

## **Rajalingam (Raj) Dakshinamurthy, Ph.D.**

Dr. Rajalingam Dakshinamurthy (Dr. Raj D) is a distinguished academic leader, scholar, and strategic innovator with a proven record of promoting student success, institutional growth, and community engagement across public higher education. He currently serves as Provost and Senior Vice President for Academic Affairs at The University of Texas Permian Basin (UTPB), where he directs the academic operations and collaborates closely with faculty, staff, and community partners to improve academic quality and expand opportunities. In this capacity, he manages academic programs, faculty affairs, research and graduate studies, and student success initiatives, overseeing a \$40 million Academic Affairs budget and a \$35 million research enterprise. His leadership has driven enrollment increases, enriched academic offerings, and enhanced retention and graduation rates.

Dr. Raj is highly respected for turning vision into action through collaborative leadership and strategic partnerships. He has secured and managed substantial external funding to support workforce development, healthcare education, and innovation. He has created new undergraduate and graduate programs, along with stackable certificates across various fields, and expanded graduate education in humanities, behavioral health, and the energy sector. His experience includes working with the University of Texas System, state coordinating boards, and national accreditation agencies to ensure institutional compliance, alignment, and quality. He has also shown strong leadership in community involvement and fundraising, diversifying revenue sources and boosting support for student success, internships, and high-impact practices. Previously, he served as Dean of two colleges at UTPB and as Associate Vice President of Research and Dean of Graduate Studies, where he more than doubled research spending.

Earlier in his career, Dr. Raj held leadership roles at Austin Peay State University and Western Kentucky University, consistently advancing research, graduate education, and student success through data-driven decision-making and shared governance. Trained as a biochemist, he earned his Ph.D. and Post-Doctoral from the University of Arkansas and completed an executive leadership program at Harvard University. Throughout his career, he has been guided by a dedication to student-centered leadership, inclusive excellence, and institutional transformation. His leadership aligns closely with the priorities of the University of Wisconsin–Eau Claire, and he is known for his accessibility, integrity, and ability to unite people around a shared vision to advance student success, academic excellence, and community impact.

## CURRICULUM VITAE

### **RAJ DAKSHINAMURTHY, Ph.D.**

Provost and Senior Vice President for Academic Affairs,  
& Research and Graduate Education  
The University of Texas Permian Basin

I am a strategic and visionary academic leader with extensive experience in faculty and administrative roles across five diverse institutions. My leadership style is built on fostering collaboration, promoting transparency, and driving institutional growth through strategic planning and fiscal responsibility. I have a proven ability to build strong partnerships with faculty, staff, students, community stakeholders, and funding agencies, ensuring the university's role in advancing regional economic, civic, and cultural development. Throughout my career, I have consistently demonstrated a commitment to servant leadership, inclusive governance, and academic excellence. My experience spans research administration, graduate and undergraduate education, faculty development, and institutional advancement. I am dedicated to shaping academic programs that support student success and institutional sustainability. For a detailed overview of my professional accomplishments, please refer to my full curriculum vitae.

### **EDUCATION**

**University of Arkansas** – Ph.D. in Biochemistry & Structural Biology, 2005  
*Dissertation: Understanding the Non-Classical Secretion of Fibroblast Growth Factor-1*

**St. Joseph's College, India** – M.Phil. in Chemistry, 2001  
*Thesis: Potassium Bromate in Aqueous Medium*

**St. Joseph's College, India** – M.S. in Chemistry, 1999  
*Thesis: Analysis of Corrosion in Alloys Using Atomic Emission Spectroscopy*

**St. Joseph's College, India** – B.S. in Chemistry, 1997

### **EXECUTIVE LEADERSHIP TRAINING**

**Harvard University, Graduate School of Education** – Institute of Education Management and Leadership Program (2024)

## **LEADERSHIP EXPERIENCE**

### **THE UNIVERSITY OF TEXAS PERMIAN BASIN (2020 – Present)**

#### **Provost and Senior Vice President for Academic Affairs (2023-Present)**

- Spearheaded strategic initiatives to enhance academic excellence, enrollment growth, and faculty development.
- Strengthened institutional accreditation processes and compliance with regulatory bodies.
- Managed university-wide academic planning, faculty hiring, and institutional policies.
- Led multi-million-dollar budget planning, ensuring fiscal responsibility and resource optimization.
- Secured significant external funding through fundraising efforts, fostering philanthropic and industry partnerships.
- Fostered innovation in research, curriculum development, and community engagement to expand the university's impact.

#### **Dean, College of Arts and Sciences & College of Health Sciences and Human Performance (2022-2023)**

- Strengthened interdisciplinary collaboration and developed programs aligned with workforce needs.
- Implemented faculty development programs, expanded research initiatives, and fostered interdisciplinary collaboration.
- Led the expansion of health-related programs and secured funding for new research labs and faculty development.
- Implemented targeted recruitment and retention strategies, leading to measurable enrollment growth.
- Enhanced student success initiatives, retention strategies, and faculty recruitment.

#### **Associate Vice President of Research and Dean of Graduate Studies (2020-Present)**

- Championed research growth, securing external funding and advancing graduate education.
- Expanded both online and innovative on-ground learning initiatives and technological integration to improve academic accessibility

#### **Tenured Professor, Chemistry (2020-Present)**

### **AUSTIN PEAY STATE UNIVERSITY (2016 – 2020)**

#### **Associate Provost for Research | Executive Director, Office of Research & Sponsored Programs**

- Transformed the university's research enterprise, increasing external funding and faculty engagement.
- Established innovative student research programs that enhanced experiential learning and career readiness.

**Dean, College of Graduate Studies | Director, Office of Student Research and Innovation**

- Developed new interdisciplinary graduate programs and online offerings to meet workforce demands.
- Strengthened faculty mentorship and research engagement to enhance graduate student experience.
- Achieved a consistent year-over-year enrollment growth in graduate programs over four years, expanding access to advanced education.

**Tenured Professor, Chemistry (2016-2020)**

**WESTERN KENTUCKY UNIVERSITY (2009 – 2016)**

**Director, Graduate Programs | Assistant Department Chair, Chemistry**

- Led academic program expansion, research initiatives, and faculty development efforts.
- Implemented faculty mentorship programs, encouraging research collaborations and professional development.
- Managed graduate admissions processes, enhanced student recruitment strategies, and improved retention rates.

**Tenured Associate & Tenure-Track Assistant Professor, Chemistry (2009-2016)**

**EARLY CAREER & INTERNATIONAL EXPERIENCE**

**University of Arkansas – Senior Research Associate (2005-2009) & Graduate Research/Teaching Assistant (2002 – 2005)**

- Conducted interdisciplinary protein biochemistry and drug discovery research, securing competitive research funding, and contributing to high-impact publications.
- Provided mentorship and academic guidance to graduate and undergraduate students, fostering an inclusive and research-driven learning environment.
- Collaborated with cross-functional research teams, industry partners, and national laboratories to drive advancements in protein isolation.
- Designed and taught undergraduate courses and labs by incorporating innovative teaching methodologies to enhance student engagement and learning outcomes.

**National Tsing Hua University, Taiwan – Senior Research Associate (2000 – 2002)**

- Led pioneering research in structural biology, contributing to the university's global reputation for excellence in science and technology.
- Developed and implemented international research collaborations, strengthening institutional partnerships between Taiwan and other global research institutions.
- Supervised and trained graduate students in laboratory techniques, research methodologies, and data analysis.
- Published research findings in prestigious peer-reviewed journals, reinforcing the university's commitment to academic and scientific leadership.
- Mentored students in independent research projects, guiding them through proposal development, data collection, and publication processes.

**St. Joseph's College, India – Senior Lecturer & Research Project Mentor (1999 – 2000)**

- Delivered engaging lectures in organic and biochemistry to undergraduate students, emphasizing critical thinking and critical thinking skills.
- Worked with senior faculty colleagues on curriculum development initiatives to modernize course content and align with emerging industry trends and global academic standards.
- Actively contributed to faculty committees and institutional development initiatives, demonstrating leadership in academic governance.

**KEY LEADERSHIP STRENGTHS**

- Institutional Strategy & Visionary Leadership
- Faculty & Staff Development
- Student Success & Retention Strategies
- Fundraising & Philanthropic Engagement
- Fiscal Management & Resource Allocation
- Research Growth & External Funding Acquisition
- Academic Program Development & Accreditation
- Equity Advocacy
- Shared Governance & Stakeholder Engagement
- Enrollment Growth & Strategic Recruitment
- Global Partnerships & Community Engagement

## **PROFESSIONAL EXPERIENCE**

### **Provost and Senior Vice President for Academic Affairs**

**The University of Texas Permian Basin, Odessa, TX**

**May 2022 – August 2022 | May 2023 – Present**

As the **Chief Academic Officer** of The University of Texas Permian Basin (UTPB), a regional comprehensive **Hispanic-Serving Institution (HSI)** within The University of Texas System, I provide strategic leadership to enhance academic excellence, align institutional priorities with the University's strategic plan, and foster student success. I serve as a key member of the senior leadership team and function as the institution's executive officer in the President's absence.

### **Key Responsibilities & Accomplishments:**

#### **Academic Leadership & Institutional Strategy**

- Spearheaded the restructuring of academic programs, establishing the College of Arts and Humanities, College of Engineering and Sciences, and College of Health Sciences, ensuring strategic alignment with institutional goals.
- Developed and implemented an Academic Affairs Strategic Plan to support the University's goal of doubling the number of graduates by 2035.
- Oversaw 101 academic majors and concentrations and 35 graduate programs, including 43 fully online undergraduate and graduate programs, ensuring program integrity and academic rigor.
- Worked under the leadership of the President in development and execution of a \$100 million campus transformation initiative, improving instructional design and student support services.

#### **Faculty & Staff Development**

- Provided leadership for over 400 faculty members and 40 staff, overseeing hiring, contract negotiations, evaluations, and retention efforts.
- Implemented an equitable faculty evaluation system, ensuring recognition of exceptional performance and fostering leadership pipelines within academic units.
- Developed and executed an organizational structure for Academic Affairs, adding key leadership roles such as Institutional Research (IR), Institutional Effectiveness (IE), Associate Provost, Graduate Dean, Registrar, and Innovation & Commercialization team.

