-4540](#)

Legend

- Undergraduate student, graduate and medical student, postdoctoral/medical fellow mentees

- ^ joint 1st author

Peer-reviewed publications

68. Xu C, Hutchins ED, Eckalbar WL, Pendarvis K, Benson DM, Lake DF, McCarthy FM, **Kusumi K**. Comparative proteomic analysis of tail regeneration in the green anole lizard, *Anolis carolinensis*. *Nat Sci*. **2023**;e20210421. <https://doi.org/10.1002/ntls.20210421>
67. **Kusumi K**, Gordon S. LGBTQIA+ STEM Day 2022: an interview with Kenro Kusumi and Sarah Gordon. *Commun Biol*. 5, 1212. 18 November **2022**. <https://doi.org/10.1038/s42003-022-04201-2>
66. Araya-Donoso R, Orton JP, Ryan MJ, Jones CA, **Kusumi K**, Dolby GA. Geospatial assessment of freshwater invasive species to inform turtle conservation and management. *Aquatic Conservation: Marine and Freshwater Ecosystems*. 1-12. 5 April **2022** <https://doi.org/10.1002/aqc.3816>
65. Westfall AK, Telemeco RS, Grizante MB, Waits DS, Clark AD, Simpson DY, Klabacka RL, Sullivan AP, Perry GH, Cox CL, Cox RM, Gifford ME, John-Alder HB, Sears MW, Angilletta MJ, Tollis M, Leaché AD, Langkilde T, **Kusumi K**, Schwartz TS. A chromosome-level genome assembly for the Eastern fence lizard (*Sceloporus undulatus*), a reptile model for physiological and evolutionary ecology. *Gigascience*. 1-17. E12753. 1 October **2021** <https://doi.org/10.1093/gigascience/giab066>
64. Romero-Diaz C, Xu C, Campos SM, Herrmann MA, **Kusumi K**, Hews DK, Martins EP. Brain transcriptomic responses of Yarrow's spiny lizard, *Sceloporus jarrovi*, to conspecific visual or chemical signals. *Genes Brain Behavior*. 25 May **2021** <https://doi.org/10.1111/gbb.12753>
63. Xu C, Palade J, Fisher RE, Smith CI, Clark AR, Sampson S, Bourgeois R, Rawls A, Elsey RM, Wilson-Rawls J, **Kusumi K**. Comparative anatomy and histology reveal that the American alligator (*Alligator mississippiensis*) exhibits regenerative capacity of the tail. *Sci Rep* 18 November **2020** 10:20122. <https://doi.org/10.1038/s41598-020-77052-8>
62. Xu C, Dolby GA, Drake KK, Esque TC, **Kusumi K**. Immune and sex-biased gene expression in the threatened Mojave desert tortoise, *Gopherus agassizii*. *PLOS ONE* 26 August **2020** 26;15(8):e0238202. <https://doi.org/10.1371/journal.pone.0238202>
61. Dolby GA, Morales M, Webster TH, DeNardo DF, Wilson MA, **Kusumi K**. Discovery of a New TLR Gene and Gene Expansion Event through Improved Desert Tortoise Genome Assembly with Chromosome-Scale Scaffolds. *Genome Biol Evol*. **2020** Feb 1;12(2):3917-3925. <https://doi.org/10.1093/gbe/evaa016>
60. Orton JP, Morales M, Fontenele RS, Schmidlin K, Kraberger S, Leavitt DJ, Webster TH, Wilson MA, **Kusumi K**, Dolby GA, Varsani A. Virus Discovery in Desert Tortoise Fecal Samples: Novel Circular Single-Stranded DNA Viruses. *Viruses*. **2020** Jan 26;12(2). pii: E143. <https://doi.org/10.3390/v12020143>
59. Xu C, Hutchins ED, Tokuyama MA, Wilson-Rawls J, **Kusumi K**. Transcriptional analysis of scar-free wound healing during early stages of tail regeneration in the lizard, *Anolis carolinensis*. *J Immunol Regen Med*. March **2020** 7(2020):100025. <https://doi.org/10.1016/j.regen.2019.100025>
58. Palade J, Djordjevic D, Hutchins ED, George R, Cornelius JA, Rawls A, Ho JWK, **Kusumi K**, Wilson-Rawls J. Identification of satellite cells from anole lizard skeletal muscle and demonstration of increased musculoskeletal potential. *Dev Biol*. **2018** 433:344-356. <https://doi.org/10.1016/j.ydbio.2017.08.037>
57. Sannan NF, Shan X, Gregory-Evans K, **Kusumi K**, Gregory-Evans CY. *Anolis carolinensis* as a model to understand molecular and cellular basis of foveal development. *Exp Eye Res*. **2018** pii: S0014-4835(18)30052-6 <https://doi.org/10.1016/j.exer.2018.05.012>
56. Tollis M[^], Hutchins ED[^], Stapley J, Rupp SM, Eckalbar WL, Maayan I, Lasku E, Infante C, Dennis SR, Robertson JA, May C, Crusoe MR, Bermingham E, DeNardo DF, Hsieh ST, Huentelman MJ, Kulathinal R, McMillan O, Menke DB, Pratt SC, Rawls A, Sanjur O, Wilson-Rawls J, Wilson Sayres MA, Fisher RE, **Kusumi K**. Comparative genomics reveals accelerated evolution in conserved pathways during the diversification of anole lizards. *Genome Biol Evol*. February **2018** 10(2):489-506 <https://doi.org/10.1093/gbe/evy013>
55. Tokuyama M, Xu C, Fisher RE, Wilson-Rawls J, **Kusumi K**, Newbern JM. Developmental and adult-specific processes contribute to *de novo* neuromuscular regeneration in the lizard tail. *Dev Biol*. **2018** 433:287-296. <https://doi.org/10.1016/j.ydbio.2017.10.003>
54. **Kusumi K**. Investigating Regeneration: Extended Rebuilding Capacity. *Dev Cell*. **2017** 43:375. <https://doi.org/10.1016/j.devcel.2017.11.009>

