Crist S. Khachikian, Ph.D.

ckhachikian@gmail.com | 818-645-0830 | Altadena, California

Executive Profile

Senior academic leader with 25+ years in public higher education, spanning executive administration, enrollment strategy, teaching, curriculum development, research growth, and institutional planning at Hispanic-Serving Institutions. As Associate Vice President for Research and Graduate Dean at CSU Northridge (2013–2019), served on the President's extended cabinet, Strategic Enrollment Planning Committee, and Admissions Planning Group. Managed a $10M operating budget, supervised 22 staff, and grew research expenditures 60% from $25M to $40M annually. Nationally recognized for teaching excellence (ASEE ExCEEd Award, Distinguished Engineering Educator, Professor of the Year three times). Built and accredited programs from bachelor's through doctorate, including interdisciplinary curricula spanning multiple departments and institutions. Secured and managed $62M+ in competitive federal funding as PI/Co-PI from NIH, NSF, USDA, DOE, and NASA. Directed the $41M NIH BUILD PODER initiative, one of the nation's most successful student research training programs, graduating 400+ underrepresented scholars with 65% pursuing doctoral degrees. Cross-divisional collaborator who has partnered with vice presidents across Academic Affairs, Student Affairs, Administration and Finance, University Advancement, and Information Technology on strategic initiatives from facilities construction to student success programming. Founded GrantPuma, a research administration platform serving 2,000+ researchers across 30+ campuses. ACE Fellow at Oregon State University. Executive education at Harvard. Active PI with current federal grants and peer-reviewed publications in 2025–2026.

Ph.D., UCLA. M.Eng., MIT. ACE Fellow (Oregon State University). Harvard Institute for Management and Leadership in Education.

Academic Credentials

Ph.D.	Civil Engineering	University of California, Los Angeles	1999
M.Eng.	Civil & Environmental Engineering	Massachusetts Institute of Technology	1996
B.S.	Civil Engineering	University of California, Los Angeles	1995

Executive Leadership Development

2015	ACE Fellow	American Council on Education / Oregon State Univ.
2014	Institute for Management and Leadership in Education	Harvard University
2013	Technical Management Program	UCLA Anderson School of Management

Executive Leadership & Research Administration

Associate Vice President for Research and Graduate Dean *2013–2019*
California State University, Northridge

Chief research and graduate education officer reporting to the Provost. Managed a $10M operating budget and supervised 22 staff including three directors and two assistant vice presidents within CSU's collective bargaining environment (CFA, CSUEU, Teamsters). Held direct executive accountability for Sponsored Programs, Research Compliance, Intellectual Property and Technology Transfer, Graduate Studies, and the NSF I-Corps Site. Served on the President's extended cabinet, Strategic Enrollment Planning Committee, and Admissions Planning Group.

Strategic Planning & Research Enterprise Growth

- Developed and executed a multi-year research growth strategy—building a research development office, deploying enterprise analytics, constructing new research facilities, and launching strategic faculty hiring programs—that grew institutional research expenditures from $25M to $40M annually, a 60% increase over six years
- Identified critical capacity gaps in pre-award support and recruited a Director of Research Development and professional grants team; restructured pre-award services to support large, complex multi-institutional federal awards (BUILD PODER, CREST, LSAMP)
- Conceived and implemented a data-driven research strategy by deploying Pivot, Cayuse, Tableau, and InfoReady enterprise-wide—enabling real-time compliance monitoring, portfolio oversight, and the institution's first strategic funding analytics
- Led multi-level strategic planning at department, college, and university levels; served on the College of Engineering Strategic Planning Committee and CSUN Road Map to the Future Steering Committee

Facilities, Infrastructure & Faculty Investment

- Conceived, designed, and delivered Lilac Hall, a 10,000 sq. ft. interdisciplinary research facility—partnering with the VP for Administration and Finance to secure funding, manage construction, and create the institution's first collaborative, center-scale research space
- Designed the institution's inaugural interdisciplinary cluster-hire program, organizing faculty across engineering, the sciences, and the humanities around shared research themes—generating $10M+ in associated competitive grants and establishing a model for strategic faculty investment tied to research growth
- Managed faculty start-up packages and research space allocation in partnership with college deans; negotiated retention packages for research-active faculty at risk of departure to competing institutions
- Developed a comprehensive undergraduate research engagement strategy that increased faculty-mentored undergraduate research participation by 500% through BUILD PODER, REU, and targeted programmatic investments

Compliance, IP & Technology Transfer

- Identified the absence of IP and commercialization infrastructure as a barrier to industry partnerships and national laboratory collaborations; designed and implemented the institution's first intellectual property policy, export controls framework, and technology transfer pipeline
- Managed IRB, IACUC, biosafety, and research security compliance; supervised the Research Compliance office and oversaw all federal reporting obligations across NIH, NSF, and DOE awards
- Founded NSF I-Corps Site ($498K)—the institution's first innovation and commercialization program; trained faculty and student entrepreneurs in customer discovery and venture development
- Brought the Los Angeles Cleantech Incubator (LACI) to campus in collaboration with the VP for University Advancement and President; transitioned it to an in-house incubator and recruited its first Executive Director