#### **Budgeting & Fiscal Management**

- As Provost and Senior Vice President for Academic Affairs, I directly managed a \$40 million Academic Affairs budget, ensuring resources were allocated strategically to maximize faculty, staff, and student success. I also oversaw the allocation of a \$35

million scholarship portfolio to expand access to higher education, particularly in STEM, pre-health, behavioral health, and graduate education. These efforts required careful balancing of fiscal responsibility with growth strategies, ensuring sustainability while meeting the needs of a Hispanic-Serving Institution within the UT System.

- In my concurrent role as Associate Vice President of Research and Dean of Graduate Studies, I administered a \$30 million research and graduate studies budget, driving investments in research infrastructure, faculty support, graduate assistantships, and student success initiatives. Under my fiscal leadership, UTPB more than doubled its research expenditure in two years—from \$9 million in FY 2020 to \$25 million in FY 2023—through strategic grant management, internal funding programs, and external partnerships. I also stewarded more than \$14 million in grant funding for student success and administered 30 UT System Rising STARS grants totaling \$9 million, making UTPB the leading recipient among comprehensive UT institutions.
- As Dean of the Colleges of Arts & Sciences and Health Sciences and Human Performance, I led resource alignment across the University’s largest academic unit. I worked collaboratively with finance, enrollment, student success, and advancement teams to ensure that budgetary allocations supported enrollment growth, faculty development, and accreditation readiness—particularly for nursing, social work, and other high-demand programs.

### **Facilities Development and Capital Projects**

Throughout my tenure at The University of Texas Permian Basin (UTPB), I have played a pivotal role in advancing the institution’s physical infrastructure, aligning capital projects with academic, research, and community priorities. My leadership has consistently emphasized leveraging external partnerships, securing competitive funding, and ensuring that facilities directly enhance student success, faculty research, and regional economic development. These experiences reflect a consistent ability to envision and execute major capital projects, to align physical infrastructure with academic and research missions, and to secure the funding and partnerships necessary to bring transformational initiatives to completion.

- One of my hallmark achievements was securing a combined \$5 million investment from the Odessa Development Corporation (ODC) and the Midland Development Corporation (MDC) to renovate the UTPB Center for Energy and Economic Diversification (CEED). This project was designed not only as an academic facility but also as a catalyst for regional workforce and economic growth. Under my leadership, the CEED was transformed into a dynamic hub for innovation and entrepreneurship. The renovated space now integrates a business incubator and maker space to support start-ups and small businesses, an executive classroom that serves the Executive MBA program and regional business leaders, and advanced co-working spaces that bring together entrepreneurs, faculty, and students for collaborative projects. In addition, the facility houses an e-sports arena that engages a rapidly growing industry, an Advanced Manufacturing Center that strengthens technical training for high-demand workforce sectors, and the Texas Water &

Energy Institute, which serves as a centralized research hub addressing critical water and energy challenges facing both faculty researchers and the broader Permian Basin region. Collectively, these facilities have redefined CEED as a hub where academic innovation, industry partnerships, and community needs converge to drive long-term prosperity for the region.

- In addition to CEED, I secured more than \$9 million in startup research funds from the University of Texas System, which enabled the establishment of cutting-edge research facilities and the renovation of laboratories across campus. These investments substantially expanded UTPB's research capabilities, provided modern infrastructure for faculty and student, and positioned the university for significant growth in externally funded research.
- Working closely with university leadership, I also secured institutional and UT System support to modernize classrooms and upgrade instructional technologies. These renovations produced a suite of smart classrooms equipped with state-of-the-art digital learning tools, ensuring that our faculty and students have access to high-quality, future-ready teaching and learning environments.
- Most recently, I have been overseeing the academic side of a \$100 million campus transformation initiative as part of the university's leadership team. This comprehensive effort includes the renovation and upgrade of more than 200 faculty offices, over 30 classrooms, and multiple computer laboratories. My role has been to ensure that design and renovation plans align with academic priorities, faculty needs, and student success strategies. By integrating pedagogical considerations into every stage of planning, this initiative is not only modernizing infrastructure but also reshaping UTPB's academic environment, creating vibrant spaces that promote innovation, collaboration, and long-term institutional growth.

### **Philanthropy, Fundraising, and Resource Development**

- \$2.1 Million Odessa Development Corporation Investment (2023–present): Served as co-Principal Investigator on a successful proposal that established UTPB's Office of Innovation and Commercialization (OIC), integrating a business incubator, makerspace, esports facility, and advanced manufacturing lab. Under my oversight as Provost and VPR, OIC has become a flagship unit within Academic Affairs, producing measurable impacts in entrepreneurship, applied research, and regional economic growth
- \$10 Million Behavioral Health Graduate Expansion (2023–present): Collaborated directly with the University President and advancement partners to secure \$5 million from the Permian Strategic Partnership and \$5 million from the Scharbauer Foundation. This investment created graduate scholarships, faculty lines, and professional staff to expand clinical psychology, counseling, and social work programs. I managed the fund's deployment by hiring a senior grant director, overseeing compliance, and ensuring

accountability. Enrollment in these programs has quadrupled—from 50 students to over 200—and included the launch of the University’s Master of Social Work program.

- **Civil Engineering Program Startup Funding (\$2.6 Million Secured):**  
Recognizing the region’s critical workforce need, I spearheaded fundraising efforts with local foundations, development corporations, and philanthropic partners to launch UTPB’s first Civil Engineering program. Our original \$3 million need was substantially met through \$2.6 million in external support. As Provost, I oversaw faculty and staff hiring, laboratory development, and accreditation preparation, culminating in the formal launch of the program in Fall 2025.
- **\$10 Million Pre-Health Scholarship Initiative (2023–present):**  
Partnered with the Permian Strategic Partnership and more than 25 oil and gas companies to establish a scholarship fund covering full tuition and fees for nursing and pre-med students. I have managed this program to ensure scholarships are paired with professional advising, clinical placements, and student support services, dramatically increasing enrollment and retention in health sciences.

### **Accreditation & Compliance**

- Served as the institutional liaison to Southern Association of Colleges and Schools (SACSCOC), Texas Higher Education Coordinating Board (THECB), The University of Texas System (UTS), and other accrediting agencies.
- Managed accreditation efforts for multiple programs, collaborating with stakeholders to ensure compliance with ABET, AACSB, NASAD, CSWE, TEA, TBN, and other accrediting bodies.

### **Student Success & Institutional Growth**

- Led initiatives to enhance student retention, graduation rates, and overall academic achievement, working collaboratively with faculty and administrators to improve educational outcomes.
- Implemented digital transformation efforts, streamlining program assessments, faculty evaluations, curriculum processes, and cataloging curriculum changes.
- Expanded the university’s electronic library collection, improving research accessibility for students and faculty.

### **Supporting and Promoting Athletics**

As Chief Academic Officer at The University of Texas Permian Basin (UTPB), I have valued and championed the crucial role that athletics plays in the life of a university. At UTPB, I served on the University Athletics Committee and worked closely with the Vice President for Athletics and the Athletics Compliance Team to ensure that student-athletes received the necessary academic support to excel both in competition and in the classroom. I spearheaded the development of flexible academic programs such as General Studies and the Bachelor of Applied Arts and Sciences (BAAS) degree, which were designed to accommodate the unique demands of

student-athlete schedules while maintaining academic rigor. These programs created pathways for athletes to progress toward their degrees and strengthened the University's ability to recruit and retain top talent. In addition, I actively contributed to fundraising initiatives that expanded athletic scholarships, collaborating with advancement colleagues and external partners to increase resources available for student-athletes.

### **Key Contributions:**

- Served on the University Athletics Committee to ensure alignment of athletics with academic priorities and compliance standards.
- Collaborated with the Vice President for Athletics and Athletics Compliance Team to secure approved academic support for student-athletes.
- Spearheaded the creation of flexible degree programs, including General Studies and BAAS, designed to support student-athlete success.
- Actively participated in fundraising efforts to expand athletic scholarships and strengthen financial support for student-athletes.
- Positioned athletics as a driver of student success, institutional identity, and regional community engagement.

### **Community Engagement & External Partnerships**

- Strengthened relationships with business, community, and educational leaders to foster partnerships that enhance the region's educational and economic development.
- Established Memorandums of Understanding (MOUs) with multiple community colleges, facilitating seamless transfer pathways across Texas and New Mexico.
- Worked closely with local school districts, medical centers, and industry partners to develop student pipelines and create experiential learning opportunities.
- Played a pivotal role in fundraising efforts alongside the President and Advancement Team, securing resources for scholarships, faculty endowments, program startup costs, and long-term sustainability initiatives.

### **University System Leadership & Governance**

- Served as the most senior Provost within The University of Texas System on the UT System Provost's Council, representing UT Permian Basin's academic interests at the system level.
- Acted as a key strategic advisor to the President, aligning academic priorities, community outreach, and fundraising efforts with the institution's mission.
- Collaborated with deans, department chairs, and campus leaders to develop strategic faculty staffing plans in alignment with institutional goals.

## **DEAN, COLLEGE OF ARTS & SCIENCES AND COLLEGE OF HEALTH SCIENCES AND HUMAN PERFORMANCE**

**The University of Texas Permian Basin, Odessa, TX**

**2022 – 2023**

As the Dean of the College of Arts & Sciences and the College of Health Sciences and Human Performance, I served as the chief academic officer, reporting directly to the Provost and Senior Vice President for Academic Affairs. In this role, I provided strategic leadership, fostering academic excellence and aligning the College's priorities with the broader vision of the University. I worked closely with the provost's senior leadership team, faculty, staff, and other university stakeholders to drive innovation and enhance student success.

The College of Arts & Sciences is the largest academic unit at the University, encompassing twelve departments and twenty programs, serving approximately 3,000 students with over 90 full-time faculty and 50+ additional staff. Additionally, I oversaw the College of Health Sciences and Human Performance, which includes key academic units such as the School of Nursing, Social Work, Human Performance, Psychology, Biology, and Community & Family Health. The College also houses several research centers, including the Center for Interprofessional and Experiential Learning and the Midland Health Simulation and Learning Resource Center.