53. Giampietro PF, Pourquie O, Raggio C, Ikegawa S, Turnpenny PD, Gray R, Dunwoodie SL, Gurnett CA, Alman B, Cheung K, **Kusumi K**, Hadley-Miller N, Wise C. Summary of the First Inaugural Meeting of the International Consortium for Scoliosis Genetics and the International Consortium for Vertebral Anomalies and Scoliosis, March 16-18, 2017, Dallas, Texas. *Am J Med Genet*, **2017** 176A:253-256. <https://doi.org/10.1002/ajmg.a.38550>
52. Tollis M, DeNardo DF, Cornelius JA, Dolby GA, Edwards T, Henen BT, Karl AE, Murphy RW, **Kusumi K**. The Agassiz's desert tortoise genome provides a resource for the conservation of a threatened species. *PLOS ONE*. **2017** 12(5): e0177708. <http://dx.doi.org/10.1371/journal.pone.0177708>
51. Rupp SM, Webster TH, Olney KC, Hutchins ED, **Kusumi K**, Wilson Sayres MA. Evolution of Dosage Compensation in *Anolis carolinensis*, a Reptile with XX/XY Chromosomal Sex Determination. *Genome Biol Evol*. **2017** Jan 1;9(1):231-240. <http://dx.doi.org/10.1093/gbe/evw263>
50. Djordjevic D, **Kusumi K**, Ho JWK. XGSA: a statistical method for cross-species gene set analysis. *Bioinformatics*. **2016** 32(17): i620-i628. <http://dx.doi.org/10.1093/bioinformatics/btw428>
49. Hutchins ED, Eckalbar WL, Wolter JM, Mangone M, **Kusumi K**. Differential expression of conserved and novel microRNAs during tail regeneration in the lizard *Anolis carolinensis*. *BMC Genomics*. **2016** 17:339 <https://doi.org/10.1186/s12864-016-2640-3>
48. Edwards T, Tollis M, Hsieh P-H, Gutenkunst RN, Liu Z, **Kusumi K**, Culver M, Murphy RW. Assessing models of speciation under different biogeographic scenarios: an empirical study using multi-locus and RNA-seq analyses. *Ecol Evol*. **2016** <http://dx.doi.org/10.1002/ece3.1865>
47. Tollis M, Hutchins ED, **Kusumi K**. Reptile Genomes Open the Frontier for Comparative Analysis of Amniote Development and Regeneration. *Int J Dev Biol*. **2014** 58: 863-871. <http://dx.doi.org/10.1387/ijdb.140316kk>
46. Hutchins ED, Markov GJ, Eckalbar WL, George RM, King J, Tokuyama MA, Geiger L, Emmert N, Ammar M, Allen A, Siniard A, Corneveaux JJ, Fisher RE, Wade J, DeNardo DF, Rawls JA, Huentelman MJ, Wilson-Rawls J, **Kusumi K**. Transcriptomic Analysis of Tail Regeneration in the Lizard *Anolis carolinensis* Reveals Activation of Conserved Vertebrate Developmental and Repair Mechanisms. *PLoS ONE*, **2014** Aug 20 9(8): e105004. <https://doi.org/10.1371/journal.pone.0105004>
45. Londono D, Kou I, Johnson TA, Sharma S, Ogura Y, Tsunoda T, Takahashi A, Matsumoto M, Herring JA, Lam T-P, Wang X, Tam EMS, Song Y-Q, Fan Y-H, Chan D, Cheah KSE, Qiu X, Jiang H, Huang D, Japanese Scoliosis Clinical Research Group, TSRHC IS Clinical Group, the **International Consortium for Scoliosis Genetics [Dr. Kusumi is a founding member of this organization.]**, Su P, Sham P, Cheung KMC, Luk KDK, Gordon D, Qiu Y, Cheng J, Tang N, Ikegawa S, Wise CA. A meta-analysis identifies adolescent idiopathic scoliosis association with LBX1 locus in multiple ethnic groups. *J Hum Mol Genet*, **2014** 51:401-406. <http://dx.doi.org/10.1136/jmedgenet-2013-102067>
44. **Kusumi K**, May CM, Eckalbar WL. A Large-Scale View of the Evolution of Amniote Development: Insights from Somitogenesis in Reptiles. *Curr Opin Genet Dev*, **2013** Aug;23(4):491-7. <http://dx.doi.org/10.1016/j.gde.2013.02.011>
43. Eckalbar WL, Hutchins ED, Markov GJ, Allen AN, Corneveaux JJ, Lindblad-Toh, K, Di Palma F, Alföldi J, Huentelman MJ, **Kusumi K**. Genome reannotation of the lizard *Anolis carolinensis* based on 14 adult and embryonic deep transcriptomes. *BMC Genomics*, **2013** Jan 23;14:49. <http://dx.doi.org/10.1186/1471-2164-14-49>
42. **Kusumi K**, Fisher RE. Studying mechanisms of regeneration in amphibian and reptilian vertebrate models. *Anat Rec*. **2012** Aug 29;295(10):1529-1531. <http://dx.doi.org/10.1002/ar.22541>
41. Eckalbar WL, Fisher RE, Rawls A, **Kusumi K**. Scoliosis and segmentation defects of the vertebrae. *WIREs Dev Biol* **2012**. <http://dx.doi.org/10.1002/wdev.34>
40. Fisher RE, Geiger LA, Stroik LK, Hutchins ED, George RM, DeNardo DF, **Kusumi K**, Rawls JA, Wilson-Rawls J. A histological comparison of the original and regenerated tail in the green anole, *Anolis carolinensis*. *Anat Rec*. **2012** Aug 29;295(10):1609-1619. <http://dx.doi.org/10.1002/ar.22537>
39. Ritzman TB, Stroik LK, Julik E, Hutchins ED, Lasku E, DeNardo DF, Wilson-Rawls J, Rawls JA, **Kusumi K**, Fisher RE. The gross anatomy of the original and regenerated tail in the green anole (*Anolis carolinensis*). *Anat Rec (Hoboken)*. **2012** Jul 2;295(10):1596-1608. <http://dx.doi.org/10.1002/ar.22524>
38. Sparrow DB, Chapman G, Smith AJ, Mattar MZ, Major JA, O'Reilly VC, Zackai EH, Dormans JP, Alman BA, McGregor L, Thompson E, Saga Y, Kageyama R, **Kusumi K**, Dunwoodie SL. A mechanism

- for gene-environment interaction in the etiology of congenital scoliosis. *Cell*. **2012** Apr 13;149(2):295-306. <http://dx.doi.org/10.1016/j.cell.2012.02.054>
37. Eckalbar WL, Lasku E, Infante CR, Elsey RM, Markov GJ, Allen AN, Corneveaux JJ, Losos JB, Denardo DF, Huentelman MJ, Wilson-Rawls J, Rawls A, **Kusumi K**. Somitogenesis in the anole lizard and alligator reveals evolutionary convergence and divergence in the amniote segmentation clock. *Dev Biol*. **2012** Mar 1;363(1):308-19. <http://dx.doi.org/10.1016/j.ydbio.2011.11.021>
 36. Fisher RE, Smith HF, **Kusumi K**, Tassone EE, Rawls A, Wilson-Rawls J. Mutations in the notch pathway alter the patterning of multifidus. *Anat Rec*. 2012 Jan;295(1):32-9. Epub **2011** Nov 18. <http://dx.doi.org/10.1002/ar.21488>
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Manuscript in Preparation

1. Baty SM, Araya-Donoso R, Mellor J, Paulsen A, Williams A, DeNardo DF, **Kusumi K**, Dolby GA. Low morphological divergence belies strong signatures of ecological adaptation and genomic reinforcement in speciating desert tortoises. In preparation.

Books Chapters

9. Xu C, Grizante MB, and **Kusumi K**. "Somitogenesis and axial development in Reptiles," in *Avian and Reptilian Developmental Biology*, Sheng G, Ed. Methods Molecular Biology, **2017**, p. 335-353. Vol. 1650, ISBN: 978-1-4939-7216-6, Springer Science+Business Media LLC: New York.
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7. Turnpenny PD, **Kusumi K**, Dunwoodie SL. *DLL3, MESP2, LFNG, HES7, TBX6, RIPPLY2* and Spondylocostal Dysostosis, *Epstein's Inborn Errors of Development: The Molecular Basis of Clinical Disorders of Morphogenesis, 3rd Edition*. Epstein CJ, Erickson RP, Wynshaw-Boris A, eds. Oxford University Press: New York, **2016**, p. 559-570. <http://dx.doi.org/10.1093/med/9780199934522.001.0001>
6. **Kusumi K**, Eckalbar W, Pourquie O. "Genetic regulation of somite and early spinal patterning." In *The Genetics and Development of Scoliosis*, Kusumi K, Dunwoodie SL, eds. Springer: New York, **2010**.
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4. Turnpenny PD, **Kusumi K**, Dunwoodie SL. Notch pathway mutations and spondylocostal dysostosis. *Epstein's Inborn Errors of Development: The Molecular Basis of Clinical Disorders of Morphogenesis, 2nd Edition*. Epstein CJ, Erickson RP, Wynshaw-Boris A, eds. Oxford University Press: New York, **2008**.

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1. Loomes K, **Kusumi K**, Spinner NB. Notch Genes, in *Wiley Encyclopedia of Molecular Medicine*, Creighton, T.E., ed. New York: John Wiley & Sons, Inc., **2002**.