External Partnerships & Industry Engagement

- Negotiated directly with Medtronic's Vice President of Research to create an integrated research and student training program in biomedical engineering, fully funded by the company; renegotiated and restructured the broader corporate-university partnership in collaboration with the Executive Director of The University Corporation
- Secured $1.5M+ from private foundations (Annenberg, La Kretz, Sloan, Boeing, SCE) by building a donor and corporate engagement pipeline that complemented the federal grants portfolio

Graduate Studies & Enrollment Strategy

- Directed Graduate Studies through enrollment growth and program diversification; implemented retention and student success initiatives that strengthened time-to-degree outcomes and graduate completion rates
- Served on the Strategic Enrollment Planning Committee and Admissions Planning Group, aligning graduate enrollment targets with institutional capacity and labor market demand
- Co-led CSU-wide Data Working Group on institutional data collection, informing system-level graduate education policy across 23 campuses
- Strengthened thesis mentoring pipelines and graduate student advising infrastructure; chaired 16 and served on 14 additional master's thesis committees as a faculty member

Cross-Divisional Leadership & Cabinet-Level Collaboration

- Served on the President's extended cabinet; collaborated as a peer with all vice presidents and cabinet-level officers across the institution on strategic initiatives
- Partnered with the VP for Administration and Finance to design, fund, and deliver Lilac Hall; with the AVP for Faculty Affairs to design and launch the cluster-hire program; with the VP for Student Affairs to develop programming that increased research access for undergraduate students
- Worked with the VP for Information Technology and CIO to host campus-wide research engagement events (Data Jam), onboard enterprise IT platforms, and co-design a research communication and student research assistant recruitment platform
- Member, Graduation Initiative Core Administrative Team and NIH Diversity Program Consortium Executive Steering Committee (multi-campus, federally accountable governance body)

Associate Dean of Research, College of Eng., Computer Science, and Technology *2011–2013*
California State University, Los Angeles

Oversaw research strategy and sponsored programs for a major engineering college. Built partnerships with NASA/JPL, Los Alamos National Laboratory, The Aerospace Corporation, Boeing, Southern California Edison, and Northrop Grumman, generating funded research, student internships, and equipment contributions. Secured and managed $13M+ in external funding from NSF, DOD, NASA, and private foundations, including a $5.3M NSF CREST Center, a $1.74M NSF grant for core laboratory renovation, and over $1.3M in major research instrumentation through federal grants. Supervised college-level research development and compliance activities; coordinated B.S. and M.S. programs in Environmental Engineering.

PI and Director, NSF CREST Center for Energy and Sustainability *2009–2013*
California State University, Los Angeles

Led a $5.3M NSF interdisciplinary research center—directing 20+ faculty and 100+ students across engineering, chemistry, biology, and geosciences around a coherent research agenda in energy and environmental sustainability. Designed the center's organizational structure, faculty incentive model, and student mentoring pipeline. Managed NSF REU Sites; served as CSU–NASA Education Collaborative liaison through the Ocean Studies Institute.

Current Research & Scholarly Activity

Active PI on federal and state grants totaling $6.5M. Current research spans environmental justice (USDA tribal forestry partnership with the Fernandeño Tataviam Band of Mission Indians), community emissions reduction (LADWP), climate action (UC Office of the President), and engineering education (NSF). Peer-reviewed publications in 2025–2026 include articles in *AERA Open* and *Studies in Graduate and Postdoctoral Education* on graduate education pathways and undergraduate research experience, with additional manuscripts under review at *International Journal of Science and Mathematics Education*, *CBE—Life Sciences Education*, and *Journal of Women and Minorities in Science and Engineering*. Active scholarly pipeline includes manuscripts in preparation on cluster hiring, engineering group identity, science identity formation, and environmental justice.

Faculty Appointments

Professor of Civil Engineering and Construction Management *2013–present*

California State University, Northridge

Environmental engineer by training (Ph.D., UCLA; M.Eng., MIT)

Assistant / Associate / Full Professor of Civil Engineering *1999–2013*

California State University, Los Angeles

Affiliated Scientist, Ocean Studies Institute, CSU *2003–2013*

Summer Faculty Fellow, NASA / Jet Propulsion Laboratory *2002–2003*

Entrepreneurship & Technology Commercialization

CEO and Founder, GrantPuma *2022–present*

Founded a research administration platform that matches researchers with funding opportunities and streamlines grant development. Raised $1M in venture capital. Platform serves 2,000+ researchers across 30+ campuses, including R1 institutions. Co-designed with the University of Wisconsin–Madison; in discussions with the University of Michigan College of Engineering. Building and scaling a technology company from scratch has provided practical experience translating academic expertise into working technology and a hands-on understanding of entrepreneurship and innovation.

Principal Investigator, NSF I-Corps Site, CSUN ($498K) *2017–2022*

Established CSUN's first NSF-funded innovation and commercialization program; designed and delivered customer discovery training for faculty and student entrepreneurs. Co-chaired the campus Makerspace Committee to expand hands-on prototyping and entrepreneurship resources.

Co-Founder, Environmental Consulting Company
Applied engineering expertise to environmental remediation consulting.

