Kenro Kusumi, PhD

Senior Vice Provost and Dean,
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EDUCATION

Massachusetts Institute of Technology — 1997
PhD (Biology)
Thesis: *Positional Cloning and Characterization of the Mouse Pudgy Locus.*
Advisor: Eric S. Lander

Harvard Medical School/ Massachusetts Institute of Technology Health Sciences and Technology Program — 1988-1997
Completed medical school years 1-2 and passed USMLE Step 1 Exam

Harvard College, Harvard University — 1988
AB (Biochemical Sciences, *magna cum laude*)
Honors Thesis: *Identification of a Cytoplasmic Myosin-Like Protein in the Nematode C. elegans.* Advisors: Dan Stinchcomb & Daniel P. Kiehart

POSTDOCTORAL TRAINING

National Institute for Medical Research, London, UK — 1998–2000
Hitchings-Elion Fellow of the Burroughs Wellcome Fund
Advisor: Robb Krumlauf

Whitehead Institute for Biomedical Research, Cambridge, MA — 1997–1998
Research Scientist
Advisor: Eric S. Lander

LEADERSHIP POSITIONS

Arizona State University, The College of Liberal Arts and Sciences

Senior Vice Provost and Dean	Jul 2024–present
Dean of Natural Sciences	Jul 2021–Jun 2024
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-present
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

Ex officio member, Executive Board, ASU Institute of Human Origins	2024-present
Member, Board of Directors, LGBTQ Leaders in Higher Education	2023-present
Trustee, Board of Trustees, Bermuda Institute of Ocean Sciences, Bermuda	2022-present
Trustee, Board of Trustees, Arizona Science Center, Phoenix, AZ	2022-present

LEADERSHIP OUTCOMES

Senior Vice Provost and Dean, The College of Liberal Arts and Sciences, Arizona State University Jul 2024–present

The College of Liberal Arts and Sciences is the academic heart of the university and serves a diverse population of 31,504 students (27,632 undergraduate majors and 3,869 graduate students) taught by nearly 1,400 dedicated faculty (including 779 tenure track faculty), including 15 members of the National Academy of Sciences, 3 Pulitzer Prize awardees, and 2 Nobel Prize winners, across 21 academic units in 3 divisions. The College drives ASU research innovation with over 50 research centers and institutes, and the FY2022 National Science Foundation Higher Education Research and Development (NSF HERD) rankings place The College and ASU at #1 for Anthropology, #3 for Social Sciences, #14 for Geosciences, and #29 for Psychology.

Dean of Natural Sciences, Arizona State University Jul 2021–Jun 2024

The Division of Natural Sciences serves a diverse population of over 16,510 students (15,171 undergraduate majors and 1,339 graduate students) taught by nearly 500 dedicated faculty (over 370 tenure track and 120 teaching faculty) across 6 academic units. The Natural Sciences are the engine for ASU research innovation with over $132M in expenditures in FY2023.

- Supporting the launch of NEO-BIO, the world's first immersive VR biological sciences curriculum – a VR driven (Dreamscape Learn) and adaptive learning based innovative biological sciences curriculum available for all campus immersion and online students in 2022, working with EdPlus/ASU Online and our School of Life Sciences.
- Strategically Expanding Online Programs and Enrollment – working with academic unit teams to launch 15 new online degree programs (5 BS/BA, 4 minors, 3 MS, and 3 certificates) and increase online enrollment 27% from Fall 2021 to 2022.
- Promoting Research Growth – 8.7% increase of non-COVID-related research expenditures from $128,137,235 in FY2021 to $139,239,568 in FY2023, through hire of over 27 tenure track/tenured faculty in the Natural Sciences, supporting major university initiatives including space exploration, compact X-ray free electron laser (CXFEL), and biodiversity.
- Transforming Leadership in the Sciences – Onboarding 3 new directors/chairs – Patricia Rankin in the Department of Physics, Tijana Rajh in the School of Molecular Sciences, and Donatella Danielli in the School of Mathematical and Statistical Sciences – and hiring Tamera Schneider to lead Psychology and Nancy Manley to lead the School of Life Sciences.
- Advancing ASU Health – Leading the Biomedicine Curriculum Team for the launch of ASU's School of Medicine and Advanced Medical Engineering in 2026, leveraging my experiences as founding faculty and curricular design team member for the University of Arizona College of Medicine – Phoenix in partnership with Arizona State University, and instructor at Mayo Clinic Alix School of Medicine.
- Supporting Development and Fundraising in the Sciences – Partnering closely with the ASU Foundation for securing gifts to advance innovative science, including for canine research in the Department of Psychology ($41M), cosmology in the School of Earth and Space Exploration ($10M), and biodiversity in the School of Life Sciences ($800k).

Director, School of Life Sciences, Arizona State University Jul 2019–Jun 2021

The School of Life Sciences (SOLS) is the largest academic unit in the College of Liberal Arts and Sciences, currently with nearly 7,000 undergraduates and over 380 graduate students instructed by over 130 faculty. SOLS is among the most innovative and entrepreneurial colleges for development of educational programs.

- Growing Enrollment and Launching Online Programs – Increased online majors from 1,600 in Fall 2019 to 3,040 in Fall 2021, a 90% increase. Launched 4 new online concentrations for BS Biological Sciences in Biomedical Sciences, Conservation Biology and Ecology, Biology and Society, and Genetics, Cell and Developmental Biology.

- Developing NEO-BIO in partnership with Dreamscape Learn and using CogBooks adaptive learning technology in the introductory biology courses (BIO 100, BIO 181, BIO 182).
- Preparing the Unit for an Inclusive Future: Working with the University Design Initiative, I led the unit's self-study (SOLS 2.0) and enacted many of its recommendations to facilitate a more inclusive community, including adding members to the executive team to lead change (Associate Director of Faculty, Assistant Director of Undergraduate Programs, and Special Advisor for inclusive excellence). To better serve students, I led the restructuring of the academic advising team into new online and on campus groups.
- Promoting Research Growth – Oversaw a 42% increase of research expenditures from $23,369,940 in 2019 to $33,184,029 in 2021, through the hiring of 9 faculty in partnership with the Biodesign Institute, including the director of the Neurodegeneration Research Center, and supporting the research advancement team in the Research and Training Initiatives office.

Associate Dean, The College, Arizona State University Jan 2013 – June 2021

Serving all 21 schools and departments and 50+ research centers in The College to advance graduate initiatives (Jan 2013–Jun 2018), research (Mar 2016–Jun 2019) and online curriculum and digital innovations (Jul 2018–Jun 2019). In addition, I served concurrently to support strategic initiatives while Director of the School of Life Sciences.

