

# LIDIA KOS

Graduate Division, Division of Biomedical Sciences | UCR, Riverside, CA 92521



## LEADERSHIP PROFILE

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Accomplished academic leader with more than a decade of progressive administrative experience spanning graduate education, research development, and institutional strategy. Currently serving as Vice Provost and Dean of Graduate Studies at UC Riverside, overseeing a \$50M+ portfolio of graduate assistantships and fellowships, a 26-member staff, and a comprehensive 2025–2030 strategic plan. Recognized for building inclusive graduate communities, forging interdisciplinary research partnerships, and building inclusive graduate communities and supporting student achievement. Active scholar in developmental and cancer biology with a sustained, externally-funded research program and a strong record of doctoral mentorship.

## ADMINISTRATIVE LEADERSHIP EXPERIENCE

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### Vice Provost and Dean of Graduate Studies

*University of California, Riverside (UCR)*

July 2023 – Present

- Lead 26 staff members delivering graduate student services across all academic units
- Developed 2025–2030 strategic plan for the Graduate Division, aligning with campus priorities
- Implemented a restructured graduate student funding model, managing and allocating over \$50M in tuition remissions and assistantships in collaboration with Academic Deans
- Redesigned Management System to integrate admissions, academic tracking, and financial support for all graduate students
- Established campus-wide Responsible Conduct of Research training program
- Designed a mentoring network connecting faculty and graduate students across disciplines

### Associate Vice President for Research and Economic Development & Associate Dean, University Graduate School

*Florida International University (FIU)*

January 2017 – June 2023

- Supervised 9 staff delivering comprehensive graduate student services across the university
- Collaborated with Dean of the Graduate School to manage and allocate over \$10M in graduate assistantships and tuition waivers across Colleges
- Established Office of Training and External Fellowships, increasing training grants and externally-funded fellowships
- Redesigned professional development program for graduate students emphasizing career preparation and wellness
- Developed professional development programming for faculty Graduate Program Directors
- Collaborated with Advancement to secure a \$400,000 gift providing scholarships to DACA graduate students
- Served as institutional point of contact for Fulbright and Fulbright-Hays graduate fellows
- Established first dual-degree program in Environmental Sciences with University of Firenze
- Responsible for monitoring and approving graduate curricular changes and new degrees
- Responsible for assessment of administrative unit for SACSCOC accreditation reporting
- Created Graduate School accountability reports for the Board of Trustees
- Supported the creation of the Center for Translational Sciences and recruited faculty members

### Associate Dean, University Graduate School

*Florida International University (FIU)*

July 2012 – July 2014

- Revised and updated all University Graduate School policies
- Responsible for review of all FIU graduate programs for SACSCOC accreditation reporting
- Reviewed and approved academic agreements with international institutions
- Developed and implemented annual evaluation and mentoring plan for all FIU doctoral students

- Developed doctoral program data summaries to facilitate performance monitoring
- Implemented performance-based allocation of graduate assistantships

### **Graduate Program Director, Department of Biological Sciences**

Florida International University (FIU)

August 2008 – June 2012 / 2015–2016

- Oversaw recruitment, admission, progression, and retention of 100+ graduate students
- Conducted Carnegie-style program review and developed improvement strategies
- Responsible for student and program outcomes reporting for SACSCOC accreditation

### **CURRENT INSTITUTIONAL SERVICE (UCR)**

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- Chancellor's Council – 2023–present
- Provost Council – 2023–present
- Academic Continuity Committee, Chair – 2023–present (leading institutional planning for instructional continuity in the event of disruptions)
- Financial Oversight Committee – 2023–present
- Housing Committee – 2023–present
- Research Committee – 2023–present
- Research Integrity Committee, Co-Chair – 2023–present
- Data Governance Committee, Co-Chair – 2023–present
- Search Committee for University Librarian – 2025

### **PREVIOUS INSTITUTIONAL SERVICE (FIU)**

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#### **University-level:**

- Graduate Council, Vice-Chair; Ex-officio – 2009–2023
- IACUC – 2010–2023
- Bargaining Team (Administration member) – 2019–2023
- International Working Group – 2017–2023
- Strategic Plan Committee – 2020
- Pre-Strategic Plan Committee – 2019
- Dissertation Advisor Status Committee, Member and Chair – 2008–2009
- Faculty Senate (Senator) – 2008
- MARC Selection Committee – 2009–2012
- Undergraduate Research Committee – 2015