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3. **Kusumi K**, Dunwoodie SL, eds. *The Genetics and Development of Scoliosis, 2nd Ed*. Springer: New York, **2018**. ISBN 978-3-319-90149-7 <https://doi.org/10.1007/978-3-319-90149-7>
2. Wilson-Rawls J, **Kusumi K**, eds. *Innovations in Molecular Mechanisms and Tissue Engineering*. Springer International Publishing: New York, **2016**. <http://dx.doi.org/0.1007/978-3-319-44996-8> 1. **Kusumi K**, Dunwoodie SL, eds. *The Genetics and Development of Scoliosis*. Springer: New York, **2010**. ISBN 978-1-4419-1406-4. <http://dx.doi.org/10.1007/978-1-4419-1406-4>

Non-peer-reviewed Pre-Print Articles

3. Westfall AK, Telemeco RS, Grizante MB, Waits DS, Clark AD, Simpson DY, Klabacka RL, Sullivan AP, Perry GH, Cox CL, Cox RM, Gifford ME, John-Alder HB, Sears MW, Angilletta MJ, Tollis M, Leaché AD, Langkilde T, **Kusumi K**, Schwartz TS. A chromosome-level genome assembly for the Eastern fence lizard (*Sceloporus undulatus*), a reptile model for physiological and evolutionary ecology. *BioRxiv*. **2020** <https://doi.org/10.1101/2020.06.06.138248>
2. Webster TH, Dolby GA, Wilson Sayres M, **Kusumi K**. Improved draft of the Mojave Desert tortoise genome, *Gopherus agassizii*, version 1.1. *PeerJ Preprints*. **2018** 6:e3266v4 <https://doi.org/10.7287/peerj.preprints.3266v4>
1. Grizante MB, Tollis M, Rodriguez JJ, Levy O, Angilletta MJ, **Kusumi K**. *De novo* assembly and annotation of the eastern fence lizard (*Sceloporus undulatus*) transcriptome. *BioRxiv*. **2017** <http://dx.doi.org/10.1101/136069>

Other Products

1. Dolby GA, Pataranutaporn P, Jacobs DK, **Kusumi K**. *Sea level & genetic diversification*. 2017. Vimeo. <https://vimeo.com/219921821>

Invited Talks (Last 5 Years)

2023

- "Genomic Approaches for Chelonian Conservation in a Changing World." 48th Annual Desert Tortoise Council Meeting, St. George, UT. February 23- 25, 2023.

2022

- "Decoding genomes to understand life while working to advance inclusive academic environments." Scientific Queeries, Faculty of Science, University of Alberta (Video). April 26, 2022.
- "Decoding Genomes and Advancing LGBTQ+ Inclusion in Academic Environments." MIT BioLGBTQ+, Department of Biology, Massachusetts Institute of Technology (Video). December 7, 2022.

2021

- "Genomic Insights into the Evolution and Conservation of Threatened Gopherus Tortoises." Department of Ecology and Evolution Seminar, Florida State University (Video). September 10, 2021.
- "The promise of future regenerative therapies: Insights from genomic analysis of regeneration in reptiles." TEDxASUWest, Arizona State University, September 23, 2021. <https://youtu.be/cFQec1-2g0M>

2019

- “Genomic Insights into the Evolution of the Threatened Gopherus Desert Tortoises and Anolis Lizard Adaptive Radiation.” Australian Wildlife Conservation Group, University of Sydney, Australia, June 4, 2019.
- “From pudgy mice to spondylocostal dysostosis.” Peter Turnpenny Retirement Symposium. Royal Devon and Exeter Hospital, University of Exeter Peninsula Medical School, Exeter, UK, September 13, 2019.

Conference Presentations, Posters & Abstracts (Last 5 Years)

2023

- Araya-Donoso R., Baty S. M., Dolby G. A., Geneva A. J. & **Kusumi K.** Características genómicas asociadas con fenotipos extremos en dos especies de Anolis. Reunión Anual Conjunta LVI Reunión Sociedad Genética De Chile XV Reunión Sociedad Chilena De Evolución. Talca, Chile. October 16-20, 2023.
- Baty S. M., Mellor J., Araya-Donoso R., Dolby G. A., & **Kusumi K.** Genes under selection and genomic analyses of three parapatric desert tortoises via chromosome-scale reference genomes. Society for the Study of Evolution annual meeting. Albuquerque, New Mexico, June 21-25, 2023.
- Araya-Donoso R., Baty S. M., Dolby G. A., Geneva A. J. & **Kusumi K.** *Genomic features associated with different phenotypes in two Anolis species.* Society for the Study of Evolution annual meeting. Albuquerque, New Mexico, June 21-25, 2023.
- Tleimat J., Crump P., Dolby G., **Kusumi K.**, McCracken SF. Establishing collaborative networks to increase surveillance of disease in Texas tortoises. Southwestern Association of Naturalists Meeting, San Antonio, TX. August 3-6, 2023.
- Tleimat J., Crump P., Dolby G., **Kusumi K.**, McCracken SF. Texas Tortoise Task Force: Collaborative networks to increase surveillance of disease in tortoises. 48th Annual Desert Tortoise Council Meeting, St. George, UT. February 23- 25, 2023.
- Baty S., Paulsen A., **Kusumi K.**, Dolby GA. Genome Comparison of Sonoran and Mojave Desert Tortoises (*Gopherus morafkai* and *G. agassizii*) and Analysis of Immunological Gene Evolution. 48th Annual Desert Tortoise Council Meeting, St. George, UT. February 23- 25, 2023.
- **Kusumi K.**, Dolby GA. Genomic Approaches for Chelonian Conservation in a Changing World. 48th Annual Desert Tortoise Council Meeting, St. George, UT. February 23- 25, 2023.

2022

- **Kusumi K.**, Dolby GA., Baty S., DeNardo DF., Crump P., McCracken SF. Genomic Insights into the Evolution and Conservation of Threatened Gopherus Tortoise Species. 47th Annual Desert Tortoise Council Meeting, Virtual Meeting, February 15, 17, 18, 22, 24, 25, 2022.

2021

- Araya-Donoso R., Alonso-Alonso P., Maag G., Dorsey R. J., Bennet S. E. K., Wilder B. T., **Kusumi K.**, Munguía-Vega A., & Dolby G. A. **2021.** *Genetic divergence and ephemeral barriers: Reconciling genetic and geological timescales within geogenomics.* American Geophysical Union Fall Meeting. New Orleans, Louisiana, December 13-18, 2021.
- Baty S., **Kusumi K.**, Dolby GA. Genome annotations and analyses of two recently diverged brittlebush species, *Encelia farinosa* and *Encelia californica*. Virtual Evolution 2021, June 21-25, 2021.
- Orton JP., DeNardo D., **Kusumi K.**, Dolby GA. Comparative Analysis of Immune Gene Family Evolution Based on a De Novo Genome for the Sonoran Desert Tortoise, *Gopherus morafkai*. Virtual Evolution 2021, June 21-25, 2021.
- Araya-Donoso R., Munguía-Vega A., Baty S. M., Alonso-Alonso P., Wilder B. T., LiraNoriega A., **Kusumi K.**, & Dolby G. A. **2021.** *Using genetic simulations and climatic niches to test plant and animal population divergence on the Baja California peninsula.* Society for the Study of Evolution annual meeting. Virtual meeting, June 2021.
- Orton JP., DeNardo D., **Kusumi K.**, Dolby GA. Comparative Analysis of Immune Gene Family Evolution Based on a De Novo Genome for the Sonoran Desert Tortoise, *Gopherus morafkai*. 46th Annual Desert Tortoise Council Meeting, Virtual Meeting, February 9, 11, 16, 18, 23 and 25, 2021, talk.

- Dolby GA, Webster TH, Byrne H, DeNardo D, **Kusumi K**. Historical effective population size and geographic population structure in Mojave and Sonoran desert tortoises. 46th Annual Desert Tortoise Council Meeting, Virtual Meeting, February 9, 11, 16, 18, 23 and 25, 2021, talk.
- Romero-Diaz C, Xu C, Campos SM, **Kusumi K**, Hews DK, Martins EP. Brain transcriptomic responses of Yarrow's spiny lizard, *Sceloporus jarrovi*, to conspecific visual or chemical signals. Society for Integrative and Comparative Biology Annual Meeting (Virtual), January 3-February 28, 2021.