### **Key Achievements & Leadership Contributions:**

- Led a strategic and collaborative process to align resources effectively, fostering university-wide innovation while prioritizing student needs.
- Worked across campus with stakeholders in finance, enrollment management, student success, marketing, and student financial services to enhance institutional effectiveness.
- Provided thought leadership in teaching, research, and faculty development by collaborating across all academic disciplines.
- Championed student success by supporting initiatives that improved retention, academic achievement, and timely graduation.
- Developed partnerships with external organizations, funding agencies, and industry leaders to strengthen research and educational opportunities that contribute to the region's economic growth.
- Played a key role in advancing accreditation efforts for the Nursing program, including the successful completion of self-study in collaboration with the Texas Board of Nursing (TBN) and the Commission on Collegiate Nursing Education (CCNE).
- Led the strategic realignment of graduate programs in Spanish, English, History, Kinesiology, Exercise Science, Athletic Training, and Social Work to enhance program effectiveness.
- Adapted the College to evolving trends in higher education, including restructuring academic departments, optimizing course offerings, and exploring new delivery models.

- Partnered with the enrollment team to develop a comprehensive strategy to increase undergraduate and graduate enrollment.
- Implemented equitable and sustainable faculty development initiatives, fostering a culture of continuous professional growth.
- Secured and supported various external grants from organizations such as NSF IRES, NSF REU, NIH GETPHIT, NEA, Odessa Arts, and NEH, contributing to the University's research and programmatic funding.

## **ASSOCIATE VICE PRESIDENT OF RESEARCH AND DEAN OF GRADUATE STUDIES**

**The University of Texas Permian Basin, Odessa, TX**

**2020 – Present**

### **Kye Responsibilities**

As the Associate Vice President of Research and Dean of Graduate Studies, I serve as the university's chief research officer, providing visionary leadership in developing, maintaining, and expanding the institution's research enterprise and graduate education infrastructure. My role encompasses oversight of all matters related to research and graduate studies, including the operations of the Office of Research and Sponsored Programs, the Office of Undergraduate Research, and the Graduate Studies Office.

I work closely with cabinet members to shape and implement university-wide strategies related to research, graduate education, and institutional growth. I play an active role in solicitation and stewardship activities, securing monetary gifts and endowments to support capital projects, student scholarships, and faculty professorships. Collaboration with academic deans and other administrators is central to my work in advancing best practices to expand endowments, research opportunities, and graduate programs.

I provide strategic leadership and operational support to numerous research centers and institutes with regional and national significance, including the Advanced Manufacturing Center, Business Incubator and Makerspace Hub, Blackstone LaunchPad, Small Business Development Center, Roden Entrepreneurial Center, Texas Water and Energy Institute, Cyber Center, Center for Natural Resource Development, and Center for Biomedical Research.

I oversee a research and graduate studies budget of approximately \$30 million, ensuring strategic allocation of resources to foster program development, faculty research, and student success initiatives. Additionally, I lead institutional efforts for accreditation and compliance, serving as the university's primary liaison to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and regularly preparing reports for the University of Texas System (UTS), the Texas Higher Education Coordinating Board (THECB), and other relevant agencies. I am an

active member of the University of Texas System Vice President for Research Council and Graduate Dean Council, contributing to system-wide policy and strategic planning.

## **Accomplishments**

### **Institutional Leadership and Policy Development**

- Co-authored several university policies and procedures to enhance institutional operations.
- Established the Applied Research Institutes to bolster interdisciplinary research initiatives.
- Led the revision of the Handbook of Operating Procedures, focusing on graduate education and research governance.
- Developed comprehensive guidelines for Faculty Annual Endowed Appointment, Annual Review, Five-Year Review, and Reappointment.
- Spearheaded the revision of the Academic Affairs Handbook, emphasizing graduate education and research policies.
- Redefined the Graduate Studies and Research Mission and Vision Statements to align with the university's strategic goals.
- Established the inaugural Internal Faculty Research Seed Grant (RSCA) to provide faculty with research funding opportunities.
- Increased the Student Research Support Grant by 100%, fostering a stronger research culture among graduate students.
- Created and published the inaugural Annual UTPB Sponsored Program Report and the Graduate Program Enrollment Funnel Report.
- Implemented formal policies and procedures for the Office of Research and Sponsored Programs (ORSP) to enhance research compliance and governance.
- Successfully led the first internal audit to meet compliance requirements, ensuring regulatory adherence.
- Established the Office of Innovation and Commercialization, securing external funding and hiring a coordinator and executive director to drive university-wide commercialization efforts.

### **Academic Program Development and Regional Economic Engagement**

- Established and expanded graduate programs, research centers, and community engagement initiatives, contributing to UTPB's recognition by U.S. News & World Report as a Top Regional University (2020) and Top Online Program (Best in Communication).
- Led the development and launch of multiple new graduate programs and tracks, including:
  - M.S. Social Work
  - M.S. Data Science
  - M.S. Information Technology
  - M.S. Finance
  - M.S. Energy Business
  - MBA/MPA Dual Degree Program

- M.A. Applied Statistics
- Spearheaded the creation of accelerated master's programs (4+1 tracks) across disciplines such as Geology, Biology, Chemistry, History, Mechanical Engineering, Psychological Sciences, Computer Science, Spanish, and Criminal Justice.
- Introduced several new graduate certificate programs, including GIS and Geo-Spatial, Cyber Security, Data Science, Energy Business, and Superintendent Certification.

### **Graduate Enrollment and Student Success Initiatives**

- Achieved consistent year-over-year growth in graduate enrollment, with a 12% increase in total enrollment from Fall 2019 to Fall 2024.
- Established graduate scholarships exceeding \$500,000 annually, supporting both on-campus and online graduate students.
- Increased first-time enrollment conversion rates for newly admitted graduate students, averaging a 39% conversion rate over four years.
- Contributed to a 10% increase in graduate degrees awarded, reflecting the highest retention and graduation rates in UTPB's history.
- Implemented a student success strategic plan (2020-25) for graduate students, ensuring long-term academic achievement and retention.
- Expanded the number of graduate assistantships in collaboration with colleges and departments.
- Created and filled new roles to strengthen graduate education administration, including Graduate Studies Director, Graduate Enrollment Coordinator, and Graduate Student Success Specialist.

### **Research and Fiscal Growth**

- Increased externally funded research from \$9 million (FY 2020) to \$25 million (FY 2023).
- Doubled total research expenditures within the last two fiscal years, including research grants per faculty productivity from \$2 million to \$4 million.
- Secured \$14 million in grant funding to support student success initiatives since 2020.
- Administered 30 UT System Rising STARS Grants totaling \$9 million, making UTPB the leading recipient among UT comprehensive institutions.
- Served as co-PI on a \$5 million Department of Education HSI STEM Grant to support student success.
- Played a key role in securing a \$2.1 million gift from the Odessa Development Corporation to establish the Office of Innovation and Commercialization.

### **Inclusion Initiatives**

- Led the reaffirmation of Hispanic Serving Institution (HSI) status in 2021.
- Co-PI on a \$5 million HSI STEM Grant from the Department of Education (2021).
- Secured \$3 million in Upward Bound and Upward Bound Math/Science grants (2022).

- Developed international graduate student recruitment initiatives, resulting in a 200% increase in international student enrollment.
- Created additional graduate assistantships and scholarships, enhancing student access to research opportunities.

### **Faculty and Administrative Recruitment**

- Led multiple successful searches for key faculty and administrative positions, including:
  - Executive Director, Innovation and Commercialization
  - Director of Graduate Admissions
  - Grant Post-Award Administrator
  - Associate Dean, College of Engineering
  - Department Chairs in Computer Science and Kinesiology
  - Associate Provost of Academic Affairs

### **EXECUTIVE DIRECTOR, OFFICE OF RESEARCH AND SPONSORED PROGRAMS Austin Peay State University – Clarksville, TN 2018-2020**

As Executive Director of the Office of Research and Sponsored Programs at Austin Peay State University (APSU), I played a pivotal role in strategic planning, research development, and financial management. Under my leadership, the university experienced consecutive years of growth in external grant submissions, securing a total of \$16 million in funding. This achievement marked a historic high in grants and sponsored research at APSU. I successfully implemented internal grant programs to support faculty, staff, and students in their research and scholarly endeavors. As an Authorized Organizational Representative (AOR), I managed a research budget exceeding \$7 million and oversaw multiple units and team members. My leadership encompassed the following divisions:

- Office of Research and Sponsored Programs
- Office of Student Research and Innovation
- Small Business Development Center (SBDC)
- Student Support Services (SSS), Department of Education-funded student success initiative
- Veterans Upward Bound (VUB), Department of Education-funded veteran outreach initiative
- Tri-County Upward Bound (TCUB), Department of Education-funded high school outreach initiative
- Institutional Review Board (IRB), serving as the institutional research compliance officer

**Key Responsibilities and Accomplishments:**

- Pre-Award and Compliance Management: Directed all pre-award operations, including staff management, data analytics, infrastructure development, export controls, policy creation, and compliance enforcement.
- Post-Award Oversight: Supervised staff handling post-award financial and grants management, providing strategic guidance and performance evaluations.
- Grants and Contract Administration: Worked closely with principal investigators (PIs) to develop and submit competitive grant proposals, negotiate contracts, and execute budgets. Collaborated with senior administrators to implement university-wide research strategies.
- Interdisciplinary Research Collaboration: Established coalitions among faculty PIs and external partners to develop competitive proposals in emerging areas of strength.
- University-Wide Research Development: Spearheaded institutional research development activities, including organizing faculty seminars, grant-writing workshops, and research symposiums.
- Strategic Fund Stewardship: Developed and nurtured relationships with funding agencies, ensuring sustained research investments and continued grant success.
- Infrastructure Development: Designed and implemented research development strategies to enhance institutional capacity for grant acquisition and efficient grants management.
- Budget and Operations Management: Provided financial oversight, managed institutional budgets, gathered and analyzed data to inform research priorities, and ensured fiscal responsibility.
- Faculty and Staff Development: Led ongoing assessment of research programs, launched faculty and staff development seminars, and developed online and printing materials.
- Technology Transfer and Commercialization: Facilitated intellectual property management, technology transfer, and commercialization of research innovations.
- Institutional Compliance and Reporting: Directed compliance with all grant-related policies, ensured proper fiscal monitoring, managed grant reporting, and facilitated research-related communication and conflict resolution.