Competitive Research Funding ($62M+)

Active Grants ($6.5M total)

USDA	$5.0M	Urban Forestry w/ Fernandeño Tataviam Band of Mission Indians	PI	2023–28
UC Office of President	$800K	Climate Action Initiative	PI	2023–26
NSF	$366K	Engineering Education	PI	2025–28
LADWP	$303K	Community Emissions Reduction Program	PI	2022–26

Selected Completed Grants ($58M total)

NIH	$21.8M	BUILD PODER Phase 1—Biomedical Sciences	PI	2014–19
NIH	$19.2M	BUILD PODER Phase 2	Co-PI	2019–25
NSF	$5.3M	CREST Center for Energy and Sustainability	PI	2009–13
NSF	$3.0M	HSI Institutional Transformation	Co-PI	2022–25
NSF	$1.74M	Core Laboratory Renovation	PI	2010–13
NSF	$987K	CSU-LSAMP Bridges to the Doctorate	Co-PI	compl.
Foundations	$1.5M+	Annenberg, La Kretz, Sloan, Boeing, SCE	various	various

Interdisciplinary Program Development & Accreditation

- **M.S. in Environmental Science**—Principal designer; interdisciplinary curriculum spanning 8 departments (Sloan Foundation funded); Cal State LA

- **Joint Doctorate in Complex Systems**—Co-led development and WASC accreditation in partnership with Claremont Graduate University
- **B.S. in Engineering (Environmental)**—Principal author; achieved ABET accreditation (2012); Cal State LA
- **Engineering Core Curriculum Overhaul**—Led faculty team to create competency-based, "learn by doing" curriculum; secured NSF funding (DUE-1246130)

Diversity, Equity & Inclusive Research Excellence

- Directed $41M NIH BUILD PODER initiative grounded in critical race theory and culturally responsive mentoring: mentored over 700 students, graduated 400+ underrepresented scholars into biomedical STEM careers; 65% now pursuing doctoral degrees—one of the most successful research training programs of its kind in the country
- Co-PI, NSF HSI Institutional Transformation grant ($3M): advancing systemic change in how universities recruit, support, and advance underrepresented researchers
- NSF CREST Center: engaged 200+ students in cutting-edge sustainability and energy research at a majority-minority institution; designed student mentoring pipeline connecting undergraduates to graduate study
- Co-chair, APLU Biomedical Research Workforce Action Group (2014–2016)—shaped national policy recommendations on diversifying the biomedical workforce
- Member, NIH Diversity Program Consortium Executive Steering Committee (multi-campus, federally accountable governance body)
- Inaugural Chair, APLU Resiliency Strand (2017–2019)
- Invited to design and deliver 4-part DEI workshop for Oakland University School of Engineering at invitation of Provost (2022)
- Active USDA partnership with Fernandeño Tataviam Band of Mission Indians on urban forestry and land stewardship ($5M)—integrating indigenous land management with university research

Honors & Awards

2020	Distinguished Engineering Educator Award, The Engineer's Council
2015	NSF Presidential Awards for Excellence in STEM Mentoring, Finalist
2010	Outstanding Professor Award (campus-wide), California State University, Los Angeles
2010	Fulbright Fellow, Armenia
2005	Commander's Award for Outstanding Research, Air Force Research Laboratory
2002	ExCEEd New Faculty Excellence in Teaching Award (national), ASEE Civil Engineering Division
2000, 04, 09	Professor of the Year, Dept. of Civil Engineering, Cal State LA
1997	Outstanding Student Paper Award, American Geophysical Union

Honor Societies: Phi Kappa Phi | Tau Beta Pi | Chi Epsilon

Publications

Chavira, G., Escobedo, P., Cascelli, L., Moreno, K., Khachikian, C.S., Kwan, P., & Flores, G.E. (2026). Enhancing science identity, research self-efficacy, and research dissemination among underrepresented biomedical science majors: The impact of undergraduate research experiences. *CBE—Life Sciences Education*, accepted for publication.

Camacho, T.C., Schaal, N., Medina, R., Khachikian, C., & Chavira, G. (2026). Barriers to participating in undergraduate research: Implications for Hispanic-Serving Institutions. *Perspectives on Undergraduate Research and Mentoring (PURM)*, under review.

Schaal, N., Camacho, T.C., Medina, R., Khachikian, C., & Chavira, G. (2026). Comparison of student perceptions of undergraduate research by STEM college and demographic characteristics. *ASEE Annual Conference*, under review.

Moon, S., Guan, S.S.A., Lin, J.C.P., Cabrera, J., Williams, L., Kwan, P., Khachikian, C., Flores, G., & Chavira, G. (2026). Longitudinal effects of a culturally responsive undergraduate research program on science identity and self-efficacy in STEM. *International Journal of Science and Mathematics Education*, under review.

Fernandez, F., Mason, S., Sharp, S., Chavira, G., Khachikian, C., Kwan, P., & Saetermoe, C. (2026). All in the family? Examining how students develop self-efficacy and science identity in biomedical sciences. *Journal of Women and Minorities in Science and Engineering*, under review.

Khachikian, C.S. (2026). Pore-scale effects of nonvolatile organic contamination on the surface properties of natural porous media: Evidence from nitrogen adsorption analysis. *Journal of Contaminant Hydrology*, in preparation.

Khachikian, C. & Lemus, D. (2026). Cluster hiring at a regional comprehensive university: A long-term assessment from a Hispanic-Serving Institution. *The Journal of Higher Education*, in preparation.