- Strategic Planning for Online Program Launch – Created a four-person College online curriculum and digital innovation team, to advance online program development and expansion in all 21 academic units. Worked to create and implement a plan to successfully take all science units online.
- Graduate Outcomes Tracking and Funding Model – Started the tracking of job placement for all College PhD and master's graduates each year to provide academic units with essential outcomes data. Developed a data-driven dynamic model for distribution of TA and block grant funding (over $22M annually) to academic units for maximal impact.
- Supporting Research Cores and Centers – Managed 17 research core facilities in The College and coordinated the complex hand-off of administration of these critical recharge centers to Knowledge Enterprise. Oversaw the assessment of the College's 50+ research centers and performance reviews and facilitated the launch of two new centers in the Social Sciences and Natural Sciences.
- Research and Education Partnerships: Championed a new partnership with the US Army Corps of Engineers, which has led to the signing of a MOU with the six-laboratory Engineering Research and Developments Centers network.

LEADERSHIP TRAINING AND PROFESSSIONAL DEVELOPMENT MEETINGS

American Council on Education (ACE), Philadelphia, PA, March 8-12	2019
American Council on Education (ACE), Washington, DC, March 10-13	2018
Association of Public and Land Grant Universities, Austin, TX, Nov. 13-15	2016
ASU Launching Leaders Program, Cohort II, Office of the Provost	2019-2020

ASU Advanced Leadership Initiative, a 6-month immersive, high-level leadership initiative dedicated to developing leaders	2018
ASU+GSV Summit 2026, San Diego, CA, April 12-15	2026
ASU+GSV Summit 2025, San Diego, CA, April 6-9	2025
ASU+GSV Summit 2024, San Diego, CA, April 14-17	2024
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
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
LGBTQ Leadership Inst., Milwaukee, WI, Oct 15-16	2025
LGBTQ Leadership Inst., U. Washington, Bothell, WA, Oct 16-17	2024
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
Western Public Deans Meeting, U. Oregon & Oregon State U., March 26-27	2026
Western Public Deans Meeting (PAC12+3), U. Arizona, March 20-21	2025
PAC12+3 Arts and Sciences Deans Meeting, U. of Washington, March 28-29	2024
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
Science-Technology-Engineering-Math Conference in Vietnam (STEMCON), Higher Engineering Education Alliance Program, Hanoi, Vietnam, March 1-2	2017

HONORS AND AWARDS

Chancellor's Award for Exemplary Service, North Carolina School of Science and Mathematics, Durham, NC	2025
Invited Faculty Speaker, Asian/Asian Pacific American Celebration, Arizona State Univ.	Spring 2025
President's Award for Innovation (for contributions to the Online Undergraduate Research Scholars Program), Arizona State University	2023
Roberts C. Stebbins Research Award, Desert Tortoise Council	2023
Invited Faculty Speaker, Rainbow LGBTQ Convocation, Arizona State Univ.	Fall 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 **$7,173,808** in funding awarded as PI or multi-PI/co-PI/co-investigator.

Current

1T32GM154654-01, Stabenfeldt (Lead PI) 8/13/25-6/30/30 NA
NIH-NIGMS $2,240,080
RESTEP in AZ: Regenerative Engineering, Science, and Technology Education Program in Arizona
Role: Multi-PI

Collaborative Grant 1925535, Dolby (PI) 10/1/19-9/30/26 0.2 mo.
NSF-IES $838,431 total costs
Collaborative Research: Testing Evolutionary Pseudocongruence Along the Baja California Peninsula Through Integration of Geologic and Genomic Data
Geo-genomic analysis of taxa across the Baja peninsula to test mid-peninsular barrier hypothesis.
Role: Co-PI and ASU subcontract PI

Completed

Grant 2107975, DeNardo (PI) 9/1/21-2/28/26 NA
NSF-IOS $869,404 total costs
IMAGiNE: Testing multi-level controls on an aridity tolerance phenotype over time through physiogenomic data integration
Integrate whole-genome, epigenome, and transcriptome sequencing data for adaptation to desert climes.
Role: Co-PI

Subcontract Grant M2201311, Kusumi (PI) 1/1/22-12/31/24 NA
Texas Parks & Wildlife Dept. $54,765 total costs (total grant $177,181)
Conservation genomics and disease ecology of the Texas tortoise, *Gopherus berlandieri*
Role: ASU Subcontract PI

ISA, Dolby (PI) 3/26/20-12/31/25 NA
AZ Dept. of Game and Fish $24,304 total costs
AZGF/ASU Sonora Mud Turtle Project
Population survey of the Sonoran mud turtle (*Kinosternon sonoriense*) in southern Arizona.
Role: Co-PI

Grant (Dolby, PI) 1/1/18-2/14/20 NA
Desert Tortoise Council $11,992 total costs
Determining the geographical and physiological range limits of Gopherus agassizii
Population genomic analysis of Mojave desert tortoise and Sonoran desert tortoise hybridization zone.
Role: Internal PI

Heritage Fund Grant, Wilson Sayres (PI) 1/1/17-12/31/19 NA
Arizona Dept. of Game & Fish Heritage Fdn. $33,002 total costs
Characterizing G. morafkai through genomic analyses of hybrids and speciation
Population genomic analysis of Mojave desert tortoise and Sonoran desert tortoise hybridization zone.
Role: Co-PI

Blue Waters Allocation (Dolby, PI) 4/16/18-3/31/19 NA
Nat'l Center for Supercomputing Applications 75,000 node hours
Broadening Participation Allocation: Scalable, reproducible inference of eco-geospatial sub-patterns in large genomic datasets
Bioinformatic analysis of southwestern desert tortoises populations (*Gopherus agassizii* and *G. morafkai*).
Role: Co-PI

G17AC00034 Kusumi (PI) 1/1/17-12/1/18 NA
US Geological Survey $33,374 total costs

Cooperative agreement for CESU-affiliated University with USGS – Cooperative Ecosystem Studies Unit
Transcriptomic analysis of tortoise dietary conditions leading to upper respiratory illness.
Role: PI

Visiting Researcher Grant, Kusumi (PI) 8/6/18-8/10/18 NA
FAPESP São Paulo Research Foundation $2,000
Abordagens Genômicas Aplicadas ao Desenvolvimento, Evolução e Regeneração
Genomic Approaches Applied to Development, Evolution, and Regeneration
Course for graduate students in Brazil, held from August 6-10, 2018, at the University of São Paulo.
Role: PI

LM9 1025 (Kusumi) 2/1/12-12/31/16 NA
Billy C. Hartman Fund for Spinal Injury Research $30,000 total costs
Harnessing Conserved Regenerative Mechanisms for Translational Therapies
Transcriptomic analysis of spinal cord regeneration and repair.
Role: PI

14071865 Kusumi (PI) 5/1/14-10/31/16 NA
Translational Genomics Research Institute $45,000 total costs
Genome reannotation of the African clawed frog, Xenopus laevis, for gene expression studies
Annotate the genome of the classic developmental model, *Xenopus laevis*.
Role: PI