**DIRECTOR, OFFICE OF STUDENT RESEARCH AND INNOVATION****Austin Peay State University – Clarksville, TN****2018-2020**

As Director of the Office of Student Research and Innovation, I served as the chief advisor to the Associate Vice President for Research, overseeing all student research activities at APSU. In this role, I provided academic leadership, managed two direct reports, and ensured the successful implementation of research programs benefiting APSU students.

**Key Responsibilities and Accomplishments:**

- Program Administration: Coordinated applications, reviews, and funding for student travel grants, Undergraduate Research Enrichment Funding (UREF), and professional development seminars.
- Interdisciplinary Collaboration: Fostered cross-college and interdepartmental partnerships to expand undergraduate research opportunities and funding.
- Grant Acquisition: Developed and submitted federal and internal grants to enhance research support for students across multiple disciplines.
- Program Assessment: Conducted evaluations of undergraduate research practices and implemented assessment tools to measure program effectiveness.
- Annual Research Symposium Leadership: Organized and executed APSU's Annual Research Symposium, overseeing logistics, marketing, and programming.
- Faculty and Staff Committee Leadership: Chaired the APSU Undergraduate Research & Creative Activities Committee, providing strategic guidance for student research initiatives.
- As Executive Director of the Office of Research and Sponsored Programs, I served as the Authorized Organizational Representative and managed a research portfolio exceeding \$7 million. I provided oversight for both pre- and post-award functions, including budget negotiations, financial compliance, and contract execution. Under my direction, APSU achieved a historic high of \$16 million in external grants and sponsored funding. I also supervised federally funded TRIO programs, the Small Business Development Center, and Student Support Services, ensuring effective fiscal management and accountability across multiple units.

**ASSOCIATE PROVOST OF RESEARCH AND DEAN, COLLEGE OF GRADUATE STUDIES**

**Austin Peay State University – Clarksville, TN  
2016**

As Associate Provost of Research and Dean of the College of Graduate Studies, I oversaw APSU's research enterprise, graduate education, and compliance with accreditation and regulatory standards. I provided leadership in restructuring administrative processes, securing external funding, and enhancing research productivity across academic units.

**Key Responsibilities and Accomplishments:**

- Office of Research Restructuring: Reorganized administrative structures to enhance efficiency, collaboration, and effectiveness in research programs.
- Sponsored Programs Expansion: Led initiatives that resulted in increased participation and efficacy in external grant funding, including the implementation of budgeting tools, grant development guides, and training workshops.

- Undergraduate Research Enhancement: Established the Office of Undergraduate Research, hiring a director and restructuring student research grant programs to encourage faculty mentorship and participation.
- Grant Development Leadership: Led teams in submitting competitive federal grant applications, including National Science Foundation proposals.
- Budget Oversight: Managed a combined research and internal grant budget of over \$3 million, ensuring strategic allocation of resources.
- Business Development and Community Engagement: Enhanced the Small Business Development Center's impact and operational efficiency.
- Student Support Services Leadership: Conducted comprehensive evaluations of federally funded TRIO programs, including Upward Bound and Veterans Upward Bound, to improve student success outcomes.
- Graduate Enrollment and Retention Strategies: Spearheaded recruitment initiatives, streamlined graduate admissions processing to a 24-hour turnaround, and developed proactive student engagement strategies.
- Graduate Assistantship Reform: Redefined policies and allocations for graduate assistantships, ensuring alignment with institutional priorities.
- Curricular Innovation: Led the development of new graduate and professional doctoral programs, including STEM and medical technology tracks.
- Accreditation and Compliance: Addressed Southern Association of Colleges and Schools-Commission on Colleges (SACSCOC) monitoring issues, revising policies to ensure compliance with residency and transfer credit standards.
- International Student Recruitment: Established the Office of International Recruitment Services, developed global marketing strategies, and facilitated international student admissions.
- As Associate Provost for Research and Dean of the College of Graduate Studies, I managed a combined research and internal grants budget of over \$3 million, establishing new funding programs for faculty and students and introducing financial tools to improve grant administration and compliance. My budgeting leadership extended to federally funded outreach and student success programs, including Veterans Upward Bound and TRIO initiatives.

## **INSTITUTIONAL SERVICE AND COMMITTEE LEADERSHIP**

**Austin Peay State University – Clarksville, TN**

**2016 – 2020**

- Chair, APSU Inquiry Committee on Research and Scholarship Misconduct (2019-2020)
- Member, APSU International Recruitment and Admission Committee (2018-2020)
- University President's Faculty Representative, Tenure and Promotion Appeals Board (2018-2019)
- Faculty Search Committee Member (Chemistry and Biology Departments)

- Tenure and Promotion Committee Member, Department of Chemistry
- Curriculum Committee Member, College of Science, Technology, Engineering & Mathematics (2016-2017)
- Student Mentorship and Advising: Guided undergraduate and graduate students in research projects, professional development, and career planning.

#### **ASSISTANT DEPARTMENT CHAIR**

**Western Kentucky University, Bowling Green, KY**

**2014 - 2015**

- Scheduling: Coordinated the scheduling of over 100 undergraduate and graduate classes, ensuring alignment with the department's curriculum, student needs, and faculty workload. This effort improved students' ability to graduate on time.
- Departmental Growth: Identified opportunities to enhance the department's reputation, visibility, and academic offerings.
- Strategic Planning: Contributed to departmental planning, implementation, and advancement of key initiatives.
- Committee Leadership: Provided guidance and assistance to four committees, particularly in data collection and evaluation:
  - Program Assessment and Reporting: Developed assessment tools for graduate and undergraduate programs and general education courses; addressed certification and accreditation requirements; coordinated major reports.
  - Communication and Development: Managed promotional materials, departmental website, alumni communications, development activities, and coordination with the university's development office.
  - Safety and Facilities: Oversaw chemical hygiene plans, safety programs, research lab safety, infrastructure, and physical facilities.
  - Instrumentation and Equipment (I&E): Maintained shared major instruments in teaching labs, planned for replacement of aging equipment, and coordinated new acquisitions.

#### **DIRECTOR, CHEMISTRY GRADUATE PROGRAM**

**Western Kentucky University, Bowling Green, KY**

**2012 - 2015**

- Outreach and Branding: Led the redesign of the Department of Chemistry webpage, developed new advisement materials, and created brochures to promote graduate research and programs. Strengthened relationships with domestic and international institutions to expand recruitment and collaboration.

- Recruitment Strategy: Designed and executed a recruitment plan that increased the quality and diversity of applicants, leveraging partnerships with international undergraduate institutions and the GRE Search Service.
- Application and Admissions Review: Streamlined application processes for international students and enhanced admission standards, leading to higher average scores among admitted students. Collaborated with the Graduate School and International Student Office on application review and evaluation.
- Student Onboarding: Oversaw administrative paperwork for domestic and international students, including visa applications, background checks, and tax documents, ensuring a smooth transition for all students.
- Graduate Orientation: Developed and implemented a comprehensive graduate orientation program in collaboration with multiple university departments, enhancing student preparedness and engagement.
- As Director of the Chemistry Graduate Program, I managed a \$200,000 graduate program budget, strategically allocating teaching and research assistantships, tuition waivers, and research support for more than 30 students annually. I also developed systematic policies to ensure efficient use of financial resources while maintaining academic quality and supporting program expansion.
- Assistantship Assignment: Allocated teaching and research assistantships to over 30 students annually, ensuring support from their first semester onward.
- Curriculum and Course Development: Revised existing courses and introduced new graduate courses such as Advanced Analytical Biochemistry, Graduate Research Proposal, and Practicum Research, aligning the curriculum with modern educational standards and workforce demands.
- New Program Development: Spearheaded the development of a Professional Science Master's program and a research-intensive MS program, expanding opportunities for students and strengthening departmental offerings.
- Accreditation and Compliance: Assisted in preparing accreditation reports for the Southern Association of Colleges and Schools (SACS), the American Chemical Society (ACS), and WKU's Academic Program Review (APR).
- Graduation Process Improvement: Designed and implemented systematic graduation timelines, evaluation procedures, and a streamlined "check-out" process, reducing administrative burdens on students.

## **OTHER ACADEMIC & ADMINISTRATIVE SERVICE**

### **Western Kentucky University**

**2009 – 2015**

- Center for Faculty Development (CFD) Advisory Committee Member (2012 – 2015): Advised on faculty development initiatives, mentorship programs, and professional development training for faculty and graduate instructors.

- Ogden Dean Advisory Committee Member (2012 – 2015): Provided strategic guidance on faculty workload distribution, academic programming, and funding allocations.
- RCAP Executive Committee Member and Reviewer (2012 – 2014): Reviewed research grant proposals for internal university funding.
- FUSE Reviewer (2012 – 2015): Evaluated faculty-mentored undergraduate research grant applications.
- Graduate Assistantship Award Committee (2009 – 2013): Reviewed applications and recommended funding allocations for graduate assistantships in the Bioinformatics and Information Science Center (BISC).
- Pre-Med Evaluation Committee (2010 – 2015): Interviewed, assessed, and recommended students for medical school admissions.
- Faculty and Staff Search Committees: Participated in faculty and staff hiring processes, including shortlisting, interviewing, and selection for multiple positions.
- Space and Renovation Committees (2013 – 2015): Contributed to planning and reallocation of academic spaces, labs, and offices in Ogden College of Science and Engineering.
- Undergraduate Curriculum Development: Revised plans of study to align with new educational standards and introduced eight program options for chemistry and biochemistry majors.
- Webmaster (2010 – 2015): Managed and enhanced the department website, optimizing it for recruitment, outreach, and student engagement.

## **INDUSTRY CONSULTING EXPERIENCE**

- Kentucky Bioprocessing LLC (2012 – 2020): Provided scientific and technical guidance on protein expression and purification, patent development, and commercialization strategies.
- Zystein LLC & Ocean Nanotech LLC (2012 – 2015): Consulted on nanoparticle-based biomedical applications, including drug delivery and antimicrobial strategies.