2020

- Araya-Donoso R, Munguia-Vega A, Dorsey RJ, Bennett SEK, Lira-Noriega A, Wilder BT, **Kusumi K**, Dolby GA. Genomic and ecological signatures of landscape change: a geologically-constrained, simulation-based case study in the Baja California Peninsula, American Geophysical Union Fall Meeting, EP036-0011, 11 Dec 2020.
- Dolby GA, Dorsey RJ, Bennett SEK, Hausback B, Lira-Noriega A, Darin M, Araya-Donoso R, Baty S, Orton J, Stokes M, Munguia-Vega A, **Kusumi K**, Wilder BT. Can we use causal theory to understand how Earth processes shape life? Examples from the Baja California peninsula, MX, American Geophysical Union Fall Meeting, IN006-0002, 8 Dec 2020.
- Araya-Donoso R, Orton JP, Jones CA, **Kusumi K**, Dolby GA. Factors determining Invasion Risk of Crayfish and Bullfrog in Populations of the Sonora Mud Turtle (*Kinosternon sonoriense*) in Arizona. 18th Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles (Turtle Survival Alliance Virtual Meeting), August 6-September 24, 2020.
- Xu C, Palade J, Fisher RE, Smith CI, Clark AR, Sampson S, Bourgeois R, Rawls A, Elsey RM, Wilson-Rawls J, **Kusumi K**. Tail Regeneration in the American Alligator (*Alligator mississippiensis*): First Characterization of Appendage Regrowth in an Archosaurian Reptile. Society for Developmental Biology Annual Meeting (Online), July 9-16, 2020, poster.
- Palade J, Boschi A, Eckalbar W, **Kusumi K**, Rawls A, Newbern J, Wilson M, Wilson-Rawls J. Analysis of vertebrate Delta like-3 genes and proteins: Implications for cellular localization and function. Society for Developmental Biology Annual Meeting (Online), July 9-16, 2020, poster.
- Romero-Diaz C, Xu C, Campos SM, **Kusumi K**, Hews DK, Martins EP. Differential brain gene expression in response to conspecific visual and chemical signals in Yarrow's spiny lizard, *Sceloporus jarrovi*. Animal Behavior Society Annual Meeting (Virtual), July 28-30, 2020.
- Xu C, Palade J, Fisher RE, Smith CI, Clark AR, Sampson S, Rawls A, Elsey RM, Wilson-Rawls J, **Kusumi K**. Comparative Anatomy and Histology Reveal the American Alligator (*Alligator mississippiensis*) Exhibits Regenerative Capacity of the Tail. American Association of Anatomists Annual Meeting at Experimental Biology 2020, San Diego, CA, April 4-7, 2020 – meeting canceled due to COVID-19.
- Orton JP, Donoso RA, DeNardo D, **Kusumi K**, Dolby GA. Progress Towards Genome Analysis of the Sonoran Desert Tortoise, *Gopherus morafkai*, and Comparison with *G. agassizii* to Identify Genetic Variations Underlying Physiological Adaptations. 45th Annual Desert Tortoise Council Meeting, Las Vegas, NV, February 20-23, 2020, poster.
- Dolby GA, Webster TH, DeNardo D, Wilson Sayres M, **Kusumi K** Genomic insights into speciation of southwestern desert tortoises. 45th Annual Desert Tortoise Council Meeting, Tucson, AZ, 45th Annual Desert Tortoise Council Meeting, Las Vegas, NV, February 20-23, 2020, talk.

2019

- Xu C, Hutchins ED, Tokuyama MA, Wilson-Rawls J, **Kusumi K**. Transcriptional analysis of scar-free wound healing during early stages of tail regeneration in the green anole lizard, *Anolis carolinensis*. Arizona Statewide Symposium in Regenerative Medicine, Phoenix, AZ. May 17-18, 2019, poster.
- Xu C, Hutchins ED, Tokuyama MA, Wilson-Rawls J, **Kusumi K**. Transcriptional analysis of scar-free wound healing during early stages of tail regeneration in the green anole lizard. Gordon Research Conference Tissue Repair and Regeneration, New London, CT. June 9-14, 2019, poster.
- Xu C, Hutchins ED, Tokuyama MA, Wilson-Rawls J, **Kusumi K**. Transcriptional analysis of scar-free wound healing during early stages of tail regeneration in the green anole lizard, *Anolis*

carolinensis. Society for Developmental Biology Annual Meeting, Boston, MA. July 26-30, 2019, poster.

- Dolby GA, Webster TH, DeNardo D, Wilson Sayres M, **Kusumi K**. Population genomic analysis of speciation among threatened desert tortoises. *Evolution* 2019. Providence, RI, June 21-25, 2019.
- Dolby GA, Webster TH, DeNardo D, Wilson Sayres M, **Kusumi K** Genomic insights into speciation of southwestern desert tortoises. 44th Annual Desert Tortoise Council Meeting, Tucson, AZ, February 22-24, 2019.
- Morales M, Dolby GA, **Kusumi K**. Mining genomes to reveal the evolution of gene families in reptiles relevant to tortoise health. 44th Annual Desert Tortoise Council Meeting, Tucson, AZ, February 22-24, 2019.
- Orton J, Morales M, Dolby GA, Schmidlin K, Fontenele RS, Kraberger S, Webster T, Wilson Sayres M, **Kusumi K**, Varsani A. Virus discovery in Mojave and Sonoran Desert tortoises. 44th Annual Desert Tortoise Council Meeting, Tucson, AZ, February 22-24, 2019.
- Dolby G, Xu C, Drake K, Esque T, **Kusumi K**. Understanding Mojave desert tortoise immunity using RNA-Seq molecular approaches. 44th Annual Desert Tortoise Council Meeting, Tucson, AZ, February 22-24, 2019.

SERVICE

School/Department

<i>Chair</i> , Stem Cell/Regenerative Biology Faculty Search Committee, School of Life Sciences, Arizona State University	2016-2017
<i>Chair</i> , Comparative Genomics Faculty Search Committee, School of Life Sciences, Arizona State University	2013-2014
<i>Chair</i> , Developmental Neuroscience Faculty Search Committee, School of Life Sciences, Arizona State University	2012-2013
<i>Member</i> , Genomics Faculty Search Committee, School of Life Sciences, Arizona State University	2010-2012
<i>Member</i> , Promotions & Tenure Committee, Dept. of Basic Medical Sciences, University of Arizona College of Medicine-Phoenix, AZ	2010-2013
<i>Genomics, Evolutionary Biology, and Bioinformatics Faculty Group Representative</i> , School of Life Sciences Graduate Committee, Arizona State University	2009-2012
<i>Member</i> , Faculty Search Committee, Department of Basic Medical Sciences, UA College of Medicine-Phoenix in partnership with ASU	2006-2008
<i>Member</i> , Personnel Committee, Genomics, Evolutionary Biology, and Bioinformatics Faculty Group, School of Life Sciences, Arizona State University	2006-2019

College and University

<i>Member</i> , Vice Provost for Inclusive Excellence Search Committee, Arizona State Univ.	2023
<i>Chair</i> , Dean Search Committee, Barrett, The Honors College, Arizona State University	2022-2023
<i>Chair</i> , Director Search Committee, School of Geographical Sciences and Urban Planning, Arizona State University	2020-2021
<i>Allies Member</i> , ADVANCE Institutional Transformation Award, Arizona State University	2018-present
<i>Faculty Advisor</i> , GRADient Out in Graduate School, Arizona State University	2018-present
<i>Member</i> , Biodesign Institute Internal Advisory Board, Arizona State University	2018-present
<i>Member</i> , Leadership Team, Smithsonian Tropical Research Institute – Arizona State University Collaborative Initiative	2018-present
<i>Mentor</i> , HUES LGBT+ Mentoring Program, Graduate College, Arizona State University	2018-present
<i>Member</i> , Trans Inclusion Support Working Group, Arizona State University	2018-2019