#### **College-level:**

- Founding committee member, Institute of Biomolecular Sciences
- Search Committee: joint positions for the Biomolecular Sciences Institute
- Pre-Medical Advising Committee

#### **Department-level:**

- Graduate Committee – Member (8 years) and Chair (8 years)
- Personnel Committee: faculty evaluations, tenure and promotion (3 years)
- Glazer Seminar Series, Chair (4 years); Tissue Culture Facility, Chair (5 years); Animal Facility, Chair (4 years)
- Job Search and Screening Committees (15 positions)

### **EDUCATION**

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Ph.D., Neurobiology – University of California, Berkeley	1991
B.Sc., Biology/Genetics – Federal University of Rio de Janeiro, Brazil	1984

### **ACADEMIC APPOINTMENTS**

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Professor, Biomedical Sciences	<i>UCR</i>	2024–present
Professor, Biological Sciences	<i>FIU</i>	2015–2023

Associate Professor, Cell/Developmental Biol.	<i>FIU</i>	2005–2015
Assistant Professor, Cell/Developmental Biol.	<i>FIU</i>	1998–2005
Postdoctoral Fellow, Genetics	<i>NHGRI/NIH</i>	1995–1998
Postdoctoral Fellow, Developmental Biology	<i>NICHHD/NIH</i>	1992–1995

## HONORS, PRIZES, AND FELLOWSHIPS

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Inclusive Culture and Equity Award (AGEP Leadership Team), WEPAN – 2022  
 Presidential Excellence Award, FIU – 2019  
 Outstanding Graduate Program Director Provost Award, FIU – 2016  
 Kauffman Professor Award, Pino Center, FIU – 2009  
 FIU Foundation Research Award – 2006  
 College of Arts and Sciences Research Award, FIU – 2004  
 Excellence in Teaching Award, FIU – 2004  
 Provost's Summer Research Award, FIU – 2000  
 Outstanding Oral Presentation Award, National Human Genome Research Institute – 1996  
 Fogarty Postdoctoral Fellowship – 1992–1996  
 Outstanding Graduate Instructor Award, UC Berkeley – 1990  
 Elizabeth Roboz Einstein Fellowship in Developmental Neurosciences – 1990  
 Abraham Rosenberg Research Fellowship – 1990  
 Regent's Fellowship, UC Berkeley – 1988–1989  
 Doctoral Fellowship, National Council for Research, Brazil – 1985–1989

## PROFESSIONAL LEADERSHIP AND AFFILIATIONS

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Board of Directors, Council of Graduate Schools – 2024–present  
 Council Member, PanAmerican Society for Pigment Cell Research – 2007–2009, 2012–2015  
 Editorial Board, Pigment Cell and Melanoma Research (Executive Editor); *Frontiers in Oncology*  
 Reviewer: *Journal of Neurosciences*, *Mechanisms of Development*, *Melanoma Research*, *Journal of Investigative Dermatology*, *PLoS Genetics* (Guest Editor), *Science Advances*, *Molecular Oncology*, and others  
 Grant Review: NIH/NIAMS, NIH/NIGMS, NIH/NCI, NSF, American Heart Association, DOD CDMRP, FWO (Belgium), Austria Academy of Sciences

## SELECTED EXTERNAL RESEARCH FUNDING

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PI/Co-PI on peer-reviewed grants totaling over \$5M from NIH, NSF, and private foundations:

- LSAMP BD: Florida International University FGLSAMP, NSF — \$1,075,000 (2022–2024)
- Transdisciplinary Training in Biomolecular and Biomedical Sciences, NIH/NIGMS (co-I) — \$1,496,250 (2019–2024)
- LSAMP BD: Florida International University FGLSAMP, NSF — \$1,075,000 (2018–2021)
- The AGEF Florida Alliance Model, NSF (FIU PI) — \$347,449 (2019–2023)
- Role of Metabotropic Glutamate Receptor 1 in Leptomeningeal Melanoma, Moffitt Cancer Center/NIH-NCI — \$300,000 (2016–2017)
- The Role of Ets1 in Melanocyte Development, NIH/NIAMS — \$300,000 (2012–2015)
- UV-Dependent Mouse Model of Melanoma, NIH/NCI — \$225,000 (2008–2012)
- Signaling in Cardiac Development, American Heart Association — \$60,000 (2001–2002)

