Executive Summary

Distinguished higher education leader and mathematician with more than three decades of progressive experience spanning academic affairs, workforce development, and state policy. Former Maryland Secretary of Higher Education, appointed by the Governor and confirmed by the Senate, overseeing a nearly $800 million budget and leading statewide strategy for public and private institutions. Brings a rare combination of system-level policy leadership and institutional experience, including a decade as Senior Vice President for Academic Affairs at Montgomery College. Proven record of advancing innovative academic and workforce initiatives, securing over $54 million in competitive grants, and fostering partnerships with government, industry, and community stakeholders. Recognized nationally for leadership in academic excellence, equity in access, and workforce alignment, with multiple awards including the Presidential Lifetime Achievement Award from President Biden. Skilled in strategic planning, institutional transformation, and advancing student success through evidence-based policy, data-driven decision-making, and collaborative governance.

Professional and Personal Information

Sanjay Rai, Ph.D.
Personal Phone: [redacted] | Personal Email: [redacted]

Education

- Ph.D., Mathematics – University of Arkansas, Fayetteville, AR
- M.S., Mathematics – Dalhousie University, Halifax, Canada
- M.S., Mathematics – University of Allahabad, India
- B.S., Statistics, Physics, & Mathematics – University of Allahabad, India

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Awards & Honors

- Dr. Martin Luther King, Jr. Distinguished Service Award - 2025
- Presidential Lifetime Achievement Award, President Biden – 2022
- Aspen Rising Presidents Fellowship Program – 2021
- Difference Maker Award, SANS Institute – 2020
- Chief Academic Officer of the Year, National Council for Instructional Administrators – 2019
- Outstanding Leader Award, Leadership Montgomery – 2017
- Leadership Montgomery, Class of 2009
- Science & Mathematics Professor of the Year, Jacksonville University – 2003
- Phi Kappa Phi, National Honor Society – 2003
- Award for Excellence in Scholarship & Professional Growth, Jacksonville University – 2001
- Faculty of the Year Award, Texas A&M International University – 1995

- J. Hillman Yowell Award for Excellence in Teaching, University of Arkansas – 1993
- John W. Keesee Award for Outstanding Work in Teaching and Graduate Studies, University of Arkansas – 1993

Leadership Experience

Secretary, Maryland Higher Education Commission May 2023 – March 2026

(Acting Secretary May 2023 – 2024)

Appointed by Governor Wes Moore and confirmed by the Maryland Senate; led statewide higher education policy for 14 public four-year institutions, 16 community colleges, 32 private institutions, and more than 140 career schools. Managed a nearly $800M budget, approved academic programs, and oversaw $180M in annual state scholarships and grants.

Key Accomplishments:

- **Revised Statewide Academic Program Approval Process** with implementation of HB 1244 (2024), the Maryland Higher Education Commission (MHEC) operationalized new statutory requirements, analytic tools, and procedural updates designed to modernize the academic program review process with the state's workforce needs.
- Oversaw the **review of over 1,100 academic program proposals** maintaining an average approval time of 30-40 days. Of these, 492 were from the University System of Maryland.
- **Expanded Promise Scholarships** to include noncredit community college students increasing access for adult learners and workforce participants.
- **Secured Maryland's selection by the Aspen Institute for a national transfer success initiative** establishing a statewide transfer-intensive partnership between universities and community colleges, allowing for seamless transfer.
- **Joined Noncredit Mobility Academy** to improve adult learner pathways; advanced terminology shift to "professional certificates" for clarity and workforce relevance.
- **Led MDRC-funded advising reform** in community colleges, emphasizing student-centered coaching.
- **Spearheaded Achieving the Dream's shortened academic terms initiative statewide**.