<i>Ex officio</i> , Special Research Advancement Team Committee, College of Liberal Arts & Sciences, Arizona State University	2016-2019
<i>Ex officio</i> , Special Research Committee, College of Liberal Arts & Sciences, Arizona State University	2016-2019
<i>Member</i> , Associate Deans of Research Advisory Group, Office of Knowledge Enterprise & Development, Arizona State University	2016-2019
<i>Member</i> , School of Life Sciences Director Search Committee, Arizona State University	2014-2015
<i>Ex officio</i> , Special Graduate Student Advisory Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
<i>Ex officio</i> , Special Graduate Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
<i>Member</i> , Graduate Deans Advisory Group, Office of the Provost, Arizona State University	2013-2018
<i>Ex officio</i> member, Curriculum Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
<i>Ex officio</i> member, Committee on Academic Affairs and Grievance, College of Liberal Arts & Sciences, Arizona State University	2013-2018
<i>Advisor</i> , University Technology Office Advisory Panel for the School of Life Sciences faculty, Arizona State University	2012
<i>Member</i> , Research Scientist Search Committee, Arizona State University Advanced Computing Center (A2C2)	2012
<i>Member</i> , Education Policy Committee, University of Arizona College of Medicine, Tucson and Phoenix, AZ	2009
<i>Faculty Advisor</i> , Gay-Straight Alliance, University of Arizona College of Medicine-Phoenix, AZ	2009-2011
<i>Scholarly Projects Advisor</i> (8 students/year), UA College of Medicine-Phoenix in partnership with ASU	2008-2009
<i>Graduate Program Director; Member, Admissions Committee</i> ; Molecular & Cellular Biology Interdisciplinary Graduate Program, Graduate College, Arizona State University	2008-2012
<i>Co-Chair, Ad Hoc</i> Admissions Committee, Molecular & Cellular Biology Graduate Group, School of Life Sciences, Arizona State University	2007-2008
<i>Interim Co-Chair</i> , Molecular & Cellular Biology Graduate Program Working Committee, Graduate College, Arizona State University	2007-2008
<i>Member</i> , Final Block Review Committee (Medical School Curriculum), UA College of Medicine-Phoenix in partnership with ASU	2007-2008
<i>Chair</i> (2011-2012) and <i>member</i> (2007-2011), Animal Users Advisory Committee	2007-2012
<i>Member</i> , Phoenix Biomedical Campus-Arizona Biomedical Collaborative Building 2 Oversight Committee, Arizona State University	2007-2009
<i>Member</i> , College Web Committee, University of Arizona College of Medicine-Phoenix in partnership with Arizona State University	2007-2008
<i>Executive Committee Member</i> (2009-2010) and <i>Member</i> (2007-2010), Admissions Committee (MD Program), UA College of Medicine-Phoenix in partnership with ASU	2007-2010
<i>Member, Ad Hoc</i> Curriculum Committee, UA College of Medicine-Phoenix in partnership with ASU	2006-2009
<i>Member</i> , Bioinformatics Core Facility advisor board, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2005-2006

<i>Member</i> , Laboratory Animal Facility Planning Committee, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2004-2006
<i>Member</i> , Proposal Preparation, Submission and Award Management Task Force, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2005-2006
<i>Member</i> , Genomics & Computational Biology Graduate Group, University of Pennsylvania School of Medicine	2002-2006
<i>Member</i> , Institutional Animal Care and Use Committee, The Children's Hospital of Philadelphia	2001-2006
<i>Member</i> , Cell and Molecular Biology Graduate Group, Developmental Biology Section, University of Pennsylvania School of Medicine	2001-2006
Community and Professional	
<i>Mentor</i> , O-STEM (Out in STEM) national mentor network	2021-present
<i>Mentor</i> , Out to Innovate (formerly National Organization of Gay & Lesbian Scientists & Technical Professionals) mentor network program	2021-present
<i>Founding Member</i> , Lesbian, Gay, Bisexual, Transgender, Queer and Community (LGBTQ+) Faculty & Staff Association, Arizona State University	2016-present
<i>Member of the Selection Committee</i> , Academic Year Out to Innovate Scholarships for LGBT STEM Students funded by the Motorola Solutions Foundation, National Organization of Gay & Lesbian Scientists & Technical Professionals (NOGLSTP)	2014, 2016, 2020
<i>Reviewer</i> , OUT and UP Scholarship Committee (for Gay, Lesbian, Bisexual, and Transgender students), Maricopa Community Colleges Foundation	2011-2012
<i>Judge</i> , Annual DNA Day Essay Contest, American Society for Human Genetics	2008-present
<i>Treasurer</i> , Harvard Gay & Lesbian Students Association, Harvard University, Cambridge, MA	1987-1988
Professional Memberships and Activities	
American Association of Anatomists	2016-2022
American College of Medical Genetics	2008-2009
American Society of Human Genetics	2001-present
<i>Anolis</i> Gene Nomenclature Committee, <i>chair and founding member</i>	2010-present
British Society for Developmental Biology	1998-2004
Delaware Valley Mouse Club	2002-2006
Desert Tortoise Council	2015-present
Harvard Gender & Sexuality Caucus (formerly Harvard Gay & Lesbian Caucus)	2001-present
International Consortium for Spinal Genetics, Development, and Disease (formed in 2017 from the merger of the International Consortium for Vertebral Anomalies and Scoliosis, <i>founding member, secretary</i> [2009-2018], and <i>steering committee member</i> ; and the International Consortium for Scoliosis Genetics)	2006-2020
International Mammalian Genome Society	2001-2010
International Society for Developmental Biology	2001-2006
LGBTQ Leaders in Higher Education, <i>2023 meeting session moderator</i>	2021-present
Out to Innovate (formerly National Organization of Gay & Lesbian Scientists & Technical Professionals NOGLSTP)	2013-present
Pan-American Society for Evolutionary Developmental Biology	2015-2017
Society for Developmental Biology (US)	2001-present
Society for Integrative and Comparative Biology	2010-2014

Editorial Responsibilities

Developmental Biology	2007-present
Journal of North American Herpetology	2013-present
“Thematic Papers: Regeneration in Non-Mammalian Vertebrates.” Anatomical Research	2007-present
American Journal of Medical Genetics	2010
Anatomical Record	2017
BMC Genomics	2016-2018
Case Reports in Medicine	2010
Clinical Genetics	2005
Clinical Orthopaedics	2005, 2006
Connective Tissue Research	2016
Developmental Biology (18 reviews total)	2000-present
Developmental Cell	2019
Developmental Dynamics (3 reviews)	2002-2015
Development (4 reviews)	2000-2023
Development, Genes, and Evolution	2016
Developmental and Comparative Immunology	2019
Evolution and Development	2019
GeneReviews	2009
Genes	2012
Genes Development and Evolution	2016
Genesis	2007
Gigascience	2015, 2016
Human Genetics	2011
Human Molecular Genetics (4 reviews)	2008-2015
Human Mutation	2010
IEEE Transactions in Nanobioscience	2005
Indian Journal of Orthopaedics	2009
Journal of Cytology and Histology	2012
Journal of Cytology and Histology	2012
Journal of Developmental Biology	2015
J. of Experimental Biology Part B: Molecular & Developmental Evolution	2009, 2018
Journal of Heredity	2013
Mammalian Genome	2011
Mechanisms of Development	2012
Molecular Biology & Evolution	2008-2009
Nature	2010
Nature Communications	2010
Nature Ecology & Evolution	2018
Naturwissenschaften	2016
Neuron	2003
Physiological Genomics	2008
PloS Genetics (Public Library of Science Genetics)	2009
PloS ONE	2013,2017
Proceedings of the National Academy of Sciences USA	2009, 2018
Regeneration	2014, 2015
Science	2014
Science Advances	2016
Science Signaling	2010