## TEACHING EXPERIENCE

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Undergraduate: General Biology; Cell Biology; Embryology; Developmental Biology; Undergraduate Research  
 Graduate: Molecular and Cell Biology II; Introduction to Biological Research; In Situ Hybridization Workshop;  
 Graduate Student Research; Master's Thesis; PhD Dissertation supervision

## GRADUATE AND POSTDOCTORAL MENTORING

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Served as major advisor to 14 doctoral students, 5 master's students, and 2 postdoctoral fellows, with trainees now holding positions across academia, medicine, and industry. Mentored over 60 undergraduate researchers who have gone on to PhD, MD, MD/PhD, DDS, and PA programs.

Selected doctoral alumni: Sana Nasim (Postdoctoral Fellow, Boston Children's Hospital/Harvard Medical School); Israel Castillo Gonzalez (Assistant Professor, FIU); Juliano Freitas (Assistant Professor, OCOM), Xiaoshuang Li (Software Engineer, Amazon); Flavia Carneiro (Research Coordinator, VA Healthcare System), Amy Saldana Caboverde (Senior Instructional Designer, University of Miami), Avner Ittah (Professor, Miami Dade College)

## PUBLICATIONS

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### Refereed Publications

- Nasim, S., Abujamra, B.A., Chaparro, D., Nogueira, P.S., Riva, A., Hutcheson, J.D., Kos, L. (2024). Multiple cell types including melanocytes contribute to elastogenesis in the developing murine aortic valve. *Sci Rep* 14, 25481.
- Nasim, S., Pandey, P., Kanashiro-Takeuchi, R.M., He, J., Hutcheson, J.D., Kos, L. (2021) Pigmentation Affects Elastic Fiber Patterning and Biomechanical Behavior of the Murine Aortic Valve. *Front Cardiovasc Med* 8:754560.
- Freitas, J., Lopez, J., Llorian, C., Boroni, M., Kos, L. (2021) The immunosuppressive role of Endothelin 3 over-expression in the melanoma microenvironment. *Pigment Cell Melanoma Res.* 34:1084–1093.
- Hutcheson, J.D., Schlotter, F., Creager, M.D., et al., Kos, L., Aikawa, E. (2021) Elastogenesis Correlates with Pigment Production in Murine Aortic Valve Leaflets. *Front. Cardiovasc. Med.* 8:678401.
- Su, L., Bryan, N., Battista, S., et al., Kos, L., et al. (2020) Identification of HMGA2 inhibitors by AlphaScreen-based ultra-high-throughput screening assays. *Sci Rep.* 10:18850.
- Chen, F., Panday, N., Li, X., et al., Kos, L., He, J. (2020) Simultaneous mapping of nanoscale topography and surface potential of charged surfaces by scanning ion conductance microscopy. *Nanoscale.* 12:20737–20748.
- Li, X., Karras, P., Torres, R., Rambow, F., van den Oord, J., Marine, J-C., Kos, L. (2020) Disseminated melanoma cells transdifferentiate into endothelial cells in intravascular niches at metastatic sites. *Cell Rep.* 31:107765.