Khachikian, C.S., Lemus, D., & Khachikian, O.S. Beyond reports and rankings: Toward a communicative ecology of sustainability in mission-driven organizations. In preparation.

Khachikian, C.S., Lemus, D., & Tindage, M. (2026). Engineering group identity: An integrative review and research agenda for inclusive team-based learning in engineering education. *Journal of Engineering Education*, in preparation.

Khachikian, C.S. & Schaal, N. (2026). Predictors of degree completion among first-time engineering freshmen: A longitudinal cohort study. *Journal of Engineering Education*, in preparation.

Lemus, D. & Khachikian, C.S. (2026). Community-based organizations as trusted messengers for electric vehicle adoption in disadvantaged communities. *Environmental Justice*, in preparation.

Moreno, K., Cascelli, L., Chavira, G., Escobedo, P., Flores, G.E., Kwan, P., & Khachikian, C. (2026). The dosage effect of undergraduate research experiences: Longitudinal evidence on participation duration and biomedical career outcomes. *International Journal of STEM Education*, in preparation.

Schaal, N., Camacho, T.C., Medina, R., Khachikian, C.S., & Chavira, G. (2026). Understanding STEM students' perspectives on undergraduate research at a Hispanic-Serving Institution. *International Journal of STEM Education*, in preparation.

Fernandez, F., Mason, S., Sharp, S.R., Chavira, G., Khachikian, C.S., Kwan, P.P., & Saetermoe, C.L. (2026). Undergraduate research experience, graduate school choice, and expected and unanticipated transitions to and through graduate school. *AERA Open*, 12. https://doi.org/10.1177/23328584251406644

Mason, S., Fernandez, F., Sharp, S., Chavira, G., Khachikian, C., Kwan, P., & Saetermoe, C. (2025). Enhancing graduate education pathways: A case study of a STEM undergraduate research experience program. *Studies in Graduate and Postdoctoral Education*. https://doi.org/10.1108/SGPE-05-2024-0053

Morales, D.X., Hyun, S.H., Rogers, J., Khachikian, C., & Guerrero, L. (2024). The effects of Entering Mentoring Training on biomedical UGR mentors: Who gains the most, in what domains, and at which type of institution? *Understanding Interventions*, 15–28.

Fernandez, F., Mason, S., Sharp, S., Chavira, G., Khachikian, C.S., Kwan, P., & Saetermoe, C. (2024). A mixed-methods study of how a critical race theory-informed undergraduate research experience program provides equitable support for aspiring graduate students. *Education Sciences*, 14(3), 334.

Vasquez-Salgado, Y., Camacho, T.C., Lopez, I., Chavira, G., Saetermoe, C.L., & Khachikian, C. (2023). "I definitely feel like a scientist": Exploring science identity trajectories among Latinx students in a critical race theory-informed undergraduate research experience. *Infant and Child Development*, 32(3), e2371.

Villasenor, V., Bui, A., Angie Guan, S.-S., Jain, D., Saetermoe, C., Chavira, G., & Khachikian, C. (2021). Mentors make a difference: Community college students' development in a biomedical research training program informed by critical race theory. *Journal of Applied Research in the Community College*, 28(1), 155–170.

Camacho, T.C., Vasquez-Salgado, Y., Chavira, G., Boyns, D., Appelrouth, S., Saetermoe, C., & Khachikian, C. (2021). Science identity among Latinx students in the biomedical sciences: The role of a critical race theory-informed undergraduate research experience. *CBE—Life Sciences Education*, 20(2), ar23.

Blakey, E., Khachikian, C., & Lemus, D. (2017). Increasing research requirements for tenure at teaching universities: Mission creep or mission critical? *Teacher-Scholar: The Journal of the State Comprehensive University*, 8(1), 3.

Saetermoe, C.L., Chavira, G., Khachikian, C.S., Boyns, D., & Cabello, B. (2017). Critical race theory as a bridge in science training: The CSUN BUILD PODER program. *BMC Proceedings*, 11(Suppl 12), 21.

Medina, R., Menezes, G., Khachikian, C., & Ellis, A. (2015). Use of fly ash as soil amendment to offset anion exclusion effect on nitrate transport. *Vadose Zone Journal*, 14(4), 1–9.

Sanchez, H., Menezes, G., Ellis, A., Espinosa-Villegas, C., & Khachikian, C. (2014). Laboratory investigations of weathering of soils from Mammoth Mountain, CA, a naturally CO_2-impacted field site. *Environmental Science & Technology*, 48(20), 12056–12062.

Khachikian, C., Guillaume, D., & Pham, T. (2011). Changes in student effort and grade expectation in the course of a term. *European Journal of Engineering Education*, 36(6), 595–605.

Guillaume, D.W., & Khachikian, C.S. (2011). The effect of time-on-task on student grades and grade expectations. *Assessment & Evaluation in Higher Education*, 36(3), 251–261.

Pech, H., Henry, A., Khachikian, C.S., Salmassi, T.M., Hanrahan, G., & Foster, K.L. (2009). Detection of geothermal phosphite using high-performance liquid chromatography. *Environmental Science & Technology*, 43(20), 7671–7675.

Hanrahan, G., Fan, T.K., Kantor, M., Clark, K., Cardenas, S., Guillaume, D.W., & Khachikian, C.S. (2009). Design and development of an automated flow injection instrument for the determination of arsenic species in natural waters. *Review of Scientific Instruments*, 80(10).