External Professional Service***International***

<i>Organizing Committee Member</i> , International Consortium for Scoliosis Genetics, Development, and Disease, April 6-9, 2018, University of Hong Kong Shenzhen Hospital, Shenzhen, and Sun Yat Sen University, Guangzhou, People's Republic of China	2018
<i>Organizing Committee Member</i> , International Consortium for Vertebral Anomalies and Scoliosis (ICVAS) and International Consortium for Scoliosis Genetics (ICGS) Conference, March 16-18, 2017, Texas Scottish Rite Hospital, Dallas, TX.	2017
<i>Moderator</i> , "Session IV: Collaborative Studies," First Meeting of the Idiopathic Scoliosis Genetics Interest Group, October 14-16, 2012, Texas Scottish Rite Hospital, Dallas, TX	2012
<i>Co-organizer</i> , "Somitogenesis: From Models to Therapeutics Meeting 2007", June 16, 2007, Cancun, Mexico, Satellite meeting to the 66 th Annual Meeting of the Society for Developmental Biology and First Pan-American Congress in Developmental Biology, Cancun, Mexico.	2007
<i>Co-organizer</i> , Segmentation Meeting 2005, July 27, 2005, San Francisco, CA, satellite meeting to the 64 th Annual Meeting of the Society for Developmental Biology (over 140 attendees, funded by the March of Dimes and the Society for Developmental Biology)	2005
National	
<i>Scientific advisory committee</i> , NIH P01 grant Developmental Mechanisms of Human Idiopathic Scoliosis, Texas Scottish Rite Hospital for Children, Dallas, TX	2016-2021
<i>Session Organizer</i> , "Straightening out the Curves: Understanding the Genetic Basis of Idiopathic and Congenital Scoliosis," at the 2008 American College of Medical Genetics Annual Meeting, March 16, 2008, 8-10am, Phoenix Convention Center, Phoenix, AZ.	2008
<i>Organizer</i> , "Symposium on Idiopathic and Congenital Scoliosis: Genetics and Current Approaches," March 15, 2008, 12:30-5:30pm, University of Arizona College of Medicine-Phoenix in Partnership with Arizona State University, Phoenix, AZ.	2008
<i>Co-organizer</i> , Workshop on Congenital Scoliosis, Nov. 2, 2005, Stowers Institute for Medical Research, Kansas City, KS	2004
<i>Co-Moderator</i> , Session 41: Molecular Basis of Mendelian Inheritance II, 52 nd Annual Meeting of the American Society of Human Genetics, Oct. 15-19, 2002, Baltimore, MD	2002
Regional	
<i>Advisory Board Member</i> , Herbert J. Louis Endowment for the Center for Pediatric Orthopaedics, Phoenix Children's Hospital, Phoenix, AZ	2009-present
<i>Organizer</i> , "ASU Molecular & Cellular Biology Interdisciplinary Graduate Program Scientific Retreat," September 18, 2009, 9:30am-3:00pm, The University of Arizona College of Medicine-Phoenix in partnership with Arizona State University, Phoenix, AZ	2009
Grant Reviews	
National Institutes of Health, <i>Standing Study-Section Member</i> Dev-2 (Development-2 Study Section), 3 review sessions annually	2006-2010
National Institutes of Health, <i>Ad hoc reviewer</i> ZRG1 MBBC-G (50) Collaborative Program Grant for Multidisciplinary Teams	2023
ZHD1 DSR-M (50) Developmental Mechanisms of Human Structural Birth Defects	2021
ZGM1 TRN-A (CF) Special Emphasis Panel (R13 Conference grants)	2019
ZEY1 VSN (09) 2 (NEI RFA-EY-15-002 Factors Influencing Neural Regeneration in the Visual System)	2016
ZHD1 DSR-Y (National Institute of Child Health and Human Development Special Emphasis Panel)	2016
DEV-2 (Development-2 Study Section)	

ZRG1 CB-T (Member Conflict: Cell Biology, Signaling, and Development Study Section)	2015
ZHD1 (Genetic/Genomic Approaches to Human Dysmorphology Study Section)	2015
DEV-1 (Development-1 Study Section)	2005
DEV-2 (Development-2 Study Section)	2005 & 2006
National Institute of Arthritis and Musculoskeletal and Skin Diseases R21 Special Review Committee	2004
National Science Foundation, <i>Ad hoc reviewer</i> Integrative Organismal Systems, BIO Directorate	2017, 2014, 2010
DBI Advances in Bioinformatics	2009
MCB Cellular Systems	2008
Health Research Council of New Zealand, <i>Ad hoc reviewer</i>	2016, 2015
Medical Research Council, United Kingdom, <i>ad hoc reviewer</i>	2012, 2010
Scoliosis Research Society, <i>Ad hoc reviewer</i>	2012
South Carolina Experimental Program to Stimulate Competitive Research and Institutional Development Awards, <i>Ad hoc reviewer</i>	2012
Wellcome Trust (UK), <i>ad hoc reviewer</i>	2008
ASU-Mayo Clinic Arizona Seed Grant review panel member, Office of the Vice President for Biomedical Affairs and Clinical Partnerships, ASU	2008
German Research Council (Deutsche Forschungsgemeinschaft, DFG), <i>Ad hoc reviewer</i>	2007
ASU Internal Reviewer (Science Foundation Arizona Competitive Advantage Award proposals), Office of VP for Research & Economic Affairs, Arizona State University	2007

TEACHING AND MENTORSHIP

Teaching Activities in Programs and Courses

<i>Instructor</i> , BIO 543 Molecular Genetics & Genomics (3 credits), Arizona State University	2017-present
<i>Instructor</i> , LIA 194 Freshman Discovery Seminar–Science and the Future: The Science Behind Science Fiction, Arizona State Univ.	2017-2020
<i>Instructor</i> , Genomic Approaches Applied to Development, Evolution, and Regeneration, <i>Instructor</i> , University of São Paulo, Ribeirão Preto, Brazil. August 6-10, 2018.	2018
<i>Co-Instructor</i> , MCB 701 Molecular & Cellular Biology Colloquium, Arizona State University	2011-2012
<i>Co-Instructor</i> , MCB 591 Seminar: Mammalian genetics and development, Arizona State Univ.	2010, 2009
<i>Co-Instructor</i> , MCB 591 Seminar-Neural Development & Regeneration, Arizona State Univ.	2016
<i>Co-Instructor</i> , MCB 591 Seminar-Regeneration & Stem Cells, Arizona State University	2015, 2012
<i>Co-Instructor</i> , BIO 352 Developmental Anatomy Lab, Arizona State University	2012-2013
<i>Co-Instructor</i> , MCB 556 Advanced Molecular & Cellular Biology II, Arizona State Univ.	2011-2013
<i>Co-Instructor</i> , BIO 340 General Genetics, Arizona State University	2011
<i>Co-Instructor</i> , BIO 351 Developmental Biology, Arizona State University	2009-2015
<i>Case Based Instruction Facilitator and Exam Committee Member</i> , GIMDO (Gastrointestinal System, Metabolism, Diabetes, and Obesity), University of Arizona College of Medicine-Phoenix in Partnership with Arizona State University	2008-2009
<i>Block Director</i> , MSS (Musculoskeletal Systems), University of Arizona College of Medicine-Phoenix in Partnership with Arizona State University	2008-2010

Lecturer (5 sessions), MBLD (Molecular Basis of Life and Disease), Block Director: Paul Boehmer/Kurt Gustin. University of Arizona College of Medicine-Phoenix in Partnership with Arizona State University 2007-2009

Research Mentorship and Education

Postdoctoral Researchers and Medical Fellows (Mentor or Co-Mentor)