- **Led the development of the Maryland State Higher Education Plan 2026–2033** designed to be presented to the MHEC Commission in June 2026 and to the General Assembly in July 2026, with the following vision and goals:

  Vision: Design an affordable, contemporary postsecondary education system that equips every Marylander to thrive in a dynamic economy and a pluralistic democratic republic, ensures the completion of meaningful degrees and credentials for all learners, and drives innovation that strengthens the state's long-term competitiveness and civic well-being.

  Statewide Goals: Increase Postsecondary Attainment for Lifelong Success, Ensure Every Degree and Credential Has Value, Mobilize Postsecondary Education Innovation and Research for Competitiveness and Public Good.

- **Led the development of the Maryland Student Information System (MDSIS)**, a comprehensive, state-of-the-art, cloud-based financial aid platform that will replace the legacy Maryland College Aid Processing System (MDCAPS). Designed to modernize and streamline the administration of state scholarships and grants, MDSIS has been designed to provide an integrated, end-to-end system that enhances user experience, improves data accuracy and transparency, strengthens security and compliance, and enables real-time processing and reporting. The platform is scheduled to become fully operational in Fall 2026.

- **Led the development of Data Dashboards** in partnership with MLDS such as Academic Momentum and The Maryland College Labor Sector and Wage Explorer (MDCLaWE). Its primary purpose is to provide a transparent look at how graduates from Maryland's colleges and universities are faring in the Maryland workforce. These dashboards are critical resources for policymakers and higher education leaders to improve student success and measure the "value" of degrees through actual economic outcomes.

Appointments & Boards:

Governor's Workforce Investment Board (Executive Committee), May 2023 – March 2026
Governor's Economic Competitiveness Cabinet, Juvenile Services Education Program Board, May 2024 – March 2026
Prison Education Reform Commission, and the Maryland Longitudinal Data System Governing Board, May 2023 – March 2026
President Advisory Council, American Association of Community Colleges, May 2026 – to date

Media Coverage Includes:

- American Bazaar - Sanjay Rai: Charting the future of higher education in Maryland
- Maryland Matters - MHEC Program Launches to Strengthen Community College Pathways and Boost Statewide Bachelor's Degree Attainment
- News India Times - Indian American makes history as first Secretary of Higher Education in Maryland
- South Asian Herald - South Asian Trailblazer Leads Maryland's Higher Education: A Journey from India to Impact

- The Daily Record - Maryland universities to receive $18.75M in campus safety grants
- WMAR - New college internship program for Key Bridge Rebuild project launched
- WYPR - Baltimore college students will join state effort to rebuild the Key Bridge

Keynotes, Panels, Roundtable Discussions, and Fireside Chats:

- Lumina Foundation Board Retreat: Fireside Chat, closing discussion with Lumina president on national trends in postsecondary attainment – March 2026
- Regional Convening "Competitiveness Conversations Across America" co-hosted by the University of Maryland, Morgan State University and the Council on Competitiveness: Panelist, *The Role of Digital Twins in Driving Innovation* – March 2026
- Maryland's AI Future Town Hall: Panelist, Joined Lt. Governor Miller, UMBC, and Morgan State University for a student-led town hall on AI literacy, equity, and future workforce readiness hosted by St. Frances Academy – February 2026
- Zhejiang University Alumni Association's Lunar New Year Gala: VIP Speaker, High-level roundtable with alumni and community leaders on fostering educational and cultural unity – February 2026
- American Association of Community College's Trustee Leadership Conference: Panelist, Bioscience workforce transitions and industry-aligned case studies at a national policy forum – February 2026
- MD Association of Community Colleges Trustee Leadership Conference: Speaker, Addressed community college trustees on the state of Maryland higher education and legislative priorities – January 2026
- Complete College America: Fireside Chat, *Scaling Student Success: Tools, Partnerships, and Impact* – November 2025
- Complete College America 2025 Annual Convening: Opening Remarks, Welcomed national leaders to Baltimore and shared Maryland's recent college completion success – November 2025
- MHEC/Department of Labor: Convener/Chair, led a statewide strategy session to align two-year and four-year academic programs with cybersecurity industry needs – November 2025
- World Trade Center Institutes Int'l Professional Exchange: Host/Lead Speaker, Briefed 13 international higher education administrators on Maryland's student success policies and ESOL teacher credentialing – November 2025
- UMD College of Agriculture and Natural Resources: Keynote, *The Future of Higher Education in the Age of AI* – October 2025
- Code Path Demo Day: Guest Speaker, *Celebrating the Maryland Department of Labor/MHEC Partnership to Boost Cybersecurity talent Pipeline for HBCU Students*, October 2025
- 12th World Tamils Economic Conference: Panelist, *Higher Education – India and the U.S.* – October 2025
- Lincoln College of Technology, 65th Anniversary Celebration: keynote, *Technical Education and Economic Development* – September 2025
- Maryland International Education Consortium International Day – April 2025
  Discussed the importance of having world knowledge and being a global citizen, and he reiterated the state's commitment to international students and study abroad programs.
- SHEEO Future of Mental Health Panel – April 2025