- Saldana-Caboverde, A., Perera, E.M., Watkins-Chow, D., et al., Pavan, W.J., Kos, L. (2015) The Transcription Factors *Ets1* and *Sox10* Interact During Murine Melanocyte Development. *Dev Biol.* 407:300–12.
- Carneiro, F., Kruithof, B.P.T., Balani, K., Agarwal, A., Gaussin, V., Kos, L. (2015) Relationships between melanocytes, mechanical properties and extracellular matrix composition in the mouse heart valves. *Long Term Eff Med Implants.* 25:17–26.
- Benaduce, A.P., Batista, D., Grilo, G., Jorge, K., Cardero, D., Milikowski, C., Kos, L. (2014) Novel UV-induced melanoma mouse model dependent on Endothelin 3 signaling. *Pigment Cell Melanoma Res.* 27:839–42.
- Martinez, C., Rath, S., Van Gulden, S., et al., Kos, L., Cheung, H., Ramaswamy, S. (2013) Periodontal ligament cells cultured under steady-flow environments demonstrate potential for use in heart valve tissue engineering. *Tissue Eng Part A.* 19:458–66.
- Kaelin, C.B., Xu, X., Hong, L.Z., et al., Kos, L., O'Brien, S.J., Barsh, G.S., Menotti-Raymond, M. (2012) Specifying and sustaining pigmentation patterns in domestic and wild cats. *Science.* 337:1536–41.
- Lahiri, D., Benaduce, A.P., Rouzaud, F., et al., Kos, L., Agarwal, A. (2011) Wear behavior and in-vitro cytotoxicity of wear debris generated from hydroxyapatite-carbon nanotube composite coating. *J Biomedical Mater A.* 96A:1–12.
- Lahiri, D., Singh, V., Benaduce, A.P., Seal, S., Kos, L., Agarwal, A. (2011) Boron nitride nanotube reinforced hydroxyapatite composite: Mechanical and tribological performance and in-vitro biocompatibility to osteoblasts. *J Mech Behav Biomed Mater.* 4:44–56.
- Lahiri, D., Benaduce, A.P., Kos, L., Agarwal, A. (2011) Quantification of carbon nanotube induced adhesion of osteoblast on hydroxyapatite using nano-scratch technique. *Nanotechnology.* 22:355703.
- Weeks, O., Villamor, E., Tracey, M., et al., Kos, L., et al. (2011) QBIC, an interdisciplinary and quantitative biological sciences curriculum: concept to implementation. *J Science Education.* 12(1):11–13.
- Lahiri, D., Rouzaud, F., Richard, T., et al., Kos, L., Agarwal, A. (2010) Boron nitride nanotube reinforced polylactide-polycaprolactone copolymer composite: Mechanical properties and cytocompatibility. *Acta Biomaterialia.* 6:3524–3533.
- Perera, E.M., Bao, Y., Kos, L., Berkovitz, G. (2010) Structural and functional characterization of the mouse *tescalcin* promoter. *Gene.* 464:50–62.
- Rouzaud, F., Oulmouden, A., Kos, L. (2010) The untranslated side of hair and skin mammalian pigmentation: beyond coding sequences. *IUMB Life.* 62:340–6.
- Saldana-Caboverde, A. and Kos, L. (2010) Roles of endothelin signaling in melanocyte development and melanoma. *Pigment Cell Melanoma Res.* 23:160–170.