R21AR064935 Kusumi (PI) 9/1/13-8/31/16 1.0 mo.
NIH-NIAMS $344,828 total costs
Connecting the proteome and transcriptome in regeneration
Integrate microRNA, transcriptome and proteome in tail regeneration in the green anole.
Role: PI

62084 Kusumi (PI) 1/2/14-8/15/15 NA
Burroughs Wellcome Fund $10,000
Collaborative Research Travel Grant
Integrating Computational & Biomedical Approaches to Comparative Genomic Analysis
Bioinformatics analysis to identify regulatory networks for regeneration in amniote vertebrates.
Role: PI

1S10RR027154 (Duch) 5/1/11-4/30/12 NA
NIH-NCRR $470,658 total costs
Acquisition of a Leica TCS SP5 laser scanning confocal microscope
Leica TCS SP5 LSCM microscope acquisition.
Role: Co-Investigator

LM5 1051 KK (Kusumi) 4/1/11-12/31/13 NA
ASU-Smithsonian Tropical Research Institute $80,000 total costs
Adaptive evolution and regeneration in Panamanian anole lizards
Comparative genomic analysis of autotomy and tail regeneration in Panamanian *Anolis* species.
Role: PI

R21 RR031305 (Kusumi) 9/15/10-8/31/13 1.5 mo.
NIH-NCRR $412,606 total costs
Developing the Anolis Lizard as a Model for Musculoskeletal Regeneration
Identify genes regulating musculoskeletal regeneration in the tail of the *Anolis carolinensis* lizard.
Role: PI

Research Contract 1113 (Kusumi) 7/16/10-6/30/13 1 mo.
Arizona Biomedical Research Commission $337,500 total costs
Transcriptome Analysis and Functional Anatomy of Spinal Cord Regeneration in the Anolis Lizard
Transcriptomic analysis of tail regeneration of the green anole lizard, *Anolis carolinensis*.

Role: PI

S10 RR025646 (Smith) 5/1/09-4/30/10 NA
NIH-NCRR $418,785 total costs
Prairie Technologies 2-Photon Microscope
Prairie Technologies 2-Photon Microscope for cellular analysis of developmental processes.
Role: Co-investigator

5M01RR000240 Project 0572 (Kusumi) 3/1/04-2/28/05 5%
NIH-NCRR
Genetic Analysis of Congenital Vertebral Malformations
Patient database for congenital scoliosis and screening for disruptions in notch pathway genes.
Role: PI

RO1 AR050687 (Kusumi) 9/29/03-8/31/09 50%
NIH-NIAMS $1,087,170 total costs
Gene Expression Studies of Early Spinal Development
Microarray analysis of notch-pathway regulated cycling genes in somitogenesis and early myogenesis.
Role: PI

R01 DK053104 (Spinner) 8/15/02-6/30/06* 10%
NIH-NIDDK $151,080 total direct costs
Molecular Analysis in Alagille Syndrome
Analyze *Jag1* mutations with other *Notch* pathway genes.
Role: Co-investigator* (transition to collaborator on 6/30/06 due to move to ASU)

Research Grant (Kusumi) 7/1/02-6/30/03 10%
Ethel Brown Foerderer Fund for Excellence $30,000 total costs
Genetic Analysis of Congenital Vertebral Malformations
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 (2025 analysis, Google Scholar)

- h-index **42**
- Total citations **9,242**
- Total peer-reviewed articles, reviews, edited books, and book chapters: **84**

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

72. Araya-Donoso R, Baty SM, Johnson JE, Lasku E, Taft J, Fisher RE, Losos J, Dolby GA, **Kusumi K,** Geneva AJ. Structural rearrangements and signatures of selection promote phenotypic evolution in *Anolis* lizards. *Genome Biology and Evolution.* 17(11): evaf196, November **2025**, https://doi.org/10.1093/gbe/evaf196
71. Baty SM, Araya-Donoso R, Paulsen A, Williams A, DeNardo DF, **Kusumi K**, Dolby GA. Strong signatures of selection on candidate genes underlying core speciation mechanisms in desert tortoises. *Mol Ecol Res*, **2025,** https://doi.org/10.1111/1755-0998.14098.
70. Cordero GA, Holloway AK, Friedrich T, Eme J, Eckalbar W, **Kusumi K**, Janzen FJ, Hicks JW, Conlon F, Bruneau BG, Pollard KS. The interplay of ontogeny and phylogeny at the transcriptome level of the tetrapod heart. *J Exp Zool B.* **2025**, https://doi.org/10.1002/jez.b.23312
69. Mellor NJ, Webster TH, Byrne H, Williams AS, Edwards T, DeNardo D, Wilson MA, **Kusumi K**, Dolby GA. Divergence in regulatory regions and gene duplications may underlie chronobiological adaptation in desert tortoise. *Mol Ecol*, **2024**, https://doi.org/10.1111/mec.17600.
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 jarrovii*, 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
35. **Kusumi K**, Kulathinal RJ, Abzhanov A, Boissinot S, Crawford NG, Faircloth BC, Glenn TC, Losos JB, Menke DB, Poe S, Sanger TJ, Schneider C, Stapley J, Wade J, Wilson-Rawls J†. Developing a community-based genetic nomenclature for anole lizards. *BMC Genomics* **2011**, 12:554 (11 November 2011). http://dx.doi.org/10.1186/1471-2164-12-554