- Maryland Business Roundtable for Education – September 2024
- Fireside chat on the robust education and workforce development landscape in Maryland, Lumina Foundation State Policy Retreat – September 2024
- U.S. India SME Council, Panelist: *Maryland's Strategic Access to AI and Quantum Computing Opportunities for Small-to-Medium Businesses* – September 2024
  Presidential Inaugurations and Commencements:

- Montgomery County Public Schools Dual Enrollment Graduation – May 2025
- Washington Adventist University Commencement – May 2025
- Carroll Community College Presidential Inauguration – November 2024
- Wor-Wic Community College Presidential Inauguration – September 2024
- Wor-Wic Community College Commencement – May 2024

Montgomery College, Maryland

- **Senior Vice President for Academic Affairs and Workforce Development and Continuing Education Unit, 2013-2023**
- **Vice President and Provost (Campus President), Germantown Campus, 2009-2013**
- **Instructional Dean, Science, Engineering, and Mathematics, Rockville Campus, 2004-2009**

Montgomery College is the largest community college in Maryland, with campuses located in Germantown, Rockville, and Takoma Park/Silver Spring, and other convenient Workforce Development and Continuing Education locations. The College serves key geographic locations in Montgomery County, a large, diverse suburban county adjacent to Washington, DC. Montgomery College serves more than 50,000 students a year, through both credit and noncredit programs (approximately 15,000 FTEs – Full-Time Equivalents), in more than 100 areas of study.

Senior Vice President for Academic Affairs and Workforce Development and Continuing Education Unit (Interim Nov. 2013 to July 2014) November 2013 - 2023

Primary Responsibilities:

- Served as the Chief Academic Officer for the College, providing collegewide vision, leadership, direction, and coordination for all instructional and workforce development and continuing education programs. The position led over 1,500 faculty and staff, with a budget of $128M.
- Led the Workforce Development and Continuing Education unit, growing a self-sustaining operation offering lifelong learning, professional, technical, and contract training programs to $20M in annual revenue.
- Served as chief presidential advisor regarding curricula, course delivery, all full- and part- time faculty and related staff, and the College's array of programs.

- Provided executive leadership to the campus vice presidents/ provosts and Workforce Development and Continuing Education vice president.
- Worked with the President's Cabinet on fiscal stability and sustainability, the pandemic, resource development, and advocacy.
- Worked with the Board of Trustees and acted as Board Liaison for the Student Success Committee of the Board.
- Represented the College with external stakeholders and served as liaison to county and statewide agencies and organizations.