## **PROFESSIONAL AFFILIATIONS AND LEADERSHIP**

- Kentucky Academy of Science (KAS) – Cellular & Molecular Biology Division: Served as Secretary (2010) and Chair (2011), organized conference sessions, and facilitated faculty engagement.
- Biochemistry Program Coordinator (2010 – 2015): Oversaw biochemistry course rotation and study plans, leading to a significant increase in student enrollment.
- Ogden College Student Award Committee Member (2010 – 2015): Reviewed nominations and awarded students for academic excellence and research contributions.
- Faculty Workload Committee (2011 – 2012): Evaluated and assigned faculty workload distributions based on research, teaching, and service commitments.
- Undergraduate Recruitment Initiatives: Collaborated with WKU Admissions to develop recruitment strategies, including open houses, transition programs, and outreach fairs

## **RESEARCH, SCHOLARLY ACTIVITIES & DEVELOPMENT EXPERIENCE**

My research primarily focuses on biomedical sciences, with an emphasis on protein and nanomaterials for biomedical applications. I have authored over thirty peer-reviewed publications in these areas and secured a patent for a novel method of synthesizing gold nanoparticles capped with drugs. My research funding efforts have resulted in securing over \$8 million in grants as either a Principal Investigator (PI) or Co-Principal Investigator (Co-PI), demonstrating an aggressive and strategic grantsmanship approach. To date, I have submitted grant proposals totaling over \$20 million to various federal and state funding agencies.

As an academic mentor, I have chaired twelve graduate student thesis committees, ensuring the rigor and quality of their research. My students have presented over 340 research papers at national, regional, and local conferences and symposia, winning 30 awards for outstanding presentations. I have been honored with research excellence awards consecutively for the past five years, along with various other accolades in recognition of my scholarly contributions. Additionally, several of my students have earned prestigious awards, scholarships, and competitive career placements both during and after our research collaborations.

### **Research Interests**

Biological Nanotechnology, Drug Delivery Systems, Protein Structure, Function, and Interaction, Development of Novel Strategies for Biopharmaceutical Production, Bioanalytical Chemistry

### **Patent**

Monodisperse Gold Nanoparticles and Facile Environmentally Favorable Process for Their Manufacture (*Biosynthesis of Gold Nanoparticles in Minimal Media Using Escherichia coli*). Principal Investigator: D. Rajalingam, 2012, U.S. Patent No.: 12/882,291.

### **EXTERNAL, INTERNAL & STUDENT GRANTS**

(Total Funded to Date: ~ \$8,155,000 & Full List Available Upon Request)

- Dakshinamurthy, R. (Co-PI). (10/01/2021-09/30/2026). Strengthening the STEM pipeline: University of Texas Permian Basin. Department of Education, HSI Stem Grant. \$5,000,000.
- Dakshinamurthy, R. (Co-PI). (09/01/2020-08/31/2023). Workforce and innovation for a stronger economy. Odessa Development Corporation Foundation Grant. \$2,100,000.
- Dakshinamurthy, R. (PI). (09/01/2016-08/31/2019). Green gold nanoparticles for catalytic reduction of nitrophenols. American Chemical Society Petroleum Research Foundation Grant. \$70,000.
- Dakshinamurthy, R. (PI). (01/2015-07/2015). Gold nanoparticles for catalytic applications. National Science Foundation – Kentucky Experimental Program to Stimulate Competitive Research (KY EPSCoR). \$25,000.

- Dakshinamurthy, R. (Co-PI). (06/2014-05/2017). MRI: Acquisition of an analytical scanning electron microscope for multidisciplinary research and education at a PUI. National Science Foundation. \$196,000.
- Dakshinamurthy, R. (PI). (01/2014-08/2014). Synthesis of green gold nanoparticles for antimicrobial applications and understanding the molecular level interaction of hFGF-1 with a cancer inhibitor imatinib. National Science Foundation – KY EPSCoR. \$21,000.
- Dakshinamurthy, R. (Co-PI). (06/2013-05/2016). MRI: Acquisition of an analytical transmission electron microscope with cryogenic imaging capabilities for undergraduate research and training. National Science Foundation. \$420,000.
- Dakshinamurthy, R. (PI). (11/2009-05/2012). Towards understanding the secretion mechanism of human interleukin-1 alpha. National Institutes of Health – Kentucky INBRE (formerly KBRIN). \$110,000.
- Dakshinamurthy, R. (Mentor). (11/2009-08/2012). REU: Summer research experience in investigative biotechnology. National Science Foundation. \$18,000.
- Dakshinamurthy, R. (Mentor). (11/2009-08/2012). REU: Mammoth Cave upper Green River project. National Science Foundation. \$12,000.

## PEER-REVIEWED PUBLICATIONS

(\*\*-Graduate Student; \*-Undergraduate Student; †-Research Experiences for Undergraduates (REU) Student; ‡-Highschool students)

\*\*Payne, J. N., Badwaik, V. D., \*\*Waghwani, H. K., \*Moolani, H. V., \*Tockstein, S., Thompson, D. H., & Dakshinamurthy, R. (2018). Development of dihydrochalcone-functionalized gold nanoparticles for augmented antineoplastic activity. *International Journal of Nanomedicine*, 13, 1917-1926. <https://doi.org/10.2147/IJN.S143506>

\*\*Payne, J. N., \*\*Waghwani, H. K., \*\*Connor, M. G., \*Hamilton, W., \*Tockstein, S., \*Moolani, H., \*Chavda, F., Badwaik, V., Lawrenz, M. B., & Dakshinamurthy, R. (2016). Novel Synthesis of Kanamycin Conjugated Gold Nanoparticles with Potent Antibacterial Activity. *Frontiers in Microbiology*, 7, 607. <https://doi.org/10.3389/fmicb.2016.00607>

Prudovsky, I., Kacer, D., Davis, J., Shah, V., Jayanthi, S., \*Huber, I., Dakshinamurthy, R., Ganter, O., Soldi, R., Neivandt, D., Guvench, O., & Kumar, T. K. S. (2016). Folding of Fibroblast Growth

Factor 1 Is Critical for Its Nonclassical Release. *Biochemistry*, 55(7), 1159-1167. <https://doi.org/10.1021/acs.biochem.5b01341>

\*Hamilton, H., \*\*Modi, T., \*\*Waghvani, H., & Dakshinamurthy, R., et al. (2015). Impact of nanotechnology on medicinal compounds. *Mini Reviews in Medicinal Chemistry*.

Jayanthi, S., Kathir, K. M., Dakshinamurthy, R., Furr, M., Daily, A., Thurman, R., Rutherford, L., Chandrashekar, R., Adams, P., Prudovsky, I., & Kumar, T. K. (2014). Affinity of the C2B domain of synaptotagmin-1 and its potential role in the nonclassical secretion of acidic fibroblast growth factor. *Biochimica et Biophysica Acta*, 1844(12), 2155-2163. <https://doi.org/10.1016/j.bbapap.2014.09.008>

\*\*Shah, M., \*\*Badwaik, V., Kherde, Y., Waghvani, H. K., Modi, T., Aguilar, Z. P., Rodgers, H., Hamilton, W., Marutharaj, T., Webb, C., Lawrenz, M. B., & Dakshinamurthy, R. (2014). Gold nanoparticles: Various methods of synthesis and antibacterial applications. *Frontiers in Bioscience (Landmark Edition)*, 19(8), 1320-1344. <https://doi.org/10.2741/4284>

\*\*Shah, M., \*\*Badwaik, V. D., & Dakshinamurthy, R. (2014). Biological applications of gold nanoparticles. *Journal of Nanoscience and Nanotechnology*, 14(1), 344-362. <https://doi.org/10.1166/jnn.2014.8900>

\*\*Badwaik, V. D., \*Willis, C. B., \*†Pender, D. S., \*\*Paripelly, R., \*\*Shah, M., \*\*Kherde, Y. A., \*\*Vangala, L. M., ‡Gonzalez, M. S., & Dakshinamurthy, R. (2013). Antibacterial gold nanoparticles-biomass assisted synthesis and characterization. *Journal of Biomedical Nanotechnology*, 9(10), 1716-1723. <https://doi.org/10.1166/jbn.2013.1666>

\*†Pender, D. S., \*\*Vangala, L. M., \*\*Badwaik, V. D., \*Willis, C. B., Aguilar, Z. P., ‡Sangoi, T., \*\*Paripelly, R., & Dakshinamurthy, R. (2013). Bactericidal activity of surface modifiable starch-encapsulated gold nanoparticles. *Frontiers in Biosciences (Landmark Edition)*, 18(3), 993-1002. <https://doi.org/10.2741/4158>

\*†Pender, D. S., \*\* Vangala, L. M., \*\* Badwaik, V. D., \*Thompson, H., Paripelly, R., & Dakshinamurthy, R. (2013). A new class of gold nanoantibiotics – Direct coating of ampicillin on gold nanoparticles. *Pharmaceutical Nanotechnology*, 1, 126-135.

\*\*Badwaik, V. D., \*\*Vangala, L. M., \*†Pender, D. S., \*Willis, C. B., Aguilar, Z. P., ‡Gonzalez, M. S., \*\*Paripelly, R., & Dakshinamurthy, R. (2012). Size dependent anti-bacterial activity of sugar encapsulated gold nanoparticles. *Nanoscale Research Letters*, 7(1), 623-633. <https://doi.org/10.1186/1556-276X-7-623>

Thurman, R. D., Kathir, K. M., Dakshinamurthy, R., & Kumar, T. K. S. (2012). Molecular basis for the Kallmann syndrome-linked fibroblast growth factor receptor mutation. *Biochemical and Biophysical Research Communications*, 425(3), 673-678. <https://doi.org/10.1016/j.bbrc.2012.07.104>

\*\*Badwaik, V. D., \*Bartonojo, J. J., \*Evans, J. W., Sahi, S. V., \*Willis, C. B., & Dakshinamurthy, R. (2011). Single-step biofriendly synthesis of surface modifiable, near-spherical gold nanoparticles for applications in biological detection and catalysis. *Langmuir: The ACS Journal of Surfaces and Colloids*, 27(9), 5549-5554. <https://doi.org/10.1021/la105041d>

\*\*Badwaik, V. D., & Dakshinamurthy, R. (2011). Single-step bacterial detection by simultaneous synthesis and integration of gold nanoparticles and its application in intracellular delivery. *ECS Transactions*, 41(20), 49-55.