34. Offiah A, Alman B, Cornier AS, Giampietro PF, Tassy O, Wade A, Turnpenny PD; on behalf of **ICVAS** (International Consortium for Vertebral Anomalies and Scoliosis, **Kusumi K** is founding member and officer). Pilot assessment of a radiologic classification system for segmentation defects of the vertebrae. *Am J Med Genet A.* **2010** Jun;152A(6):1357-1371. http://dx.doi.org/10.1002/ajmg.a.33361
33. Sewell W, Sparrow DB, Smith AJ, Gonzalez DM, Rappaport EF, Dunwoodie SL, **Kusumi K**. Cyclical expression of the Notch/Wnt regulator *Nrarp* requires *Dll3* function in somitogenesis. *Dev Biol.* **2009** May 15;329(2):400-9. http://dx.doi.org/10.1016/j.ydbio.2009.02.023
32. Giampietro PF, Dunwoodie SL, **Kusumi K**, Pourquié O, Tassy O, Offiah AC, Cornier AS, Alman BA, Blank RD, Raggio CL, Glurich I, Turnpenny PD. Progress in understanding of the genetic etiology of vertebral segmentation disorders in humans. *Ann NY Acad Sci.* **2009** Jan;1151:38-67. http://dx.doi.org/10.1111/j.1749-6632.2008.03452.x
31. Giampietro PF, Dunwoodie SL, **Kusumi K**, Pourquié O, Tassy O, Offiah AC, Cornier AS, Alman BA, Blank RD, Raggio CL, Glurich I, Turnpenny PD. Molecular diagnosis of vertebral segmentation disorders in humans. *Expert Opin Med Diagn*. **2008**; 2(10):1107-1121. https://doi.org/10.1517/17530059.2.10.1107
30. Ryan MJ, Bales C, Nelson A, Gonzalez DM, Underkoffler L, Segalov M, Wilson-Rawls J, Cole SE, Russo P, Spinner NB, **Kusumi K**, Loomes KM. Biliary duct proliferation in *Jag1*/Fringe heterozygous mice identifies candidate modifiers of the Alagille syndrome hepatic phenotype. *Hepatology.* **2008** Dec;48(6):1989-97. http://dx.doi.org/10.1002/hep.22538
29. Loomes KM, Stevens SA, O'Brien ML, Gonzalez DM, Ryan MJ, Segalov M, Dormans NJ, Mimoto MS, Gibson JD, Sewell W, Schaffer AA, Nah HD, Rappaport EF, Pratt SC, Dunwoodie SL, **Kusumi K**. *Dll3* and *Notch1* genetic interactions model axial segmental and craniofacial malformations of human birth defects. *Dev Dynam*. **2007** Oct;236(10):2943-51. PMID: 17849441; Erratum 2008 Jun;237(6):1754. http://dx.doi.org/10.1002/dvdy.21296
28. Turnpenny PD, Alman B, Cornier AS, Giampietro PF, Offiah A, Tassy O, **Kusumi K**, Dunwoodie SL†. Abnormal vertebral segmentation and the notch signaling pathway in man, *Dev Dynam*, **2007**;236:1456-1474. http://dx.doi.org/10.1002/dvdy.21182
27. Sewell W, **Kusumi K**. Genetic analysis of molecular oscillators in mammalian somitogenesis: clues for studies of human vertebral disorders. *Birth Defects Res C Embryo Today*. **2007** Jun;81(2):111-20. http://dx.doi.org/10.1002/bdrc.20091
26. William DA^, Saitta B^, Gibson JD, Traas J, Markov V, Gonzalez DM, Sewell W, Anderson DM, Pratt SC, Rappaport E, **Kusumi K**. Identification of oscillatory genes in somitogenesis from functional genomic analysis of a human mesenchymal stem cell model. *Dev Biol*, **2007** May 1;305(1):172-186. http://dx.doi.org/10.1016/j.ydbio.2007.02.007
25. Markov V, **Kusumi K**, Tadesse M, William DA, Hall DM, Lounev V, Carlton A, Leonard J, Cohen RI, Rappaport RF, Saitta B. Identification of distinct cord blood-derived mesenchymal stem/stromal cells with different growth kinetics, differentiation potentials, and gene expression profiles. *Stem Cells Dev*, **2007** Feb;16(1):53-73. http://dx.doi.org/10.1089/scd.2006.0660
24. **Kusumi K**, Turnpenny PD. Formation errors of the vertebral column. *J Bone Joint Surg Am*. **2007** Feb;89 Suppl 1:64-71. http://dx.doi.org/10.2106/JBJS.F.00486
23. Sparrow DB, Chapman G, Wouters MA, Whittock NV, Ellard S, Turnpenny PD, **Kusumi K**, Sillence D, Dunwoodie SL. Mutation of the LUNATIC FRINGE gene in humans causes spondylocostal dysostosis with a severe vertebral phenotype. *Am J Hum Genet*, **2006** Jan;78(1):28-37. http://dx.doi.org/10.1086/498879
22. Schaffer AA, Kaplan FS, Tracy MR, O'Brien ML, Dormans JP, Shore EM, Harland RM, **Kusumi K**. Developmental anomalies of the cervical spine in patients with fibrodysplasia ossificans progressiva are distinctly different from those in patients with Klippel-Feil syndrome: clues from the BMP signaling pathway. *Spine*. **2005** Jun 15;30(12):1379-85. http://dx.doi.org/10.1097/01.brs.0000166619.22832.2c
21. Maisenbacher MK, Han JS, O'Brien ML, Tracy MR, Erol B, Schaffer AA, Dormans JP, Zackai EH, **Kusumi K**. Molecular analysis of congenital scoliosis: a candidate gene approach. *Hum Genet*. 2005 Apr;116(5):416-419. Epub **2005** Feb 17. http://dx.doi.org/10.1007/s00439-005-1253-8
20. Erol B, Tracy MR, Dormans JP, Zackai EH, Maisenbacher MK, O'Brien ML, Turnpenny PD, **Kusumi K**. Congenital Scoliosis and Vertebral Malformations: Characterization of Segmental Defects for Genetic Analysis. *J Pediatr Orthoped.* **2004** Nov-Dec;24(6):674-682. PMID: 15502569