- Lahiri, D., Rouzaud, F., Namin, S., et al., Kos, L., Tsoukias, N., Agarwal, A. (2009) Carbon nanotube reinforced polylactide-caprolactone copolymer: mechanical strengthening and interaction with human osteoblasts in vitro. *App. Mat. Interface*. 11:2470–76.
- Balani, K., Brito, F.C., Kos, L., Agarwal, A. (2009) Melanocyte pigmentation stiffens murine cardiac tricuspid valve leaflet. *J. Royal Soc Interface*. 6:1097–1102.
- Brito, F.C. and Kos, L. (2008) Timeline and distribution of melanocyte precursors in the mouse heart. *Pigment Cell Melanoma Res*. 21:464–70.
- Garcia, R.J., Ittah, A., Mirabal, S., Figueroa, J., Lopez, L., Glick, A.B., Kos, L. (2008) Endothelin 3 induces skin pigmentation in a keratin-driven inducible mouse model. *J Invest Dermatol*. 128:131–42.
- Patel, R. and Kos, L. (2005) Endothelin-1 and neuregulin-1 convert embryonic cardiomyocytes into cells of the conduction system in the mouse. *Dev Dyn*. 233:20–25.
- Kozmik, Z., Daube, M., Frei, E., Norman, B., Kos, L., Dishaw, L.J., Noll, M., Piatigorsky, J. (2003) Role of Pax genes in eye evolution: an ancestral PaxB gene uniting Pax2 and Pax6 functions. *Developmental Cell*. 5:773–785.
- Piatigorsky, J., Norman, B., Dishaw, L.J., Kos, L., Horwitz, J., Steinbach, P.J., Kozmik, Z. (2001) J3-crystallin of the jellyfish lens: Similarity to saposins. *Proc. Natl. Acad. Sci. USA*. 98:12362–12367.
- Perera, E.M., Martin, H., Seeherunvong, T., Kos, L., Hughes, L.A., Hawkins, J.R., Berkovitz, G. (2001) Tescalcin, a novel gene belonging to the family of EF-hand Ca<sup>2+</sup> binding proteins, Col9a3 and Renin are expressed in the mouse testis during early stages of gonadal differentiation. *Endocrinology*. 142:455–463.
- Kos, L., Takayama, H., Maina, F., Ponzetto, C., Merlino, G., Pavan, W.J. (1999) Hepatocyte Growth Factor/Scatter Factor-MET signaling in neural crest-derived melanocyte development. *Pigment Cell Research*. 12:13–21.
- Opdecamp, K., Kos, L., Arnheiter, H., Pavan, W.J. (1998) Endothelin signalling in the development of neural crest-derived melanocytes. *Biochemistry and Cell Biology*. 76:1093–1099.
- Southard-Smith, E.M., Kos, L., Pavan, W.J. (1998) Sox10 mutation disrupts neural crest development in *Dom Hirschsprung* mouse model. *Nature Genetics*. 18:60–64.
- Kos, L., Chiang, C., Mahon, K.A. (1998) Mediolateral patterning of somites: Axial signals including Sonic hedgehog regulate *Nkx-3.1* expression. *Mechanisms of Development*. 70:25–34.
- Duncan, M.K., Kos, L., Jenkins, N.A., Gilbert, J.C., Copeland, N.G., Tomarev, S.I. (1997) *Eyes Absent*: a gene family found in several metazoan phyla. *Mammalian Genome*. 8:479–485.
- Tomarev, S.I., Callaerts, P., Kos, L., Zinovieva, R., Halder, G., Gehring, W., Piatigorsky, J. (1997) Squid Pax-6 and eye development. *Proc. Natl. Acad. Sci. USA*. 94:2421–2426.
- Hellmich, H.L., Kos, L., Cho, E.S., Mahon, K.A., Zimmer, A. (1996) Embryonic expression of glial cell-line derived neurotrophic factor (GDNF) suggests multiple developmental roles. *Mechanisms of Development*. 54:95–105.
- Gleizer\*, L. and Stent, G. (1993) Developmental origin of segmental identity in the leech mesoderm. *Development*. 117:177–189.
- Volchan, E., Bernardes, R.F., Rocha-Miranda, C.E., Gleizer\*, L., Gawryszewski, L.G. (1988) The ipsilateral field representation in the striate cortex of the opossum. *Experimental Brain Research*. 73:297–304.
- Volchan, E., Kos, L., Gawryszewski, L.G., Bernardes, R.F., Rocha-Miranda, C.E. (1984) Reference axis for visuotopy in the opossum's striate cortex. *Brazilian Journal of Medical and Biological Research*. 17:5–7.

\* Gleizer, L.: Name used previously

### **Non-Refereed Publications**

- Kelsh, R., Kos, L., Arnheiter, H., Aplin, A., Bosenberg, M. (2015) What shall we do this year? *Pigment Cell Melanoma Res*. 28:1.
- Aplin, A., Bosenberg, M., Soengas, M., Kos, L., Arnheiter, H., Kelsh, R. (2014) Unmet needs in melanoma research. *Pigment Cell Melanoma Res*. 27:1003.

### **Book Chapters**

- Thomas, S., Johnson Austin, S., Lane, T.B., et al., Kos, L., et al. Culturally relevant mentoring: a differentiator for institutional change (2022). In *Implementing Diversity, Equity, Inclusion, and Belonging in Educational Management Practices*. pp. 290–309. IGI Global, PA, USA.
- Pino, J. and Kos, L. (2013) The regulation of skin and hair pigmentation by signaling pathways and related disorders. In *Skin Pigmentation: Genetics, Geographic Variation and Disorders*. pp. 57–88. Nova Science Publishers, NY, USA.
- Kos, L. and Garcia, R. (2004) Molecular Biology and Applications. In *Biomedical Technology and Devices Handbook*. pp. 13-1–19. CRC Press, FL, USA.