\*\*Sumit, B., \*Sahi, N., \*Mikulcik, K., ‡Turner, C., \*Shockely, H., †‡Laux, Z., Conte, E., & Dakshinamurthy, R. (2011). Efficient and inexpensive method for purification of heparin binding proteins. *Journal of Chromatography B, Analytical Technologies in The Biomedical and Life Sciences*, 879(24), 2437-2442. <https://doi.org/10.1016/j.jchromb.2011.06.047>

Lewis, N. E., Marty, N. J., Kathir, K. M., Dakshinamurthy, R., Kight, A. D., Daily, A., Kumar, T. K. S., Henry, R. L., & Goforth, R. L. (2010). A dynamic cpSRP43-Albino3 interaction mediates translocase regulation of chloroplast signal recognition particle (cpSRP)-targeting components. *The Journal of Biological Chemistry*, 285(44), 34220-34230. <https://doi.org/10.1074/jbc.M110.160093>

Kathir, K. M., Gao, L., Dakshinamurthy, R., Daily, A. E., Adams, P. D., & Kumar, T. K. S. (2010). Copper and lipid binding affinities of the C2B domain of synaptotagmin-1 – relevance to the non-classical secretion of acidic fibroblast growth factor. *Biochimica et Biophysica Acta*, 1798(2), 297-302.

Dakshinamurthy, R., Loftis, C., Xu, J., & Kumar, T. K. S. (2009). Understanding the mechanism of trichloro acetic acid induced aggregation. *Protein Science: A Publication of the Protein Society*, 18(5), 980-993. <https://doi.org/10.1002/pro.108>

Marty, N. J., Dakshinamurthy, R., Kight, A. D., Kumar, T. K. S., Henry, R., & Goforth, R. (2009). Role of a structural switch mechanism in membrane binding by the signal recognition particle receptor. *Journal of Biological Chemistry*, 284, 14891-14903. (Paper of The Week and Cover Page)

Dakshinamurthy, R., Kathir, K. M., Ananthamurthy, K., Adams, P. D., & Kumar, T. K. S. (2008). A method for the prevention of thrombin-induced degradation of recombinant proteins. *Analytical Biochemistry*, 375(2), 361-363. <https://doi.org/10.1016/j.ab.2008.01.014>

Sharma, P., Dakshinamurthy, R., Kumar, T. K. S., & Singh, S. (2008). A light scattering study of the interaction of fibroblast growth factor (FGF) to its receptor. *Biophysical Journal*, 94(9), L71-L73. <https://doi.org/10.1529/biophysj.108.129569>

Kathir, K. M., Dakshinamurthy, R., Sivaraja, V., Kight, A., Goforth, R. L., Yu, C., Henry, R., & Kumar, T. K. S. (2008). The chloroplast signal recognition particle interface assembles through structural rearrangement of a chromatin-binding domain in cpSRP43. *Journal of Molecular Biology*, 381(1), 49-60. <https://doi.org/10.1016/j.jmb.2008.05.065>

Dakshinamurthy, R., Kacer, D., Prudovsky, I., & Kumar, T. K. S. (2007). Molecular cloning, over expression and characterization of human interleukin 1alpha. *Biochemical and Biophysical Research Communications*, 360(3), 604-608. <https://doi.org/10.1016/j.bbrc.2007.06.099>

Prudovsky, I., Tarantini, F., Landriscina, M., Neivandt, D., Soldi, R., Kirov, A., Small, D., Kathir, K. M., Dakshinamurthy, R., & Kumar, T. K. (2008). Secretion without Golgi. *Journal of Cellular Biochemistry*, 103(5), 1327-1343. <https://doi.org/10.1002/jcb.21513>

Kathir, K. M., Ibrahim, K., Dakshinamurthy, R., Prudovsky, I., Yu, C., & Kumar, T. K. (2007). S100A13-lipid interactions-role in the non-classical release of the acidic fibroblast growth factor. *Biochimica et Biophysica Acta*, 1768(12), 3080-3089. <https://doi.org/10.1016/j.bbamem.2007.09.007>

Dakshinamurthy, R., Kumar, T. K. S., & Yu, C. (2007). Fibroblast growth factor-1 and the C2A domain of synaptotagmin exist as partially structured states under acidic conditions-implications in the non-classical secretion of fibroblast growth factor-1. *Biochemistry*, 46, 9225-9238.

Sivaraja, V., Kumar, T. K. S., Dakshinamurthy, R., Graziani, I., Prudovsky, I., & Yu, C. (2006). Copper binding affinity of S100A13, a key component of the FGF-1 nonclassical copper-dependent release complex. *Biophysical Journal*, 91(5), 1832-1843. <https://doi.org/10.1529/biophysj.105.079988>

Dakshinamurthy, R., Kumar, T. K. S., Soldi, R., Graziani, I., Prudovsky, I., & Yu, C. (2005). Molecular mechanism of inhibition of nonclassical FGF-1 export. *Biochemistry*, 44(47), 15472-15479. <https://doi.org/10.1021/bi0516071>

Dakshinamurthy, R., Kumar, T. K. S., & Yu, C. (2005). The C2A domain of synaptotagmin exhibits high binding affinity for copper: Implications in the formation of the multiprotein FGF release complex. *Biochemistry*, 44(44), 14431-14442. <https://doi.org/10.1021/bi051387r>

Sivaraja, V., Kumar, T. K., Leena, P. S., Chang, A. N., Vidya, C., Goforth, R. L., Dakshinamurthy, R., Arvind, K., Ye, J. L., Chou, J., Henry, R., & Yu, C. (2005). Three-dimensional solution structures of the chromodomains of cpSRP43. *The Journal of Biological Chemistry*, 280(50), 41465-41471. <https://doi.org/10.1074/jbc.M507077200>

Kathir, K. M., Kumar, T. K., Dakshinamurthy, R., & Yu, C. (2005). Time-dependent changes in the denatured state(s) influence the folding mechanism of an all beta-sheet protein. *The Journal of Biological Chemistry*, 280(33), 29682-29688. <https://doi.org/10.1074/jbc.M504389200>

Srisailam, S., Kumar, T. K., Dakshinamurthy, R., Kathir, K. M., Sheu, H. S., Jan, F. J., Chao, P. C., & Yu, C. (2003). Amyloid-like fibril formation in an all beta-barrel protein. Partially structured intermediate state(s) is a precursor for fibril formation. *The Journal of Biological Chemistry*, 278(20), 17701-17709. <https://doi.org/10.1074/jbc.M300336200>

Srisailam, S., Wang, H. M., Kumar, T. K., Dakshinamurthy, R., Sivaraja, V., Sheu, H. S., Chang, Y. C., & Yu, C. (2002). Amyloid-like fibril formation in an all-beta-barrel protein involves the formation of partially structured intermediate(s). *The Journal of Biological Chemistry*, 277(21), 19027-19036. <https://doi.org/10.1074/jbc.M110762200>

## **LECTURES, SEMINARS, AND CONFERENCE PRESENTATIONS**

- Over 350 research presentations at national, regional, and local conferences since 2009.
- Presentations at:
  - National Conferences: ACS, Protein Society, Sigma Xi, ECS, NCUR, EPSCoR, SERMACS, NATAS, SESAPS
  - State Conferences: NIH-INBRE, Tennessee Academy of Sciences, KAS, Poster-at-Capitol, SEFNK, Naff, KSEF, Kentucky Honor Roundtable
  - Local Symposia: APSU Research Symposium, WKU REACH, NSF-REU, Gatton Research
- Student Involvement:
  - All presentations were co-authored with students.
  - 30 awards won by students for outstanding research presentations.

*Since January 2018 (Full list is available upon request.)*

Yee, A., Patel, P., Ponce, P., Schmittou, A., Soto, J., Alaya, A., Markov, S., Phambu, N., Chaparadza, A., & Dakshinamurthy, R. (April 2019). Antimicrobial activity of membrane-

spanning peptides. 14th Annual Research and Creativity Forum and Graduate Research Extravaganza, Clarksville, TN.

Tadsen, A., O'Donnell, A., Baxter, K., & Dakshinamurthy, R. (April 2019). Optimization of atomic absorption for the characterization of gold nanoparticles. 14th Annual Research and Creativity Forum and Graduate Research Extravaganza, Clarksville, TN.

Patel, P., Soto, J., Ponce, P., Schmittou, A., Yee, A., Mohsun, F., Markov, S., & Dakshinamurthy, R. (April 2019). Bio-friendly gold nanoparticles conjugated with antibiotics for antibacterial applications. 14th Annual Research and Creativity Forum and Graduate Research Extravaganza, Clarksville, TN.

Schmittou, A., Keeton, W., Ayala, A., Soto, J., Ponce, P., & Dakshinamurthy, R. (April 2019). Effect of ligand size on catalytic activity of gold nanoparticles: A comparative study. 14th Annual Research and Creativity Forum and Graduate Research Extravaganza, Clarksville, TN.

Schmittou, A., Keeton, W., Ayala, A., Soto, J., Ponce, P., & Dakshinamurthy, R. (February 2019). A comparative study of how ligand size effects the catalytic activity of gold nanoparticles. 2019 Posters at the Capitol, Nashville, TN.

Yee, A., Patel, P., Ponce, P., Schmittou, A., Soto, J., Alaya, A., Markov, S., Phambu, N., Chaparadza, A., & Dakshinamurthy, R. (February 2019). Antimicrobial activity of membrane spanning peptides. 2019 Posters at the Capitol, Nashville, TN.

Soto, J., Patel, P., Ponce, P., Schmittou, A., Yee, A., Mohsun, F., Markov, S., & Dakshinamurthy, R. (February 2019). Antibacterial activity of bio-friendly gold nanoparticles conjugated with antibiotic. 2019 Posters at the Capitol, Nashville, TN.

Schmittou, A., Keeton, W., Ayala, A., Soto, J., Ponce, P., & Dakshinamurthy, R. (February 2019). Effect of ligand size on catalytic activity of gold nanoparticles: A comparative study. 51st Annual Southeastern Undergraduate Research Conference, Martin, TN.