19. Tracy MR, Dormans JP, **Kusumi K**. Klippel-Feil syndrome: Clinical features and current understanding of etiology. *Clin Orthop Relat R*. **2004** Jul;1(424):183-190. http://dx.doi.org/10.1097/01.blo.0000130267.49895.20
18. **Kusumi K**, Mimoto MS, Covello K, Beddington RSP, Krumlauf R, Dunwoodie SL. The *Dll3* pudgy mutation differentially disrupts dynamic expression of somite genes. *Genesis*, **2004** Jun;39(2):115-21. http://dx.doi.org/10.1002/gene.20034
17. Sparrow DB, Clements M, Withington SL, Scott AN, Novotny J, Sillence D, **Kusumi K**, Beddington RS, Dunwoodie SL. Diverse requirements for Notch signalling in mammals. Int J Dev Biol. **2004**;46(4):365-74. PMID: 12141422
16. Turnpenny PD, Whittock N, Duncan J, Dunwoodie S, **Kusumi K**, Ellard S. Novel mutations in *DLL3*, a somitogenesis gene encoding a ligand for the Notch signalling pathway, cause a consistent pattern of abnormal vertebral segmentation in spondylocostal dysostosis. *J Med Genet*. **2003** May;40(5):333-9. http://dx.doi.org/10.1136/jmg.40.5.333
15. Erol B, **Kusumi K**, Lou J, Dormans JP. The etiology of congenital scoliosis. *U Penn Orthop J*. **2002** 15: 37-42.
14. Pierz KA, Stieber JR, **Kusumi K**, Dormans JP. Hereditary multiple exostoses: one center's experience and review of etiology. *Clin Orthop Relat R*. **2002** Aug;(401):49-59. https://dx.doi.org/10.1097/00003086-200208000-00008
13. Pourquié O, **Kusumi K**. When body segmentation goes wrong. *Clin Genet*. **2001** Dec;60(6):409-16. http://dx.doi.org/10.1034/j.1399-0004.2001.600602.x
12. Barclay J, Balaguero N, Mione M, Ackerman SL, Letts VA, Brodbeck J, Canti C, Meir A, Page KM, **Kusumi K**, Perez-Reyes E, Lander ES, Frankel WN, Gardiner RM, Dolphin AC, Rees M. Ducky mouse phenotype of epilepsy and ataxia is associated with mutations in the Cacna2d2 gene and decreased calcium channel current in cerebellar Purkinje cells. *J Neurosci*. **2001** Aug 15;21(16):6095-104. http://dx.doi.org/10.1523/JNEUROSCI.21-16-06095.2001
11. **Kusumi K**, Dunwoodie SL, Krumlauf R**.** Dynamic expression patterns of the pudgy/spondylocostal dysostosis gene *Dll3* in the developing nervous system. *Mech Develop*. **2001** Jan;100(1):141-4. http://dx.doi.org/10.1016/S0925-4773(00)00514-1
10. Bulman MP^, **Kusumi K**^, Frayling TM, McKeown C, Garrett C, Lander ES, Krumlauf R, Hattersley AT, Ellard S, Turnpenny PD. Mutations in the human delta homologue, *DLL3*, cause axial skeletal defects in spondylocostal dysostosis. *Nat Genet*. **2000** Apr;24(4):438-41. http://dx.doi.org/10.1038/74307
9. Ranta S, Zhang Y, Ross B, Lonka L, Takkunen E, Messer A, Sharp J, Wheeler R, **Kusumi K**, Mole S, Liu W, Soares MB, Bonaldo MF, Hirvasniemi A, de la Chapelle A, Gilliam TC, Lehesjoki AE. The neuronal ceroid lipofuscinoses in human EPMR and mnd mutant mice are associated with mutations in CLN8. *Nat Genet*. **1999** Oct;23(2):233-6. http://dx.doi.org/10.1038/13868
8. **Kusumi K**, Sun ES, Kerrebrock AW, Bronson RT, Chi DC, Bulotsky MS, Spencer JB, Birren BW, Frankel WN, Lander ES. The mouse pudgy mutation disrupts Delta homologue *Dll3* and initiation of early somite boundaries. *Nat Genet*. **1998** Jul;19(3):274-8. http://dx.doi.org/10.1038/961
7. Hamilton BA, Frankel WN, Kerrebrock AW, Hawkins TL, FitzHugh W, **Kusumi K**, Russell LB, Mueller KL, van Berkel V, Birren BW, Kruglyak L, Lander ES. Disruption of the nuclear hormone receptor RORalpha in staggerer mice. *Nature*. **1996** Feb 22;379(6567):736-9. Erratum in: Nature 1996 May 23;381(6580):346. http://dx.doi.org/10.1038/379736a0
6. Hästbacka J, de la Chapelle A, Mahtani MM, Clines G, Reeve-Daly MP, Daly M, Hamilton BA, **Kusumi K**, Trivedi B, Weaver A, Coloma A, Lovett M, Buckler A, Kaitila I, Lander ES. The diastrophic dysplasia gene encodes a novel sulfate transporter: positional cloning by fine-structure linkage disequilibrium mapping. *Cell*. **1994** Sep 23;78(6):1073-87. http://dx.doi.org/10.1016/0092-8674(94)90281-X
5. Lisitsyn NA, Segre JA, **Kusumi K**, Lisitsyn NM, Nadeau JH, Frankel WN, Wigler MH, Lander ES. Direct isolation of polymorphic markers linked to a trait by genetically directed representational difference analysis. *Nat Genet*. **1994** Jan;6(1):57-63. http://dx.doi.org/10.1038/ng0194-57
4. **Kusumi K**, Smith JS, Segre JA, Koos DS, Lander ES. Construction of a large-insert yeast artificial chromosome library of the mouse genome. *Mamm Genome*. **1993**;4(7):391-2. http://dx.doi.org/10.1007/BF00360591

3. **Kusumi K,** Conway B, Cunningham S, Berson A, Evans C, Iversen AK, Colvin D, Gallo MV, Coutre S, Shpaer EG, Faulkner DV, de Ronde A, Volkman S, Williams C, Hirsch MS, Mullins JI**.** Human immunodeficiency virus type 1 envelope gene structure and diversity in vivo and after cocultivation in vitro. *J Virol*. **1992** Feb;66(2):875-85. http://dx.doi.org/10.1128/JVI.66.2.875-885.1992
2. Jacob HJ, Lindpaintner K, Lincoln SE, **Kusumi K**, Bunker RK, Mao YP, Ganten D, Dzau VJ, Lander ES. Genetic mapping of a gene causing hypertension in the stroke-prone spontaneously hypertensive rat. *Cell*. **1991** Oct 4;67(1):213-24. http://dx.doi.org/10.1016/0092-8674(91)90584-L
1. Girard M, Kieny MP, Pinter A, Barre-Sinoussi F, Nara P, Kolbe H, **Kusumi K**, Chaput A, Reinhart T, Muchmore E, Ronco J, Kaczorek M, Gomard E, Gluckman J-C, Fultz PN. Immunization of chimpanzees confers protection against challenge with human immunodeficiency virus. *Proc Natl Acad Sci U S A*. **1991** Jan 15;88(2):542-6. https://doi.org/10.1073/pnas.88.2.542

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.
8. Hutchins ED, Wilson-Rawls J, Kusumi K. Regeneration: lessons from the lizard. In *Innovations in Molecular Mechanisms and Tissue Engineering*. Wilson-Rawls J, **Kusumi K**, eds. Springer: New York, **2016**. https://doi.org/10.1007/978-3-319-44996-8_2
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**.
5. **Kusumi K**. "Conclusion: Trends and predictions for genetic and developmental biological research on scoliosis." In *The Genetics and Development of Scoliosis*, Kusumi K, Dunwoodie SL, eds. Springer: New York, **2010**.
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**.
3. **Kusumi K**, Sewell W, O'Brien ML. "Mouse mutations disrupting somitogenesis and vertebral patterning" in *Somitogenesis*, Maroto M and Whittock NV, ed., Vol. 638 of Advances in Experimental Medicine and Biology, Springer Science+Business Media LLC/Landes Bioscience: Austin, TX, 140-163, **2008.**
2. Turnpenny PD, **Kusumi K.** *DLL3* and spondylocostal dysostosis. *Molecular Basis of Inborn Errors of Development*, Epstein CJ, Erickson RP, Wynshaw-Boris A, eds. Oxford University Press: New York, 470-481, **2004**.
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**.