Accomplishments:

- **Reorganized the Academic Affairs Division,** implementing a collegewide structure that improved student success, strengthened transfer and workforce alignment, and enhanced operational efficiency without additional resources. The redesign shifted from a campus-based to a collegewide model, expanded authority for vice presidents, provosts, and deans, and transitioned department chairs to 12-month leadership roles outside the bargaining unit.
- **Student Success Initiatives**
    - Led the development of student success program strategies for 16 highly enrolled academic programs ○ Led the development of DFW reduction initiatives for our most highly enrolled and gateway courses.
    - In an effort to reduce the cost, and provide current and relevant content, developed and implemented the use of Open Education Resources (OER). For Fall 2021, nearly 600 OER sections were offered, benefiting over 10,000 students.
    - Led and supported the development of Z-degrees, whereby all courses in a degree program use OER and no textbooks.
    - Led seat utilization standard of 85 percent average for fall and spring semesters collegewide, optimizing efficiency.
    - Led the development of data mining unrelated to required reporting for the state or for IPEDS, including
        - Resource Planning Toolkit
        - Blackboard Analytics – measure engagement of faculty and students
        - Daily Seat Utilization and Enrollment Reports

- **Led and Supported the Development of Online Degrees (enrollment)** to support the College's enrollment growth, expand accessibility, and reduce time to degree agenda. Twenty online degree programs and certificates were developed in the last seven years, up from zero in 2015. Montgomery College was noted as the number one community college in the state for online education.

- **Developed E-Learning, Innovation, and Teaching Excellence (ELITE)** as a single collegewide source/resource for professional development and distance education.

- **Led and Supported Significant Curriculum Reform** based on data analysis and outcomes assessment for general education, general studies, the American English language program, developmental reading and writing, and developmental math. Initiated and supported faculty in this tremendous effort. Results have led to higher completion rates.

- **Developed and Implemented Academic Master Plan 2016-2021**
  Montgomery College did not have a comprehensive and formal Academic Master Plan. Over the course of an academic year, the Academic Affairs leadership team led the effort to create an Academic Master Plan through a process that was inclusive (over 200 college and community members participated in the development process) and transparent. The AMP closed a year early, having completed many of its goals, and the incorporation of many of these initiatives into the College's strategic plan, *MC2025*.

- **Led Academic Affairs' Response to COVID**
  - **Communication**: Developed a dashboard for our website for communication and posting of relevant data
  - **Leadership and guidance** provided on the use of **state and federal COVID related funds** (CARES Act and HEERFS)
  - **Professional Development:** Provided training to faculty who were available, both on the two days left before spring break, and over spring break, so faculty could transition their courses to emergency remote instruction using Blackboard and Zoom; developed a comprehensive 7-week Structured Remote Teaching professional development program beginning in May 2020 – intensive and rigorous, as well as compensated. Over 700 faculty, both full-time and part-time, participated in the SRT program, which successfully prepared them to teach in the Summer II and Fall 2020 semesters.
  - **Led rapid decision-making on course delivery during COVID-19,** determining instructional modalities for summer and fall terms (in-person, remote, hybrid) under accelerated timelines.
  - **Expanded Advisory Council:** I expanded the Academic Affairs Advisory Council to include more department chairs, union representation from all three unions, the student affairs division, and others (in addition to regular members from the Faculty Council, Staff Council, vice presidents/provosts, dean representatives, assessment, Achieving the Promise Academy, ELITE, the libraries, and the associate senior vice presidents for academic affairs). The objective was to have collective thought generation, proactive identification of problems, and their possible solutions.
  - **Led the transition of Learning Centers and Library Services to fully virtual operations,** expanding hours to meet student needs and increasing access to evening and weekend support.
  - **Assessment and Placement:** Developed remote assessment protocols using tools like ALEKS and GPA for placement.
  - **Grading:** Added grading options through the typical governance process to include Incomplete in Crisis and Withdrawal in Crisis grades.