Barco, R.A., Patil, D.G., Xu, W., Ke, L., Khachikian, C.S., Hanrahan, G., & Salmassi, T.M. (2006). The development of iodide-based methods for batch and on-line determinations of phosphite in aqueous samples. *Talanta*, 69(5), 1292–1299.

Hanrahan, G., Salmassi, T.M., Khachikian, C.S., & Foster, K.L. (2005). Reduced inorganic phosphorus in the natural environment: Significance, speciation and determination. *Talanta*, 66(2), 435–444.

McDowell, M.M., Ivey, M.M., Lee, M.E., Firpo, V.V., Salmassi, T.M., Khachikian, C.S., & Foster, K.L. (2004). Detection of hypophosphite, phosphite, and orthophosphate in natural geothermal water by ion chromatography. *Journal of Chromatography A*, 1039(1–2), 105–111.

Khachikian, C.S., & Harmon, T.C. (2002). Long-term studies on the effects of nonvolatile organic compounds on porous media surface areas. *Journal of Environmental Quality*, 31(4), 1309–1315.

Khachikian, C., & Harmon, T.C. (2000). Nonaqueous phase liquid dissolution in porous media: Current state of knowledge and research needs. *Transport in Porous Media*, 38, 3–28.

Khachikian, C.S., & Harmon, T.C. (2000). Effects of nonvolatile organic contamination on the surface areas and adsorption energetics of porous media. *Langmuir*, 16(25), 9819–9824.

Khachikian, C.S. & Harmon, T.C. (2000). Release of polycyclic aromatic hydrocarbons from the vadose zone. In J. Kilduff, S. Komisar, & M. Nyman (Eds.), *Hazardous and Industrial Wastes* (pp. 135–144). Technomic Publishing Company.

Selected Conferences & Invited Talks

Camacho, T., Chavira, G., Khachikian, C., & Bocanegra, M. (2024, September). From access to excellence: Empowering diverse voices in STEM undergraduate research. 2024 NSF Regional HSI Conference on Servingness, Los Angeles, CA.

Chavira, G., & Khachikian, C. (2024, September). Empowering tomorrow's scholars: Institutionalization efforts to increase research capacity. CSU STEM-NET Webcast, CSU NSF HSI-STEM Grantees [Webcast panelist].

Chavira, G., & Khachikian, C. (2024, June). Empowering tomorrow's scholars: Critical race theory in institutionalization efforts. Council on Undergraduate Research ConnectUR Conference, College Park, MD.

Chavira, G., Khachikian, C.S., et al. (2023, May). Creating opportunities for minoritized undergraduate students to participate in mentored research. NSF Hispanic Serving Institutions PI Conference, San Antonio, TX.

Khachikian, C.S., & Zappia, N. (2022, November). Community Emission Reduction Grant Assistance and Training Program. UCLA Climate Research Symposium [invited].

Chavira, G., & Khachikian, C.S. (2022). Oakland University School of Engineering DEI workshop [invited by provost; 4-part workshop].

Chavira, G., Saetermoe, C., & Khachikian, C.S. (2017). BUILD PODER overview [invited]. NIH Training, Workforce Development, and Diversity Program Directors' Meeting, Baltimore, MD.

Chavira, G., Saetermoe, C., & Khachikian, C.S. (2017). Developing a science identity: Using developmental and critical race theoretical lenses in an undergraduate research training program. NIH Training, Workforce Development, and Diversity Program Directors' Meeting, Baltimore, MD.

Khachikian, C., Blakey, E., & Lemus, D. (2017). Historical perspective on increasing faculty research expectations. WASC Academic Resources Conference, San Diego, CA.

Khachikian, C. (2016). Open Data and Open Access. Open Access: A Day of Data, Northridge, CA.

Khachikian, C. & Lemus, D. (2016). What is a "Teaching University" anyway? Mission creep and the role of public universities. WASC Academic Resources Conference, Garden Grove, CA.

Khachikian, C. (2015, November). Diversity in the biomedical research workforce [panelist]. USU/APLU Presidents' and Chancellors' Meeting, APLU Annual Meeting, Indianapolis, IN.

Khachikian, C. (2015). BUILD-PODER [invited presentation to President's Cabinet]. Oregon State University, Corvallis, OR.

Khachikian, C., Lemus, D., & Oh, J. (2015). Making excellence inclusive: AAC&U Centennial Dialogues Faculty Symposium [invited]. Oregon State University.

Khachikian, C. (2015). Increasing diversity in the biomedical sciences [invited talk]. Huntington Medical Research Institutes, Pasadena, CA.

McNicholas, J., Khachikian, C., & Waite, J. (2014). The role(s) of the PUI sponsored research officer in consortia and collaborations. 56th Annual Meeting, National Council of University Research Administrators, Washington, DC.

Won, D., Schlemer, L., Vanasupa, L., Menezes, G., Pacheco-Vega, A., Rodriguez-Nikl, T., Sharif, A., & Khachikian, C.S. (2014). Beyond the basics: Transforming engineering education. ASEE Zone IV Conference, Long Beach, CA.

Asgari Lamjiri, M., Medrano, Y.S., Guillaume, D.W., & Khachikian, C.S. (2013). Particle-bound PAH emission from the exhaust of combustion chamber. American Geophysical Union Fall Meeting, San Francisco, CA.