Edited Books

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/0.1007/978-3-319-44996-81. **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

6. Araya-Donoso R, Baty SM, Johnson JE, Lasku E, Taft, JM, Fisher RE, Losos J, Dolby GA, **Kusumi K**, Geneva AJ. Structural rearrangements and selection promote phenotypic evolution in *Anolis* lizards. *bioRxiv*, **2024**, 12.628123, https://doi.org/10.1101/2024.12.12.628123.
5. Baty SM, Araya-Donoso R, Paulsen A, Williams A, DeNardo DF, **Kusumi K**, Dolby GA. Strong signatures of selection on genes underlying core reinforcement mechanisms in speciating desert tortoises. *bioRxiv*, **2024**, 06.597788 https://www.biorxiv.org/content/10.1101/2024.06.06.597788.full.pdf.
4. Mellor NJ, Webster TH, Byrne H, Williams AS, Edwards T, DeNardo D, Wilson MA, **Kusumi K**, Dolby GA. Regulatory divergence may underlie ecological adaptation of chronobiological functions between speciated desert tortoises. *Authorea*, September 03, **2024**. https://doi.org/10.22541/au.172532972.22372724/v 1
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)

2024

- **"**Genomic Analysis of Reptile Evolution, Adaptation, and Conservation." School of Life Sciences Seminar, University of Nevada, Las Vegas. October 11, 2024 (virtual seminar)

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

Conference Presentations, Posters & Abstracts (Last 5 Years)

2026

- Mellor J, Dolby GA**, Kusumi K**. Hybridization dynamics of southwest tortoises along an environmental gradient. Evolution 2026, Cleveland, OH, Juen 20-24, 2026.

- Biddy A, McDaniels G, Benson D, **Kusumi K**, DeNardo D, Dolby GA. Differential adaptation and genic divergence related to drought tolerance among rattlesnakes within a phylogenetic framework. Population, Evolutionary, and Quantitative Genetics Conference, Pacific Grove, CA. June 9-12, 2026.
- Dolby GA, Munguia-Vega A, Dorsey RJ, Bennett SEK, Andreev V, Darin M, Gardner K, Araya-Donoso R, Dávalos-Dehullu L, Baty SM, Biddy A, Lira-Noriega A, Wilder BT, Diego Cortez D, Culver M, **Kusumi K**. A new working model to explain co-evolution of plant and animal species on the Baja California peninsula from genomic and geologic data. 122nd Annual Meeting of the Geological Society of America Cordilleran Section, Loreto, Baja California, Mexico, April 21-24, 2026.
- Robinson CD, Tleimat J, McDaniels GM, Baty S, Mellor J, Crump P, McCracken SF, Dolby GA, **Kusumi K**. Lessons from Gopherus Genomes: Current Progress Towards Conservation Efforts Using a Genomic Toolkit. 51st Annual Meeting and Symposium of the Desert Tortoise Council, Las Vegas, NV, February 24-27.
- Biddy A, McDaniels G, Benson D, **Kusumi K**, DeNardo D, Dolby GA. Differential adaptation and genic divergence related to drought tolerance among rattlesnakes within a phylogenetic framework. 103rd Annual Meeting of the Alabama Academy of Science, Faulkner University, February 27-28, 2026.
- Mellor J, **Kusumi K**, Dolby GA. Hybridization dynamics of southwest tortoises along an environmental gradient. 103rd Annual Meeting of the Alabama Academy of Science, Faulkner University, February 27-28, 2026.
- McDaniels G, Tleimat J, Baty S, Mellor J, Crump P, McCracken S, **Kusumi K**, Dolby GA. Population structure, adaptation, and demography in the Texas tortoise (*Gopherus berlandieri*). 103rd Annual Meeting of the Alabama Academy of Science, Faulkner University, February 27-28, 2026.

2025

- Mellor NJ, Wilson M, DeNardo D, **Kusumi K**, Dolby GA. Speciation and hybridization dynamics between desert tortoises (*Gopherus agassizii* and *G. morafkai*) along an environmental gradient. Evolution 2025, joint meeting of the American Society of Naturalists, the Society of Systematic Biologists, and the Society for the Study of Evolution, Athens, Georgia, June 20-24, 2025.
- McDaniels G, Tleimat J, Baty SM, Mellor J, Crump P, McCracken S, **Kusumi K,** Dolby GA. Population structure, adaptation, and demography in the Texas tortoise (*Gopherus berlandieri*). Evolution 2025, joint meeting of the American Society of Naturalists, the Society of Systematic Biologists, and the Society for the Study of Evolution. Athens, Georgia, June 20-24, 2025.
- **Kusumi K**, Mellor J, Baty SM, Tleimat J, McDaniels GM, Crump P, McCracken SF, Dolby GA**.** A tale of three gopherus tortoises: Insights from genomic analysis of Sonoran and Mojave Desert tortoises (*Gopherus morafkai* and *G. agassizii*) compared with the Texas tortoise (*G. berlandieri*. 50th Annual Desert Tortoise Council Symposium. Las Vegas, NV. February 25-28, 2025.

2024

- Dolby G, Munquia-Vega A, Dorsey R, Bennett S, Gardner, Araya-Donoso RI, Davalos, Baty SM, Biddy A, Andreev, Lira-Noriega A, Wilder B, Cortez, Culver, **Kusumi K.** A new working model for co-evolution of plant and animal species on the Baja California peninsula from genomic and geologic data. Geological Society of America Annual Meeting. Anaheim CA. September 22-25, 2024.
- Biddy A, Dolby G, Araya-Donoso RI, Lira-Noriega A, **Kusumi K**, Munquia-Vega A. Differential gene expression is constrained by clade divergence in a Baja California Peninsula endemic lizard *(Urosaurus nigricaudus)*. 3rd Joint Congress on Evolutionary Biology. Montréal, Québec, Canada. June 26-30, 2024.
- Baty SM, Singhal S, Barker MS, Paulsen A., **Kusumi K,** Dolby G. Comparative genomic analyses of two desert adapted shrub species, *Encelia farinosa* and *E. californica* shows conservation of synteny and species-level gene duplications. 3rd Joint Congress on Evolutionary Biology. Montréal, Québec, Canada. June 26-30, 2024.
- Baty SM, Singhal S, Barker MS, Paulsen A., Munquia-Vega A, **Kusumi K,** Dolby G. Comparative Genomic Analysis of Sonoran and Mojave Desert Tortoises (*Gopherus m*orafkai and *G. agassizii*) to Identify the Genetic Basis of Desert Adaptations. 49th Annual Desert Tortoise Council Symposium. Las Vegas, NV. February 21-23, 2024.

- Mellor NJ, Baty SM, **Kusumi K,** Dolby G. We aren't mucin around: The evolution of disparate mucin arrays in *Gopherus morafkai* and *G. agassizii*. 49th Annual Desert Tortoise Council Symposium. Las Vegas, NV. February 21-23, 2024.
- Johnson J, Mellor NJ, Baty SM, Tleimat J, Crump P, McCracken SF, Dolby G **Kusumi K,**. Genome Sequencing and Annotation of the Texas Tortoise (*Gopherus berlandieri*) as a Resource for Population Genetic Studies. 49th Annual Desert Tortoise Council Symposium. Las Vegas, NV. February 21-23, 2024.

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 jarrovii*, to conspecific visual or chemical signals. Society for Integrative and Comparative Biology Annual Meeting (Virtual), January 3-Feburary 28, 2021.