- **Accreditations**
  - **Middle States:** Addressed concerns the accreditation visit had with the College's General Studies program to increase rigor and transferability; participated in most recent accreditation in the role of CAO.
  - **Paralegal Program:** Sought ABA accreditation, and it was awarded in 2017 ○ **Physical Therapy Assistant:** Program was reaccredited in 2021 ○ **Achieved National Association of Schools of Art and Design (NASAD)** accreditation for 10 programs in 2021, with two additional programs in progress.
  - **Cybersecurity:** National Security Agency's Center of Excellence

- **Efforts to Close the Achievement Gap**

  - Established the Achieving the Promise Academy which provides one-onone mentoring and embedded coaching support in gateway courses with high DFW rates. This Academy primarily serves students of color (88%) with academic challenges who are interested in completing an academic program. It impacts 12,500 students per year.
  - The College moved to GPA-based placement in Fall 2019, resulting in more students of color placing into college-level courses, more are attempting college-level courses, and more are successfully completing.
  - Revised developmental education programs to provide access to collegelevel coursework in the first semester.
  - Detailed program advising guides were created for all academic programs and made available to all on the Academic Affairs website.

- **Conceptualized and Developed the Institute for Part-Time Faculty Engagement and Support -** With part-time faculty teaching 40% of credit courses and 90% of noncredit courses, a mechanism was needed to further integrate them into the fabric of the institution and into our student success efforts. The Institute opened in Fall 2015 with the hiring of a director, with working space especially designed for part-time faculty on each campus, and staff assigned to support part-time faculty. Professional development activities, particularly designed for part-time faculty, were created, including professional week conferences that provided resources, information, and tools to be successful at MC.

  In Spring of 2019, the Part-time Faculty Institute secured funding from a donor to establish the Shoenberg Part-time Faculty Fellows, a sabbatical program for 3 parttime faculty members each year. The first three Fellows were selected in 2020.

In 2022, the Pullias Center for Higher Education at the University of Southern California's Rossier School of Education, in partnership with the American Association of Colleges & Universities (AAC&U), selected Montgomery College as one of two winners of the prestigious Delphi Award. (The other winner is Dominican University (CA)) As part of this distinction, Montgomery College received $15,000 to continue its work to support adjunct, contingent, and/or non-tenure-track faculty (NTTF) in promoting student success.

- **Instituted Faculty and Staff Driven Recognition Process –** Worked to assure recognition of full-time faculty and part-time faculty for excellence in teaching, service, or scholarship, with an award of $2,000 each, as well as Part-time Faculty of the Year and Full-time Faculty of the Year, with an award of $5,000 each, through a process developed and implemented by the faculty governance group.

- **The Scholarship for Excellence in Teaching** initiative was conceptualized in recognition that the College has excellent faculty, and that our faculty can contribute to the scholarship of teaching. The Institute selects 12 faculty each year via a rigorous application process. Cohorts have a two-year commitment, whereby the first year is spent reading, discussing, and reflecting on their own teaching, and the second year is spent implementing the action plan from the end of the first year and assessing that implementation.

- **New programs**: Driven by community and regional needs, new programs were created during my tenure in Bioinformatics, Data Science, and Cloud Computing. In addition, industry specific programs such as Amazon Web Services (AWS) (in partnership with Amazon) and Microsoft Azure were offered. A new Behavioral Health degree program was implemented in Fall 2021.

- **International Relationship Building (continued from previous position) Russia (2019):** Participated with three other community college colleagues selected for a Fulbright grant to travel to Russia and share community college information and learn about the Russian higher education system. As a result of this engagement, the U.S. Embassy has awarded a grant to support a two-week travel/study abroad in Russia for 10 MC participants.

  South Korea (2018): Traveled to South Korea with Montgomery County Executive, Ike Leggett, to continue teacher training efforts and build relationships with businesses interested in setting up in Montgomery County.

  India (2016): Led Montgomery County Executive Ike Leggett's Sister City Mission trip to India. This mission trip resulted in several Memoranda of Understanding and agreements including the expansion and establishment of the global IT firm Infosys' presence in Montgomery County with a contract training partnership with Montgomery College.