Menezes, G.B., Moo-Young, H.K., Khachikian, C., & de Brito Galvão, T.C. (2012). XII International Symposium on Environmental Geotechnology, Energy and Global Sustainable Development.

Raskin, S., Nafis, H., Ellis, A.S., & Khachikian, C.S. (2011). Geochemistry of springs and groundwater in a region impacted by leakage of natural carbon dioxide around Mammoth Mountain, Mammoth Lakes, CA. AGU Fall Meeting Abstracts.

Szutu, D., Santilena, R., Ellis, A.S., & Khachikian, C.S. (2011). Geochemistry of a lake impacted by natural CO_2 leakage: Case study of Horseshoe Lake, Mammoth Lakes, California. AGU Fall Meeting Abstracts.

Won, D., Menezes, G., Pacheco-Vega, A., Rodriguez-Nikl, T., Sharif, A., & Khachikian, C.S. (2015). Sophomore Unified Core Curriculum for Engineering Education (SUCCEEd) at CalStateLA. 2015 ASEE Annual Conference and Exposition, Seattle, WA.

Chavira, G., Saetermoe, C., & Khachikian, C. (2015). Critical race theory as a framework for research training and mentoring. Critical Race Studies in Education Association Conference, Nashville, TN.

Dwyer, C.D., Ellis, A.S., & Khachikian, C.S. (2010). Water quality in an elevated CO_2 region: A field study at Mammoth Lakes, CA. AGU Fall Meeting Abstracts.

Santilena, R., Szutu, D., Ellis, A.S., & Khachikian, C.S. (2010). Major ion geochemistry of Horseshoe Lake, Mammoth Lakes, California. AGU Fall Meeting Abstracts.

Medrano, Y., Guillaume, D.W., Khachikian, C.S., & Pham, T.K. (2010). Particulate matter: A new approach. 239th ACS National Meeting, San Francisco, CA.

Ghadiri, M., Khachikian, C.S., Guillaume, D.W., Pham, T.K., Esparza, S., Guillaume, T., Ortega, M., & Bautista, E. (2010). PAHs and particle emissions from a combustion chamber. 239th ACS National Meeting, San Francisco, CA.

Vahmani, P. & Khachikian, C.S. (2010). Microtextural analysis of weathering in CO_2 saturated soils.

239th ACS National Meeting, San Francisco, CA.

Singh, A., Singh, H., Pham, T.K., & Khachikian, C.S. (2010). Increasing the efficiency of the enzymatic decomposition of cellulose to glucose as a feedstock for biofuels. 239th ACS National Meeting, San Francisco, CA.

Guillaume, T., Pham, T.K., Guillaume, D.W., Rauda, C., Luong, H., Ramos, A., & Khachikian, C.S. (2010). Combustion flow visualization through Schlieren method. 239th ACS National Meeting, San Francisco, CA.

Ortega, M., Ghadiri, M., Guillaume, D., Pham, T., Esparza, S., & Khachikian, C.S. (2009). Emissions from the combustion of fuels in a gas turbine engine. 238th ACS National Meeting, Washington, DC.

Nation, H.E., Monterrosa, A., Rademacher, L.K., & Khachikian, C.S. (2006). Characterization of wildfire-induced changes in soil properties by CHNS and stable isotope analysis. EOS Trans. AGU, 87(36), Jt. Assem. Suppl., Abstract B43A-13.

Foster, K.L., Tostado, E., Gonzalez, A., & Khachikian, C.S. (2006). Monitoring polycyclic aromatic hydrocarbon photooxidation products using LC/MS/MS techniques. 40th Western Regional Meeting, ACS, Anaheim, CA.

Khachikian, C.S., Salmassi, T.M., Hanrahan, G., & Foster, K. (2006). Monitoring air and water quality using a microlayer sampler. 40th Western Regional Meeting, ACS, Anaheim, CA.

Nation, H., Santilena, R., & Khachikian, C.S. (2006). Effects of wildfires on the physicochemical properties of soils. The Ravage of the Planet, 1st International Conference on the Management of Natural Resources, Bariloche, Argentina.

Salmassi, T.M. & Khachikian, C.S. (2006). The effects of magmatic carbon dioxide on the distribution and diversity of soil bacteria. The Ravage of the Planet, 1st International Conference, Bariloche, Argentina.

Nation, H.E., Lopez, S.R., Monterrosa, A., Khachikian, C.S., Rademacher, L.K., & Hogue, T.S. (2005). Wildfire-induced changes in the physico-chemical properties of soils. EOS Trans. AGU, 86(52), Fall Meet. Suppl., Abstract H51C-0366.

Mannino, I. & Khachikian, C.S. (2005). Geochemical cycling of phosphorus compounds in sediments. Abstracts of Papers of the ACS, 230: U1578-U1578.

Khachikian, C. (2005). Environmental engineering research at the California State University Los Angeles [invited]. Florida State University, Water Science and Engineering Seminar.

Khachikian, C. (2005). Metals in the sediments of Pt. Mugu Naval Base [invited]. Auburn University.

Mannino, I. & Khachikian, C.S. (2004). Extraction and analysis of PAHs in surface soils near freeways in Los Angeles. EOS Trans. AGU, 85(47), Fall Meet. Suppl., Abstract H53A-1199.