SERVICE

School/Department

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

College and University

Co-Chair, Dean Search Committee, School of Medicine and Advanced Medical Engineering, Arizona State University	2023-2024
Member, Vice Provost for Inclusive Excellence Search Committee, Arizona State Univ.	2023
Chair, Dean Search Committee, Barrett, The Honors College, Arizona State University	2022-2023
Chair, Director Search Committee, School of Geographical Sciences and Urban Planning, Arizona State University	2020-2021
Allies Member, ADVANCE Institutional Transformation Award, Arizona State University	2018-present
Faculty Advisor, GRADient Out in Graduate School, Arizona State University	2018-2024
Member, Biodesign Institute Internal Advisory Board, Arizona State University	2018-present
Member, Leadership Team, Smithsonian Tropical Research Institute – Arizona State University Collaborative Initiative	2018-present
Mentor, HUES LGBT+ Mentoring Program, Graduate College, Arizona State University	2018-2024
Member, Trans Inclusion Support Working Group, Arizona State University	2018-2019
Ex officio, Special Research Advancement Team Committee, College of Liberal Arts & Sciences, Arizona State University	2016-2019
Ex officio, Special Research Committee, College of Liberal Arts & Sciences, Arizona State University	2016-2019
Member, Associate Deans of Research Advisory Group, Office of Knowledge Enterprise & Development, Arizona State University	2016-2019

Member, School of Life Sciences Director Search Committee, Arizona State University	2014-2015
Ex officio, Special Graduate Student Advisory Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
Ex officio, Special Graduate Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
Member, Graduate Deans Advisory Group, Office of the Provost, Arizona State University	2013-2018
Ex officio member, Curriculum Committee, College of Liberal Arts & Sciences, Arizona State University	2013-2018
Ex officio member, Committee on Academic Affairs and Grievance, College of Liberal Arts & Sciences, Arizona State University	2013-2018
Advisor, University Technology Office Advisory Panel for the School of Life Sciences faculty, Arizona State University	2012
Member, Research Scientist Search Committee, Arizona State University Advanced Computing Center (A2C2)	2012
Member, Education Policy Committee, University of Arizona College of Medicine, Tucson and Phoenix, AZ	2009
Faculty Advisor, Gay-Straight Alliance, University of Arizona College of Medicine-Phoenix, AZ	2009-2011
Scholarly Projects Advisor (8 students/year), UA College of Medicine-Phoenix in partnership with ASU	2008-2009
Graduate Program Director; *Member, Admissions Committee*; Molecular & Cellular Biology Interdisciplinary Graduate Program, Graduate College, Arizona State University	2008-2012
Co-Chair, *Ad Hoc* Admissions Committee, Molecular & Cellular Biology Graduate Group, School of Life Sciences, Arizona State University	2007-2008
Interim Co-Chair, Molecular & Cellular Biology Graduate Program Working Committee, Graduate College, Arizona State University	2007-2008
Member, Final Block Review Committee (Medical School Curriculum), UA College of Medicine-Phoenix in partnership with ASU	2007-2008
Chair (2011-2012) and *member* (2007-2011), Animal Users Advisory Committee	2007-2012
Member, Phoenix Biomedical Campus-Arizona Biomedical Collaborative Building 2 Oversight Committee, Arizona State University	2007-2009
Member, College Web Committee, University of Arizona College of Medicine-Phoenix in partnership with Arizona State University	2007-2008
Executive Committee Member (2009-2010) and *Member* (2007-2010), Admissions Committee (MD Program), UA College of Medicine-Phoenix in partnership with ASU	2007-2010
Member, *Ad Hoc* Curriculum Committee, UA College of Medicine-Phoenix in partnership with ASU	2006-2009
Member, Bioinformatics Core Facility advisor board, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2005-2006
Member, Laboratory Animal Facility Planning Committee, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2004-2006
Member, Proposal Preparation, Submission and Award Management Task Force, Joseph Stokes, Jr. Research Institute of The Children's Hospital of Philadelphia	2005-2006
Member, Genomics & Computational Biology Graduate Group, University of Pennsylvania School of Medicine	2002-2006

Member, Institutional Animal Care and Use Committee, The Children's Hospital of Philadelphia	2001-2006
Member, Cell and Molecular Biology Graduate Group, Developmental Biology Section, University of Pennsylvania School of Medicine	2001-2006

Community and Professional

Mentor, O-STEM (Out in STEM) national mentor network	2021-present
Mentor, Out to Innovate (formerly National Organization of Gay & Lesbian Scientists & Technical Professionals) mentor network program	2021-present
Founding Member, Lesbian, Gay, Bisexual, Transgender, Queer and Community (LGBTQ+) Faculty & Staff Association, Arizona State University	2016-present
Member of the Selection Committee, 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
Reviewer, OUT and UP Scholarship Committee (for Gay, Lesbian, Bisexual, and Transgender students), Maricopa Community Colleges Foundation	2011-2012
Judge, Annual DNA Day Essay Contest, American Society for Human Genetics	2008-2024
Treasurer, 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	2001-2025
Anolis Gene Nomenclature Committee, *chair and founding member*	2010-2011
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, *founding member*, *secretary* [2009-2018], and *steering committee member;* 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, *Board Member*	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	2007-2025
Journal of North American Herpetology	2013-present
"Thematic Papers: Regeneration in Non-Mammalian Vertebrates." Anatomical Research	2007

***Ad Hoc* Journal Review**

American Journal of Medical Genetics	2010
Anatomical Record	2017

BMC Genomics	2016-2018
Case Reports in Medicine	2010
Cell Genomics	2025
Clinical Genetics	2005
Clinical Orthopaedics	2005, 2006
Connective Tissue Research	2016
Developmental Biology (18 reviews total)	2000-2025
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 Developmental Biology	2015
J. of Experimental Biology Part B: Molecular & Developmental Evolution	2009, 2018
J. of Experimental Zoology Part A: Ecological and Integrative Physiology	2026
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

Organizing Committee Member, 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

Organizing Committee Member, 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

Moderator, "Session IV: Collaborative Studies," First Meeting of the Idiopathic Scoliosis Genetics Interest Group, October 14-16, 2012, Texas Scottish Rite Hospital, Dallas, TX 2012

Co-organizer, "Somitogenesis: From Models to Therapeutics Meeting 2007", June 16, 2007, Cancun, Mexico, Satellite meeting to the 66th Annual Meeting of the Society for Developmental Biology and First Pan-American Congress in Developmental Biology, Cancun, Mexico. 2007

Co-organizer, Segmentation Meeting 2005, July 27, 2005, San Francisco, CA, satellite meeting to the 64th 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

Scientific advisory committee, NIH P01 grant Developmental Mechanisms of Human Idiopathic Scoliosis, Texas Scottish Rite Hospital for Children, Dallas, TX 2016-2021

Session Organizer, "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

Organizer, "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

Co-organizer, Workshop on Congenital Scoliosis, Nov. 2, 2005, Stowers Institute for Medical Research, Kansas City, KS 2004

Co-Moderator, Session 41: Molecular Basis of Mendelian Inheritance II, 52nd Annual Meeting of the American Society of Human Genetics, Oct. 15-19, 2002, Baltimore, MD 2002