Yee, A., Pate, P., Ponce, P., Schmittou, A., Soto, J., Alaya, A., Markov, S., Phambu, N., Chaparadza, A., & Dakshinamurthy, R. (February 2019). Antimicrobial activity of membrane spanning peptides. 51st Annual Southeastern Undergraduate Research Conference, Martin, TN.

Patel, P., Soto, J., Ponce, P., Schmittou, A., Yee, A., Mohsun, F., Markov, S., & Dakshinamurthy, R. (February 2019). Antibacterial activity of bio-friendly gold nanoparticles conjugated with antibiotic. 51st Annual Southeastern Undergraduate Research Conference, Martin, TN.

Soto, J., Ayala, A., Patel, P., Yee, C., Schmittou, A., Ponce, P., & Dakshinamurthy, R. (February 2019). Synthesis and stability of antibiotic oxytetracycline encapsulated gold nanoparticles for long term use. 51st Annual Southeastern Undergraduate Research Conference, Martin, TN.

Ayala, A., Soto, J., Schmittou, A., Ponce, P., & Dakshinamurthy, R. (November 2018). Environmentally friendly synthesis of sugar encapsulated gold nanoparticles. 2018 Fall Chemistry Research Symposium, Austin Peay State University, Clarksville, TN.

Yee, A., Patel, P., Ponce, P., Schmittou, A., Soto, J., Alaya, A., Markov, S., Phambu, N., Chaparadza, A., & Dakshinamurthy, R. (November 2018). Antimicrobial activity of membrane spanning peptides. 2018 Fall Chemistry Research Symposium, Austin Peay State University, Clarksville, TN.

Patel, P., Ponce, P., Schmittou, A., Soto, J., Yee, A., Mohsun, F., Markov, S., & Dakshinamurthy, R. (November 2018). Antibacterial activity of antibiotic coated gold nanoparticle. 2018 Fall Chemistry Research Symposium, Austin Peay State University, Clarksville, TN.

Schmittou, A., Tadsen, A., Ayala, A., Soto, J., Ponce, P., & Dakshinamurthy, R. (November 2018). Catalytic application for environmentally friendly synthesized gold nanoparticles. 2018 Fall Chemistry Research Symposium, Austin Peay State University, Clarksville, TN.

Soto, J., Patel, P., Yee, C., Schmittou, A., Ayala, A., Ponce, P., & Dakshinamurthy, R. (November 2018). Single-step green synthesis of tetracycline-type encapsulated gold nanoparticles. 2018 Fall Chemistry Research Symposium, Austin Peay State University, Clarksville, TN.

Patel, P., Ponce, P., Allison, A., Soto, J., Yee, A., Mohsun, F., & Dakshinamurthy, R. (November 2018). Antibacterial activity of antibiotic coated gold nanoparticle. 70th Southeastern Regional Meeting of American Chemistry Society, Savannah, GA.

Allison, A., Ponce, P., Soto, J., Wallenius, C., Payne, J., & Dakshinamurthy, R. (November 2018). Environmentally friendly gold nanoparticles for catalytic applications. 70th Southeastern Regional Meeting of American Chemistry Society, Savannah, GA.

Payne, J., & Dakshinamurthy, R. (May 2018). Novel self-patented gold nanoparticles for antimicrobial applications. TechConnect World Innovation Conference and Expo, Anaheim, CA.

## **AWARDS AND RECOGNITIONS RECEIVED BY STUDENT RESEACHERS**

Recognition of Research Excellence and Contributions to Higher Education: This extensive history of awards and recognitions reflects a deep commitment to fostering research excellence,

supporting student success, and advancing the field of chemistry through scholarly contributions and mentorship.

- 51st Annual Southeastern Undergraduate Research Conference, Outstanding Oral, A. Schmittou, 2019
- 128th Tennessee Academy of Science, Outstanding Oral Chemistry, A. Schmittou, 2019
- 2018 APSU Spring Chemistry Research Symposium Outstanding Poster, P. Ponce, 2018
- 2017 APSU Spring Chemistry Research Symposium Outstanding Poster, V. Huynh, 2017
- American Chemical Society, Division of Environmental Chemistry 2015 Undergraduate Award, Jason Payne, 2015
- Ogden College Outstanding Graduate Student Award, T. Modi, 2015
- Nell Skean Award for Outstanding Laboratory Assistant, H. Waghwani, 2015
- American Institute of Chemist's Outstanding Graduate Student Award, H. Waghwani, 2015
- Carl. P. McNally Outstanding Chemistry Graduate Student Award, T. Modi, 2015
- 45th Annual WKURSC Outstanding Oral Presentation Award, T. Modi, 2015
- 45th Annual WKURSC Outstanding Oral Presentation Award, S. Tockstein, 2015
- 100th Annual KAS meeting, Outstanding Oral Presentation Award, W. Hamilton, 2014
- 100th Annual KAS meeting, Outstanding Oral Presentation Award, H. Waghwani, 2014
- 100th Annual KAS meeting, Outstanding Oral Presentation Award, T. Modi, 2014
- Bucks for Bright Ideas Kentucky Innovation Network Entrepreneur Award, Dr. R. Dakshinamurthy and M. Shah, 2014
- Ogden College Outstanding Graduate Student Award, M. Shah, 2014
- Freshman Achievement in Chemistry Award, H. Rodgers, 2014
- Carl. P. McNally Undergraduate Scholarship Award, W. Hamilton, 2014
- Nell Skean Award for Outstanding Laboratory Assistant, M. Shah, 2014
- Carl. P. McNally Outstanding Graduate Student Chemistry Award, M. Shah, 2014
- 44th Annual WKURSC Outstanding Oral Presentation Award, M. Shah, 2014
- 44th Annual WKURSC Outstanding Oral Presentation Award, W. Hamilton, 2014
- 99th Annual KAS meeting, Outstanding Poster Award, H. Rodgers, 2013
- 99th Annual KAS meeting, Outstanding Oral Presentation Award, Y. Kherde, 2013
- Carl. P. McNally Outstanding Graduate Student Chemistry Award, M. Shah, 2013
- 43rd Annual WKURSC, Outstanding Oral Presentation Award, H. Rodgers, 2013
- 43rd Annual WKURSC, Outstanding Poster Presentation Award, Y. Kherde, 2013
- 43rd Annual WKURSC, Outstanding Oral Presentation Award, Dillon Pender, 2013
- Outstanding Chemistry Major Award, Dillon Pender, 2013
- Carl. P. McNally Outstanding Graduate Student Chemistry Award, S. Hume, 2013
- Ward C. Sumpter Undergraduate Scholarship Award, G. Ison, 2013
- 98th Annual KAS meeting, Outstanding Oral Presentation Award, D. Pender, 2012
- Outstanding Graduate Student Chemistry Award, L.M. Vangala, 2012
- Glen Dooley Undergraduate Scholarship Award, Dillon Pender, 2012

- Outstanding Graduating Senior in Chemistry Award, Chad Willis, 2012
- Outstanding Graduating Senior in Chemistry Award, J. Bartonojo, 2011
- Nell Skean Award for Outstanding Laboratory Assistant, C.B. Willis, 2011
- Carl. P. McNally Outstanding Graduate Student Chemistry Award, Vivek Badwaik, 2011
- 97th Annual KAS meeting, Graduate Oral Presentation Award, L. Vangala, 2011
- 97th Annual KAS meeting, Undergraduate Oral Presentation Award, D. Pender, 2011
- 97th Annual KAS meeting, Undergraduate Oral Presentation Award, C.B. Willis, 2011
- 41st WKUSRC, Outstanding Oral Presentation Award, V.D. Badwaik, 2011
- 96th Annual KAS meeting, Undergraduate Poster Presentation Award, Z. Laux, 2010
- 96th Annual KAS meeting, Undergraduate Poster Presentation Award, C.B. Willis, 2010
- 96th Annual KAS meeting, Graduate Oral Presentation Award, V.D. Badwaik, 2010
- Kentucky Junior Academy of Science Meeting, Chemistry, C. Turner, 2010
- 40th Annual WKUSRC, Undergraduate Oral Presentation Award, N. Sahi, 2010
- 40th Annual WKUSRC, Graduate Physical Sciences Poster Award, V.D. Badwaik, 2010
- 40th Annual WKUSRC, Undergraduate Physical Sciences Poster Award, J. Bartonjo, 2010

## **TEACHING EXPERIENCE**

Throughout my academic career, I have been deeply committed to excellence in teaching, consistently earning high praise from students. Student feedback surveys have regularly included positive comments regarding my teaching effectiveness, and my Student Instructional Teaching Evaluation (SITE) scores have consistently exceeded department, college, and university averages, averaging above  $4.5 \pm 0.5$  on a 5-point scale.

As part of my dedication to enhancing academic programs, I have successfully designed and developed new graduate-level courses, expanding learning opportunities for students and contributing to curriculum innovation. In addition, I have demonstrated a commitment to improving laboratory-based education by securing a \$25,000 instrument for the biochemistry lab, thereby enhancing hands-on learning experiences and research opportunities for students.

My approach to teaching integrates rigorous academic instruction with mentorship, fostering an engaging and supportive learning environment that prepares students for both academic and professional success.

## **SERVICE TO THE PROFESSION**

### **Outreach – Peer Review of Grant Proposals (2009–2014)**

- Served as a reviewer for research grant proposals submitted to the **American Chemical Society Petroleum Research Foundation**, evaluating the scientific merit and impact of proposed research projects.

### **Outreach – Peer Review of Manuscripts (2006–2014)**

- Provided peer review for manuscripts submitted to leading scientific journals, ensuring the integrity and quality of published research:
  - Journal of Materials Chemistry
  - Biochemistry (American Chemical Society Journal)
  - Biochemical Journal
  - Biophysical Journal (American Biophysical Society Journal)
  - Journal of Biomedical Research

### **Community Service & Public Engagement**

- **Scientific Session Judge**, Western Kentucky University Student Research Conference (WKU SRC) (2010–Present)
  - Served annually as a judge for student research presentations, providing feedback and fostering academic excellence in undergraduate and graduate research.
- **Science Olympiad Event Supervisor – Protein Modeling (2010–2015)**
  - Designed and supervised the protein modeling competition for the Science Olympiad, engaging high school students in structural biology and computational modeling.
  - Trained and provided necessary guidance to Kentucky school teachers on using the **Protein Data Bank (PDB)** for instructional purposes in support of the Science Olympiad.
- **Public Health Advocacy and Outreach**
  - Featured in the *Bowling Green Daily News* for providing critical information on the harmful and long-term health effects of tobacco use in hookah products, contributing to public awareness and health education initiatives.