Orozco, M., Foster, K.L., Ivey, M.M., et al. (2004). Investigating photodissociation of phosphorus oxyanions. Abstracts of Papers of the ACS, 227: U615-U615.

Gonzalez, Y. & Khachikian, C.S. (2004). Methods of detecting polycyclic aromatic hydrocarbons in rural sediments and urban soils. SACNAS National Conference, Austin, TX.

Khachikian, C.S., Plotkin, C., Monterrosa, A., & Ramirez, P. (2004). The release of chromium in aquifers underlying the Western Mojave Desert. EOS Trans. AGU, 85(47), Fall Meet. Suppl., Abstract H53A-1203.

Monterrosa, A. & Khachikian, C.S. (2004). The effects of moisture on the surface and pore areas of kaolinite, montmorillonite and silica gel. EOS Trans. AGU, 85(47), Fall Meet. Suppl., Abstract H31D-0418.

Monterrosa, A. & Khachikian, C.S. (2002). The effects of moisture on the surface of Ottawa sand, glass beads and silica gel. SACNAS, Anaheim, CA.

Monterrosa, A. & Khachikian, C.S. (2002). Quantifying the effects of varying relative humidity on the surface areas of silica gel and Ottawa sand. SCCUR, Pasadena, CA.

Lee, M.E., Ramirez, S., Gonzalez, Y., Khachikian, C., & Foster, K.L. (2002). Characterization of polycyclic aromatic hydrocarbons (PAHs) and PAH derivatives in aerosol and soil samples. ACS National Meeting, Boston, MA.

Becerra, C.A., Wong, N., & Khachikian, C.S. (2002). Sediment surface areas, organic content, and metal fractionation of Point Mugu sediments. EOS Trans. AGU, 83(47), Fall Meet. Suppl., Abstract B22B-0761.

Khachikian, C.S. & Guillaume, D.W. (2002). Attitudes vs. performance in the engineering classroom. ASEE Annual Conference & Exposition, Montreal, Canada.

Khachikian, C.S. (2002). Processes at environmental interfaces [Session Chair]. CEA-CREST Third Annual Environmental Science Conference, Pasadena, CA.

Khachikian, C.S. (2001). Is graduate school for you? CE Pacific District Conference, Los Angeles, CA.

Khachikian, C.S. (2001). The effects and behavior of solid organic compounds in porous media. CEA-CREST Seminar Series, CSU Los Angeles.

Ramirez, S. & Khachikian, C.S. (2001). The effects of motion on the sorption of organics. SCCUR, Los Angeles, CA.

Teaching

Taught 14 different courses from introductory 100-level to advanced graduate seminars, including two general education courses serving non-majors. Chaired 16 master's thesis committees; served on 14 additional thesis committees.

- Recognized nationally for teaching excellence: ExCEEd New Faculty Excellence in Teaching Award (ASEE, 2002), Distinguished Engineering Educator Award (The Engineer's Council, 2020), and Professor of the Year three times at Cal State LA (2000, 2004, 2009)
- Active researcher in engineering education with a current NSF grant (2025–28) and publications in *European Journal of Engineering Education* and *Assessment & Evaluation in Higher Education*; manuscripts in preparation for *Journal of Engineering Education* on engineering group identity and degree completion
- Led a faculty team to redesign the engineering core curriculum around a competency-based, "learn by doing" model with NSF funding (DUE-1246130), emphasizing hands-on, experiential approaches to undergraduate engineering education
- Designed and mentored undergraduate research experiences at scale through BUILD PODER and NSF REU Sites, increasing faculty-mentored research participation at CSUN by 500%

Service

Board Service & Community Engagement

- **AltadenaWILD**—Board Member; led urban reforestation initiative following 2025 Altadena fires; successful advocacy against major development encroachment (current)
- **American University of Armenia**, College of Science and Engineering Advisory Board (2023–present)
- **Los Angeles Cleantech Incubator (LACI)**, Steering and Navigation Committees (2013–2016)
- **Fernandeño Tataviam Band of Mission Indians** / Tataviam Land Conservancy—active USDA research partner

Strategic Industry & Laboratory Partners: Boeing | Southern California Edison | NASA/JPL | Los Alamos National Laboratory | The Aerospace Corporation | Northrop Grumman | Medtronic

Paper & Proposal Review

Illinois Water Resources Center, Proposal Review. Reviewer for *Environmental Science & Technology*; *Environmental Engineering Science*; *Environmental Toxicology and Chemistry*; *Langmuir*; *Journal of Environmental Engineering*; *Journal of Environmental Quality*. SERDP/DOD Proposal Review Panel. SACNAS conference reviewer. Engineering Division ASEE conference reviewer (Instrumentation division). NSF Panels: I/USE, Environmental Engineering, Research Experience for Teachers, Research Experience for Undergraduates, CREST, Graduate Research Fellowship, HSI Program.