10. Greer Dolby, PhD, Postdoctoral Fellow, ASU School of Life Sciences. *Current Position*: Asst. Professor (tenure track), Dept. of Biology, University of Alabama at Birmingham 2016-2019
9. Mariana Bortoletto Grizante, PhD, Exchange Postdoctoral Scholar of the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), ASU School of Life Sciences. *Current Position*: Postdoctoral Fellow, Brazilian Biosciences National Laboratory, Campinas, Brazil. 2014-2017
8. Marc Tollis, PhD, Postdoctoral Fellow, ASU School of Life Sciences. *Current Position*: Asst. Professor, School of Informatics, Computing, and Cyber Systems, Northern Arizona University 2013-2015
7. Terry Ritzman, PhD in Anthropology, ASU, graduate research assistant. *Current Position*: Assistant Professor, Department of Neuroscience, Washington University, St. Louis MO. 2010-2012
6. Laura Stroik, PhD in Anthropology, ASU, graduate research associate. *Current Position*: Associate Professor, Dept. of Anatomy, Grand Valley State University, Allendale, MI. 2010-2011
5. William Sewell, PhD, Postdoctoral Fellow, ASU School of Life Sciences, *Current Position*: Biology Instructor, Ozarks Technical Community College, Springfield, MO 2007-2009
4. Jeremy Traas, PhD, Postdoctoral Fellow, Children's Hospital of Philadelphia, *Current Position*: Teaching Faculty at Missouri Western State University 2005-2006
3. Alyssa Schaffer, MD, Medical Fellow, Children's Hospital of Philadelphia, Co-Mentored with John Dormans, MD. *Current Position*: Orthopaedic Surgeon, Wilcox Memorial Hospital, Lihue HI. 2003-2004
2. Ji-Soo Han, MD, PhD, Postdoctoral Fellow, Children's Hospital of Philadelphia, *Current Position*: Physician, Edison NJ. 2002-2004
1. Bülent Erol, MD, Medical Fellow, Children's Hospital of Philadelphia, Co-Mentored with John Dormans, MD. *Current Position*: Professor, Dept. of Orthopaedics & Traumatology, School of Medicine, Univ. of Marmara, Istanbul, Turkey 2001-2002

Doctoral Students (Chair or Co-Chair)

8. Sarah Baty, ASU Evolutionary Biology Graduate Program 2020-present
7. Raúl Araya Donoso, ASU Evolutionary Biology Graduate Program, CONICYT Fellow (National Commission for Scientific and Technological Research, Chile) 2020-present
6. Wayne Jepsen, Chair: Matthew Huentelman, TGen. ASU Molecular & Cellular Biology Graduate Program. *Current position*: Technical Director, TGen Clinical Lab, Phoenix, AZ. 2016-2021
5. Cindy Xu, ASU Molecular & Cellular Biology Interdisciplinary Graduate Program. Masters in Passing 2017. "Transcriptomic and cellular studies of tail regeneration in saurian reptiles." *Current Position*: Medical Affairs Manager, Boston Pharmaceuticals, Boston, MA. Years to degree = 5.0 2015-2020
4. Mari (Turk) Willeman, Chair: Matthew Huentelman, TGen. ASU Neuroscience Graduate Program. "The Effect of Rho Kinase Inhibitors on Alzheimer's Disease." *Current Position*: Medical Writer, MedVal Scientific Information Services, LLC. 2012-2017

3. Elizabeth Hutchins, ASU Molecular & Cellular Biology Interdisciplinary Graduate Program. “Insights Towards Developing Regenerative Therapies: The Lizard, *Anolis carolinensis*, as a Genetic Model for Regeneration in Amniotes.” *Current Position*: Computational Scientist, Translational Genomics Research Institute, Phoenix, AZ. Years to degree = 5.0. 2010-2015
2. Szabolcs Szelinger, Chair: David Craig, TGen. ASU Molecular & Cellular Biology Graduate Program. “Methods in the assessment of genotype-phenotype correlations in rare childhood disease through orthogonal multi-omics, high-throughput sequencing approaches.” *Current position*: Associate Laboratory Director, Exact Sciences, Marlborough, MA. 2012-2015
1. Walter Eckalbar, ASU, Molecular & Cellular Biology Interdisciplinary Graduate Program. “Advancing the lizard, *Anolis carolinensis*, as a model system for genomic studies of evolution, development and regeneration.” *Current Position*: Assistant Professor, Dept. of Medicine, University of California, San Francisco. Years to degree = 5.5. 2007-2012

MS Students (Chair or Co-Chair)

4. Garrett Maag, ASU Biology Graduate Program. *Current Position*: PhD student, University of Michigan, Ann Arbor, MI. 2022-2023
3. Joseph (Joey) Orton, ASU Evolutionary Biology Graduate Program. Transferred to Reed Cartwright, chair. *Current Position*: Bioinformatic Data Scientist, Signature Science, Charlottesville VA. 2018-2021
2. John Cornelius, ASU Molecular & Cellular Biology Interdisciplinary Graduate Program. Masters in Passing 2015. Co-advised with Jeanne Wilson-Rawls. *Current Position*: Bioinformatician, Seattle WA. 2012-2015
1. Catherine May, ASU Biology Graduate Program, “Genomic Diversity and Abundance of LINE Retrotransposons in 4 Anole Lizards.” Graduated Dec. 2013. *Current position*: Junior Bioinformatics Scientist, Tempus Labs, Chicago, IL. 2012-2013

Member (Non-Chair) of PhD and MS Graduate Committees

24. Derek Benson, ASU Biology PhD Program. 2021-present
23. Alex Andre, ASU Molecular & Cellular Biology PhD Program. 2016-2022
22. Joanna Palade, ASU Molecular & Cellular Biology PhD Program. 2016-2020
21. Shawn Rupp, ASU, Biology MS Degree Program. 2015-2016
20. Joel Robertson, ASU Biology Graduate Program. Withdrew from program. Chair-Rebecca Fisher. 2014-2015
19. Genevieve Housman, ASU Anthropology PhD Program. 2013-2017
18. Behzad Damadzadeh, ASU, Biomedical Engineering PhD Program. 2013-2014
17. Elizabeth Cash, ASU Biology PhD Program. 2013-2016
16. Brooke Hjelm, ASU Molecular & Cellular Biology PhD Program. 2012-2013
15. Julie Getz, ASU Molecular & Cellular Biology PhD Program. 2012-2015
14. Erik Rogers, ASU Molecular & Cellular Biology PhD Program. 2012-2014
13. Amanda Mulia, ASU Molecular & Cellular Biology Graduate Program (comp. exam). 2012
12. Lalitha Venkataraman, ASU Biological Design Program (comprehensive exam). 2012
11. Brianne Petritis, ASU Biological Design Program (comprehensive exam). 2012
10. Justin Wolter, ASU Molecular & Cellular Biology PhD Program. 2011-2016
9. Corinne DeRuiter, ASU, Biology BS/MS Degree Program. 2011-2012
8. Nohea Arkus, ASU, Biological Design Program (comprehensive exam). 2011
7. Pilar Hydar Ramos, ASU Molecular & Cellular Biology PhD Program. 2009-2014
6. Joshua Podlevsky, ASU Molecular & Cellular Biology PhD Program. 2009-2015

5. Megan Rowton, ASU Molecular & Cellular Biology PhD Program 2008-2013
4. Rajani George, ASU Molecular & Cellular Biology PhD Program 2008-2012
3. Douglas Anderson, ASU Molecular & Cellular Biology PhD Program 2008-2010
2. Katherine Ihle, ASU Biology PhD Program 2006-2010
1. Brian Beres, ASU Biology PhD Program 2006-2009