Regional

Advisory Board Member, Herbert J. Louis Endowment for the Center for Pediatric Orthopaedics, Phoenix Children's Hospital, Phoenix, AZ 2009-2019

Organizer, "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*, Standing Study-Section Member*

Dev-2 (Development-2 Study Section), 3 review sessions annually 2006-2010

National Institutes of Health*, Ad hoc reviewer*

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*, Ad hoc reviewer*	
Integrative Organismal Systems, BIO Directorate	2017, 2014, 2010
DBI Advances in Bioinformatics	2009
MCB Cellular Systems	2008
Health Research Council of New Zealand, *Ad hoc* reviewer	2016, 2015
Medical Research Council, United Kingdom, *ad hoc* reviewer	2012, 2010
Scoliosis Research Society, *Ad hoc* reviewer	2012
South Carolina Experimental Program to Stimulate Competitive Research and Institutional Development Awards, *Ad hoc* reviewer	2012
Wellcome Trust (UK), *ad hoc* reviewer	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), *Ad hoc* reviewer	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

Instructor, BIO 543 Molecular Genetics & Genomics (3 credits), Arizona State University	2017-2026
Instructor, LIA 194 Freshman Discovery Seminar–Science and the Future: The Science Behind Science Fiction, Arizona State Univ.	2017-2020, 2025
Instructor, Genomic Approaches Applied to Development, Evolution, and Regeneration, *Instructor*, University of São Paulo, Ribeirão Preto, Brazil. August 6-10, 2018.	2018
Co-Instructor, MCB 701 Molecular & Cellular Biology Colloquium, Arizona State University	2011-2012
Co-Instructor, MCB 591 Seminar: Mammalian genetics and development, Arizona State Univ.	2010, 2009
Co-Instructor, MCB 591 Seminar-Neural Development & Regeneration, Arizona State Univ.	2016
Co-Instructor, MCB 591 Seminar-Regeneration & Stem Cells, Arizona State University	2015, 2012
Co-Instructor, BIO 352 Developmental Anatomy Lab, Arizona State University	2012-2013
Co-Instructor, MCB 556 Advanced Molecular & Cellular Biology II, Arizona State Univ.	2011-2013
Co-Instructor, BIO 340 General Genetics, Arizona State University	2011
Co-Instructor, BIO 351 Developmental Biology, Arizona State University	2009-2015
Case Based Instruction Facilitator and Exam Committee Member, GIMDO (Gastrointestinal System, Metabolism, Diabetes, and Obesity), University of Arizona College of Medicine-Phoenix in Partnership with Arizona State University	2008-2009
Block Director, 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)

11. Christopher Robinson, PhD, Postdoctoral Research Scholar, ASU School of Life Sciences — 2025-present
10. Greer Dolby, PhD, Postdoctoral Research Scholar, ASU School of Life Sciences. *Current Position*: Asst. Professor (tenure track), Dept. of Biology, University of Alabama at Birmingham, AL — 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:* Assistant CRA, RARASCO, São Paulo, 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, Flagstaff, AZ — 2013-2015
7. Terry Ritzman, PhD.in Anthropology, ASU, graduate research assistant. *Current Position:* Assistant Professor, Midwestern University, Downers Grove, IL — 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*: Assistant Teaching Professor of Biology, Rockhurst University, Kansas City, MO — 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, İstanbul Medeniyet University, Medical Faculty, Surgical Medical Sciences Department, Turkey — 2001-2002

Doctoral Students (Chair or Co-Chair)

9. Grace Carraasco, Chair: Anthony Barley, ASU Biology Graduate Program (starting August 2026) — 2026-
8. Sarah Baty, ASU Evolutionary Biology Graduate Program. *Current position*: Postdoctoral Researcher, Los Alamos National Laboratory. — 2020-2025
7. Raúl Araya Donoso, ASU Evolutionary Biology Graduate Program, CONICYT Fellow (National Commission for Scientific and Technological Research, Chile). *Current position*: Assistant Professor, Catholic University of Maule. — 2020-2024
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:* Director, Global Scientific Communications, Hepatology, Glaxo SmithKline, 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:* Senior Medical Writer, Woven Health Collective. — 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:* Bioinformatic Specialist, DataTecnica LLC. 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*: Associate Professor and Genomics CoLab Director, 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. 2012-2015
1. Catherine May, ASU Biology Graduate Program, "Genomic Diversity and Abundance of LINE Retrotransposons in 4 Anole Lizards." Graduated Dec. 2013. 2012-2013

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

24. Derek Benson, ASU Biology PhD Program 2021-2026
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. *Current Position:* Postdoctoral Fellow, University of North Carolina at Chapel Hill. 2020
18. Alexander Gleason, ASU, Biomedical Diagnostics (MS) Program, College of Health Solutions. Laboratory experience. *Current Position:* Galleri Consultant, GRAIL Multi-Cancer Early Detection 2016-2017
17. Juan Rodriguez, ASU, *Current Position*: Flight Software Engineer, Northrop Grumman Space Systems 2016
16. Justin Griffin, ASU, *Current Position*: Family Medicine Resident, Phoenix AZ 2015
15. Minami Tokuyama, ASU, *Current Position*: Resident Physician in Anatomic and Clinical Pathology, Stanford Medicine Health Care 2014-2016
14. Benjamin Garns, 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*: Child and Adolescent Psychiatrist, San Francisco Department of Public Health 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*: Executive Director, Regenesis 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, *Current Position*: Head of Medical, Mirati Therapeutics 2002 spring
3. Stacey Stevens, Univ. of Pennsylvania
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, Fox Rothschild LLP 1994-1997

Undergraduate Researchers (including 14 Barrett Honors students)

58. Aamuktha Tirupati, ASU Barrett Honors College and School of Mathematical and Statistical Sciences 2026-present
57. Casey Kim, ASU Barrett Honors College and School of Molecular Sciences 2026-present
56. Ethan Lieu, ASU School of Life Sciences 2025
55. Kaylee Rhyne, ASU Barrett Honors College and Dept. of Psychology & CISA 2025-present
54. Brooke Larweth, ASU Barrett Honors College and School of Life Sciences 2025
53. Carter Henry, ASU School of Life Sciences 2024

52. Zachary Lukasik-Drescher, ASU Barrett Honors College and School of Geographical Sciences and Urban Planning	2023-2024
51. Jaime Johnson, ASU Barrett Honors College and School of Life Sciences	2022-2024
50. Avery Paulsen, ASU School of Molecular Sciences	2021-2024
49. Alexa Turpen, ASU School of Life Sciences	2021
48. Bryan Yavari, ASU School of Life Sciences	2021
47. Devany Detwiller, 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" *Current Position*: Medical Student, Icahn School of Medicine at Mount Sinai, NYC	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*: Postdoctoral Fellow, Rutgers University-Camden and 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 and COO, 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