National – Policy & Advocacy

2017–2019	Inaugural Chair, APLU Resiliency Strand
2016–2018	USU/APLU Diversity and Inclusivity Campus Climate Assessment
2014–2016	Co-chair, USU/APLU Biomedical Research Workforce Action Group
2014–2016	Executive Steering Committee, NIH Diversity Consortium

National Service

2023–2024	NSF HSI Proposal Review Panel
2021	Co-lead, NIH Diversity Program Annual Grantees Conference
2021	Member, NIH Diversity Program Consortium writing group
2009–2010	ASCE Environmental and Water Resources Institute Educational Task Force Committee
2009	Water Environment Federation (WEF) Literature Review Committee
2006–2009	ASCE Environmental and Water Resources Institute – Groundwater Quality Committee
2005	NSF-funded CLEANER, educational sub-committee
2002	Assistant Mentor, ASCE Excellence in CE Education (ExCEEd) workshop

International

2023–pres.	Advisory Board, College of Science and Engineering, American University of Armenia

Regional

2019 Co-Chair, CSU-wide Data Working Group: Data Collection Processes Subcommittee
2009–2011 Advisory Board Member, East Los Angeles College Green Science Initiative
2009–2011 External RTP Reviewer for faculty at U. of the Pacific, Northern Arizona U., and LMU
2006 KTLA (Channel 5) series feature "S.O.S. H2O"
2003–2013 Ocean Studies Institute (OSI) Affiliated Scientist
2003 JPL – Liaison for the CSU-NASA Education Collaborative
2003 OSI Advisory Board Member for CI-CORE

CSU Northridge – Campus Service

2024 Member, College Personnel Committee, College of Engineering and Computer Science
2024 Chair, Department Research Task Force
2023 Member, College Personnel Committee, College of Engineering and Computer Science
2023 Chair, Department Personnel Committee
2023 Chair, CECM Department Research Task Force
2023 Member, CECM Department Assessment Committee
2023 Member, Tseng College, M.A. in Design & Innovation Curriculum Advisory Group
2022 Member, CECM Departmental Chair Selection Committee
2022 Global HSI Equity Innovation Hub Makerspace & Incubator Lab Focus Group
2021 Member, CSUN Road Map to the Future Steering Committee (invited by Provost)
2021 Member, Equity and Innovation Hub: Outreach & Engagement Group (invited by Dean)
2021 Member, Equity and Innovation Hub: Makerspace Group (invited by Dean)
2021 Faculty Moderator, CE and Contr. Mgmt, Virtual Senior Design Showcase
2021 Member, CECM Department RTP Committee
2021 Chair, Department Post Tenure Review Committee
2021 Judge, 2021 CSUNPosium
2020 Member, College of Engineering and Computer Science RTP Committee
2019 Chair, Associate Dean Recruitment Committee, College of Eng. & Computer Science
2019 Member, CECM Department RTP Committee
2018 Co-chair of CSUN Makerspace Committee
2016–2018 Graduation Initiative (GI) Core Administrative Team
2014–2020 Judge, Annual CSUN Student Research and Creative Activities Symposium
2013–2019 Admissions Planning Group Member
2013–2019 Strategic Enrollment Planning Committee
2013–2016 Los Angeles Cleantech Incubator (LACI), Steering and Navigation Committees
2013–2019 Journal on Technology and Persons with Disabilities, Organization Advisory Council
2013–2019 Center for Disabilities, Advisory Council

CSU Los Angeles – College of Engineering, Computer Science, and Technology

2010–2013 ECST Research Task Force
2009–2013 ECST Curriculum Task Force
2011–2013 ECST College RTP Committee (2 terms)
2008–2011 ARTP committee for department of Mechanical Engineering
2007–2011 ARTP committee for department of Civil Engineering
2008 Search committee for department of Mechanical Engineering
2007–2011 Search committee for department of Civil Engineering
2003–2009 College Instructional Affairs Committee
2008 Post Promotion Increase committee (Civil Eng. and Mechanical Eng.)
2006 Search committee for Associate Dean of Engineering
2006 Strategic Planning Committee for Graduate Studies
2003–2006 Program Modification Task Team, Civil Engineering
2003–2006 Graduate Affairs Committee, Department of Civil Engineering
2004 American Society for Civil Engineers Student Chapter Advisor

CSU Los Angeles – Campus Service

2011–2013 University Faculty Policy Committee
2011–2013 Honors Convocation and Commencement Committee
2009–2013 Lead author and director, Joint Doctorate in Complex Systems with CGU
2012 Search Committee, Director of Office of Research and Development
2011–2013 Grand Marshal
2010–2012 Advisory Committee Member, Community Engagement Initiative
2009–2012 WASC Educational Effectiveness research team member
2000–2011 Judge, 10th, 11th, 13th, 16th, and 18th Annual CSULA Symposium of Research
2006–2010 Tau Beta Pi Faculty Advisor
2005–2010 Marshal, 41st, 42nd, and 44th Honors Convocation and Commencement
2009 Ad hoc committee to evaluate Faculty Perception of Administrators
2008 Invited member of CSULA team, Council for Undergraduate Research workshop
2008 Advisory committee, Urban Studies Program
2007 Search committee, Dean of Natural and Social Sciences
2006 Vice chair, Awards and Leaves Subcommittee
2005 Academic Senator
2003 University-Wide Faculty Development Task Force
2003 Academic Technology Advisory Committee – Campus rep to system-wide committee
2002 Vice-chair and Chair, Academic Information Resources Committee
2000 Coordinator of the Cyprus-CSULA International Exchange Program
1999 Faculty advisor, Society of Hispanic Engineering and Science Students (SHESS)