Rotation Graduate Students (Non-Chair) and Other Mentees

19. Brianah McCoy, ASU, Molecular and Cellular Biology Graduate Program. Rotation student. 2020
18. Alexander Gleason, ASU, Biomedical Diagnostics (MS) Program, College of Health Solutions. Laboratory experience. *Current Position*: Account Manager, Caris Life Sciences. 2016-2017
17. Juan Rodriguez, ASU, *Current Position*: Flight Software Engineer, Northrop Grumman Space Systems 2016
16. Justin Griffin, ASU, *Current Position*: DO student, Midwestern University 2015
15. Minami Tokuyama, ASU, *Current Position*: Medical Resident, Stanford Medicine Health Care 2014-2016
14. Benjamin Gams, ASU, *Current Position*: Emergency Medicine Resident, Indiana U School of Medicine 2014
13. Michael Crusoe, ASU, *Current Position*: Project Leader, FAIR Service Architecture in EXLIXIR-NL 2012-2013
12. Allanceson Smith, ASU, MD (Univ. of New Mexico), *Current Position*: Staff Psychiatrist, UC San Francisco 2008-2009
11. Ashutosh Singraur, MS, ASU, graduate research project. *Current Position*: Research Assistant, Arizona State University. 2011 fall
10. Erica Tassone, PhD, ASU, graduate student rotation, *Current Position*: Laboratory Director, Regenesys Biomedical, Inc. 2007-2008
9. Dilusha William, MD, Univ. of Pennsylvania, graduate research, *Current Position*: Internal Medicine Physician, Seattle, WA. 2005-2006
8. Geetu Tuteja, PhD, Univ. of Pennsylvania, graduate student rotation 2005-2006
7. Joshua Gibson, Univ. of Pennsylvania & ASU, PhD (ASU, Biology). *Current Position*: Assistant Professor, Georgia Southern University. 2004-2007
6. Megan (O'Brien) Avila, Emory University, BS graduate. *Current Position*: Assistant Vice President, Cooper University Health Care 2003-2005
5. Michael Tracy, MD, MS, Univ. of Pennsylvania, medical student research rotation 2002-2003
4. Kelly Covello, PhD, Univ. of Pennsylvania, graduate rotation 2002 spring
3. Stacey Stevens, Univ. of Pennsylvania, *Current Position*: Regional Sales Manager, Thermo-Fisher Scientific
2. Mizuho Mimoto, Univ. of Pennsylvania, MD-PhD (Oregon Health Sci. Univ.), *Current Position*: Assistant Professor of Medicine, UC San Diego Health 2001-2003
1. Eileen Sun, MIT, *Current Position*: Partner, Seed IP Law Group 1994-1997

Undergraduate Researchers

52. Zachary Lukasik-Drescher, ASU School of Geographical Sciences and Urban Planning 2023-present
51. Jaime Johnson, ASU School of Life Sciences 2022-present
50. Avery Paulsen, ASU School of Molecular Sciences 2021-present
49. Alexa Turpen, ASU School of Life Sciences 2021
48. Bryan Yavari, ASU School of Life Sciences 2021

47. Devany Detwiler, ASU School of Life Sciences 2021
46. Dylan Wang, ASU Barrett Honors College and School of Life Sciences, Thesis “Gene Family Evolution of Mucin Genes across Reptiles” 2020-2023
45. Alexander Yu, ASU Barrett Honors College and School of Life Sciences, Thesis “Evolutionary Analysis of the Matrix Metalloproteinase Gene Family: Their Role in Wound Repair and Immune Response” 2020-2022
44. Yash Sharma, ASU Barrett Honors College and School of Life Sciences, Thesis “Comparative Genomic Analysis of the Heat Shock Factor Gene Family: Roles in Heat Response, Proteotoxic stress and Spermatogenesis” 2020-2023
43. Gage Keranen, ASU School of Life Sciences 2020
42. Shruthi Seetharaman, ASU School of Life Sciences 2019
41. Ray Elementi, ASU School of Life Sciences 2018
40. Sarah Walls, ASU School of Life Sciences 2017-2018
39. Matheo Morales, ASU Barrett Honors College and School of Life Sciences, Thesis “Genome-wide mining and comparative analyses of the Toll-like Receptor 7 and 11 gene subfamilies in reptiles.” *Current Position*: Graduate Student, Molecular, Cellular and Developmental Biology PhD Program, Yale University, New Haven, CT. 2016-2020
38. Jacob Gaare, ASU School of Life Sciences 2016-2018
37. Morgan Richman, Williams College 2016
36. Alexander Frese, ASU School of Life Sciences 2016
35. Juan Rodriguez, ASU School of Life Sciences 2015
34. Pat Pataranutaporn, ASU School of Life Sciences 2014-2017
33. Justin Griffin, ASU School of Life Sciences 2014-2015
32. Neal Williams, ASU School of Mathematics and Statistical Sciences 2013-2014
31. Elise Kulik, ASU Barrett Honors College and School of Life Sciences, Thesis, “The Sonoran Desert Tortoise (*Gopherus morafkai*) and Insights into Conservation Biology and Policy from the Mohave Desert Tortoise (*Gopherus agassizii*).” *Current Position*: Legislative Liaison, Arizona Supreme Court 2012-2015
30. Margaret Liu, ASU School of Life Sciences 2011
29. Meghana Yamanandra, ASU School of Life Sciences 2011-2012
28. Bianca Zietal, ASU School of Life Sciences 2011-2012
27. Jesse King, ASU School of Life Sciences 2011-2012
26. Minami Tokuyama, ASU Barrett Honors College and School of Life Sciences, Thesis, “A Histological Analysis of Cell Proliferation Patterns in the Regenerating Tail of the Lizard, *Anolis carolinensis*.” *Current Position*: Resident, Anatomical and Clinical Pathology, Stanford Health Care 2011-2014
25. Haroon Kisana, ASU School of Life Sciences 2011-2013
24. Allison Wooten, ASU School of Life Sciences 2010-2011
23. Jonathan Sankman, ASU School of Life Sciences 2010-2011
22. Eris Lasku, ASU Barrett Honors College and School of Life Sciences, Thesis, “Comparative osteology of the anole lizard tail.” *Current Position*: Dentist, Edinburg, TX 2010-2013
21. Inbar Maayan, ASU Barrett Honors College and School of Life Sciences, Thesis, “Comparative appendicular osteology and evolutionary genetics of Panamanian anoles with divergent locomotor strategies.” *Current Position*: PhD Student, Dept. of Organismic and Evolutionary Biology, Harvard University 2010-2013
20. Michael Ammar, ASU Barrett Honors College and School of Life Sciences, Thesis “Functional Genomic Analysis of Myogenesis During Tail Regeneration in the Lizard, *Anolis carolinensis*.” *Current Position*: Ophthalmologist, Los Angeles, CA 2009-2011

19. Jaken Shirley, ASU School of Life Sciences 2009-2010
18. Katherine Noonan, ASU School of Life Sciences 2008
17. Kristen Landry, ASU School of Life Sciences 2008-2010
16. Glenn Markov, ASU Barrett Honors College and School of Life Sciences, Thesis, "Investigating Molecular Inducers of Tail Regeneration in the Lizard *Anolis carolinensis*." *Current Position*: Co-founder of Rejuvenation Technologies 2008-2011
15. Eric Huyhn, ASU Barrett Honors College and School of Biological Health Systems Engineering, Thesis, "Bioinformatics: Database Design and Yeast Genetic Analysis." *Current Position*: Family medicine physician, Kingman, AZ 2007-2009
14. Allanceson Smith, ASU School of Life Sciences 2006-2008
13. Michael Barton, ASU School of Life Sciences 2006-2007
12. Michael Chacon, ASU School of Life Sciences 2006-2009
11. Rebecca Bramble, ASU School of Life Sciences 2006-2007
10. Stephanie Goettl, ASU Barrett Honors College and School of Life Sciences, Thesis, "Understanding Congenital and Idiopathic Scoliosis: Genetic Studies of Complex Disease and Current Approaches." *Current Position*: Instructor of Molecular and Medical Genetics and Genetic Counselor, Oregon Health Sciences University 2006-2007
9. Nicholas Dormans, U. Penn./Children's Hosp. of Philadelphia 2004 summer
8. Huan Wang, U. Penn./Children's Hosp. of Philadelphia 2004-2005
7. Neha Sahni, U. Penn./Children's Hosp. of Philadelphia 2004-2006
6. Dilusha William, U. Penn./Children's Hosp. of Philadelphia 2003-2005
5. Vanessa Garcia, U. Penn./Children's Hosp. of Philadelphia 2002-2004
4. Amy Visser, U. Penn./Children's Hosp. of Philadelphia 2002 summer
3. Megan O'Brien, U. Penn./Children's Hosp. of Philadelphia 2002 summer
2. Yana Tsygansky, U. Penn./Children's Hosp. of Philadelphia 2001
1. Akshay Mehta, U. Penn./Children's Hosp. of Philadelphia 2001-2002