### **AWARDS & RECOGNITION**

Throughout my academic career, I have been honored with numerous awards recognizing excellence in research, teaching, advising, and leadership. These accolades reflect my commitment to student success, innovative scholarship, and institutional impact. Below is a selection of awards and recognitions received over the years:

- Military Student Center Faculty Leader (2019) – Recognized for exceptional leadership and support of military-affiliated students.
- Governors Impact Award (2019) – Honored for significant contributions to the APSU community through research, leadership, and student engagement.
- Richard Hawkins Award for Research – College of STEM Nominee (2019) – Nominated for outstanding research achievements in STEM disciplines.
- Ogden College of Science and Engineering Advising Award Winner (2015) – Recognized for excellence in academic advising and student mentorship.

- Ogden College of Science and Engineering Research Award Nominee (2015) – Nominated for contributions to research within the college.
- Ogden College of Science and Engineering Junior Faculty Teaching Award Nominee (2015) – Acknowledged for exemplary teaching and dedication to student success.
- Research Recognition Award – Most Prolific Proposer (2014) – Awarded by the WKU Office of Research for securing significant research funding.
- Bucks for Bright Ideas Entrepreneur Award (2014) – Recognized by the Kentucky Innovation Network for innovative research with commercialization potential.
- Research Recognition Award – Most Prolific Proposer (2013) – Repeatedly honored for outstanding contributions to research proposal development.
- Research Commercialization Award (2012) – Recognized for translating academic research into potential commercial applications.
- Research Recognition Award (2010) – Acknowledged for research excellence and significant contributions to scholarly advancement.
- ACS Travel Award, American Chemical Society (2012) – Awarded for academic contributions and participation in professional conferences.
- National Science Council of Taiwan Fellowship (2001) – Prestigious international fellowship recognizing academic excellence and research contributions.
- St. Joseph’s Medal for Outstanding Academic Performance (2000) – Awarded for exceptional achievement in the Master of Philosophy in Chemistry program.
- Outstanding Academic Performance Award – Master’s Degree (1999) – Recognized for distinguished academic performance at the graduate level.
- Outstanding Academic Performance Award – Bachelor’s Degree (1997) – Honored for exemplary undergraduate academic achievements.

## **CONFERENCES/WORKSHOPS**

As a committed academic leader and scholar, I have actively participated in numerous professional conferences and workshops that address critical issues in higher education, accreditation, workforce development, graduate education, STEM research, and institutional leadership. Below is a comprehensive list of these engagements:

### **Higher Education Leadership & Accreditation Conferences**

- 2024 – UT System Workforce Summit, Dallas, TX
- 2023 – SACSCOC Annual Meeting, Orlando, FL
- 2023 – UT System Academic Affairs Conference, Austin, TX
- 2022 – SACSCOC Annual Meeting, Atlanta, GA
- 2022 – UT System Provost Consortium Conference, Austin, TX
- 2022 – UT System Roundtable with the National Science Board and the National Science Foundation, TX
- 2021 – Association of Texas Graduate Schools Annual Meeting, TX

- 2020 – Association of Texas Graduate Schools Annual Meeting, TX
- 2016 – Council of Graduate Schools Summer Conference, Savannah, GA

### **National & International STEM Conferences and Research Symposia**

- 2023 – UT System Workforce Summit, Dallas, TX
- 2019 – Fulbright U.S. Student Program Workshop, Nashville, TN
- 2018 – TechConnect World Innovation & National Innovation Summit, Anaheim, CA
- 2018 – 128th Tennessee Academy of Science, Clarksville, TN
- 2015 – Pittcon Conference and Expo, New Orleans, LA
- 2015 – TechConnect World Innovation & National Innovation Summit, Washington, DC
- 2015 – KY EPSCoR Conference, Lexington, KY
- 2015 – 59th Annual Biophysical Society Meeting, Baltimore, MD
- 2014 – 100th Kentucky Academy of Sciences Annual Meeting, Lexington, KY
- 2014 – SERMACS, Nashville, TN
- 2014 – 247th ACS National Meeting & Exposition, San Francisco, CA
- 2013 – 245th ACS National Meeting & Exposition, Indianapolis, IN
- 2012 – 244th ACS National Meeting & Exposition, Philadelphia, PA
- 2012 – 17th Kentucky EPSCoR Conference, Lexington, KY
- 2012 – 1st Annual Kentucky Nanotechnology Symposium, Bowling Green, KY
- 2011 – 220th ECS Meeting, Boston, MA
- 2011 – 97th Kentucky Academy of Sciences Annual Meeting, Murray, KY
- 2010 – 239th ACS National Meeting, San Francisco, CA
- 2010 – NIH-KY-INBRE Annual Meeting, KY-INBRE, Louisville, KY
- 2009 – 53rd Annual Biophysical Society Meeting, Boston, MA
- 2008 – 52nd Annual and 16th International Biophysics Conference, Long Beach, CA
- 2007 – 51st Annual American Biophysical Society Meeting, Baltimore, MD
- 2006 – 50th Annual American Biophysical Society Meeting, Salt Lake City, UT
- 2005 – 57th Southeast / 61st Southwest Joint Regional Meeting of the American Chemical Society, Memphis, TN
- 2004 – Cell and Molecular Biology Annual Meeting, University of Arkansas, Fayetteville, AR
- 2002 – Eighth Symposium on Recent Advances in Biophysics, Taipei, Taiwan

### **State and Regional Higher Education Engagements**

- 2021 – Association of Texas Graduate Schools Annual Meeting, TX
- 2020 – Association of Texas Graduate Schools Annual Meeting, TX
- 2011 – Posters-at-the-Capitol, Frankfort, KY
- 2011 – 16th Kentucky EPSCoR Conference & 7th KY Innovation & Entrepreneurship Conference (KIEC), Louisville, KY
- 2010 – NSF Day at Kentucky State University, Frankfort, KY
- 2010 – 96th Kentucky Academy of Sciences Annual Meeting, Bowling Green, KY

- 2009 – 95th Kentucky Academy of Sciences Annual Meeting, Northern Kentucky University, Highland Heights, KY
- 2008 – Fall 2008 Arkansas INBRE Research Conference, University of Arkansas, AR
- 2007 – NSF-IDeA Networks of Biomedical Research and NIH-COBRE Research Symposium, Fayetteville, AR
- 2006 – NIH COBRE Research Symposium, Fayetteville, AR
- 2005 – Arkansas Bioscience Institute Annual Meeting, University of Arkansas Medical School, Little Rock, AR
- 2003 – NIH COBRE Annual Conference, University of Arkansas, Fayetteville, AR

### **Workshops & Institutional Engagements**

- 2022 – UT System Roundtable with the National Science Board and the National Science Foundation, TX
- 2011 – US Army Armament Research Development and Engineering Center (ARDEC) Workshop, The Council on Postsecondary Education, Frankfort, KY
- 2010 – Twenty Years of Teaching Excellence, FaCET Summer Conference, Western Kentucky University, Bowling Green, KY
- 2010 – Gatton Academy Research Fair, Western Kentucky University, Bowling Green, KY
- 2009 – 40th WKU Student Research Conference, Bowling Green, KY
- 2014, 2013, 2012, 2011 – Gatton Academy Research Fair, Bowling Green, KY
- 2014, 2013, 2012 – WKU Student Research Conferences, Bowling Green, KY

### **Key Highlights:**

- Extensive participation in accreditation and higher education leadership conferences, including SACSCOC and UT System Academic Affairs engagements.
- Active involvement in national and international STEM research conferences, demonstrating a deep commitment to interdisciplinary research and innovation.
- Regular engagement in state and regional higher education policy discussions, advocating for academic excellence and workforce alignment.
- Long-standing commitment to student research and mentorship, with participation in WKU Student Research Conferences and Gatton Academy initiatives.
- Active collaboration with national agencies, including NSF, NIH, EPSCoR, and the National Science Board.

### **SELECTED COMMITTEES SINCE 2020**

As a dedicated academic leader, I have actively contributed to numerous university and system-wide committees that have shaped institutional policies, strategic planning, academic affairs, research compliance, diversity and inclusion efforts, and student success initiatives. My commitment to these committees demonstrates a commitment to collaborative governance,

institutional effectiveness, and the advancement of higher education priorities. These roles have provided me with extensive experience in decision-making, policy development, and interdisciplinary collaboration to enhance institutional growth, faculty and student success, and research innovation. Below is a selection of my committee service since 2020:

- Permian Strategic Partnership & UT System Education Steering Committee
- Permian Strategic Partnership & UT System Health Care Review Committee Member
- UT System Provost Council
- UT System Academic Affairs Council
- UT System Faculty Success Council
- UT System VPR Consortium
- UT System Graduate Dean Consortium
- State of Texas, Graduate Dean Consortium
- UT System Research Compliance Consortium
- Administrative Council
- Academic Council
- Deans Council
- Graduate Council
- Athletic Advisory Committee
- Diversity and Inclusion Taskforce
- Handbook of Operating Procedure Committee
- Research Compliance and Intellectual Property Committee (Co-Chair)
- Budget and Planning Committee
- Strategic Assessment Committee
- Enrollment Management Committee
- Internal Audit Committee
- International Oversight Committee
- QEP Committee
- SACSCOC Committee
- IRB Committee (AOR)
- IACUC Committee (AOR)
- Compliance Committee
- Endowment Compliance Committee
- Emergency Management/Environmental Health and Safety/Lab/Biosafety Committee
- Commencement and Graduation Committee
- Student Research Committee
- Graduate Student Association
- Blackstone LaunchPad Executive Committee
- LBJ School & College of Business Anchor Assessment Team
- COVID-19 Taskforce: COVID-19 Research Accommodation Plans and Implementation