India (2015): Collaborated with the Indian Centre for Research and Development of Community Education (ICRDCE) to build capacity in curriculum and syllabus development using the American community college model. The conference was funded by the U.S. State Department. The result was a successful professional development opportunity for over 300 community college faculty, staff, and administrators in Chennai, India.

- **Partnerships/Grants**

Secured Trade Adjustment Assistance Community College and Career Training (TAACCCT) competitive grant of $15M from the U.S. Department of Labor Employment and Training Administration. The grant created the Cyber Technology Pathways Across Maryland (CPAM) Consortium, consisting of 14 of the state's community colleges, in collaboration with Lockheed and two other major cyber industry corporations, to spearhead the expansion of career pathways to address this workforce need. Montgomery College led the consortium, resulting in many institutions increasing capacity and providing a talent pipeline for our region.

Secured TechHire Grant, $4M, from the U.S. Department of Labor to launch an innovative training and job placement model as a means of advancing career pathways and creating jobs for local economies by offering training and supports that lead to middle- and high-skilled employment opportunities for special populations facing historical barriers (example: individuals with limited English proficiency). These funds build upon the Cyber-Technology Pathways Across Maryland consortium in which MC is the lead organization.

Secured America's Promise Grant, $5.6M, a tuition-free training program designed to strengthen the pipeline of skilled workers to expand our region's middle- to high-skilled workforce in the IT and cybersecurity industries. The program featured real-world projects provided by local employers, so we have many local industry partners involved in this project.

- **Partnership with Montgomery County Public Schools/Enrollment and Completion**

The College's dual enrollment program has been growing for years, but there are several programs that should be highlighted:

Middle College is an associate's degree program offered at two Montgomery County high schools. There are 200 students enrolled who have the option to earn an associate's degree in general engineering or general studies, along with their high school diploma, through a series of AP/IB course offerings and courses taught by College faculty at the two high schools. This program started under my leadership as Germantown Campus vice president and provost, and is being expanded as a Virtual Middle College from Fall 2021 to additional Montgomery County public high schools, private high schools and homeschooled students.

Early College builds on the success of the Middle College program by expanding offerings *and* bringing high school students to our campuses for their junior and senior years of high school. Initially (Fall 2018), we offered two degree options, but demand increased significantly, warranting the addition of nine more associate degree programs important to our region across all three campuses beginning in Fall 2019. In Fall 2020, the

College added Biotechnology, and for Fall 2022, Cloud Computing and Behavioral Health degree programs were added. Montgomery College graduates the most dual enrollment students in the state, the majority of whom are first generation and/or students of color. These graduates are transferring to major universities across the country including University System of Maryland institutions.

The Teacher Preparation Program is a very special initiative - MCPS issued an RFQ, and Montgomery College was awarded the opportunity to develop a para-educator program for those employed with the school district, but in other capacities. There are tracks for those with a bachelor's degree, an associate's degree, a high school diploma or GED, and those who have not completed high school. Montgomery College was the only community college in the state awarded this opportunity. For the 2021academic year, 75 participants were enrolled in the MCPS Paraprofessional Preparation Program. To date, there are 20 graduates of the program.

- **Partnerships (Other)**

University of Maryland, Baltimore County (UMBC) - Creation of Translational Life Sciences Technology (TLST) Program – Through engagement with the University of Maryland, Baltimore County, created a four-year degree program that builds upon the highly successful Montgomery College two-year biotechnology program. The junior and senior years of this program are offered at the Universities at Shady Grove (USG), which serves the region's robust life sciences companies.

University of Maryland College Park – Creation of four-year degree programs in embedded systems and biocomputational engineering, building upon MC's nationally known engineering program, and the junior and senior years of the programs are offered at USG.

BIOTrain – BioTrain is a sector partnership of biotechnology companies, government, nonprofits, led by Montgomery College and working together to shape a workforce that is ready for today and tomorrow. A State of Maryland funded grant effort to create a workforce for Maryland's life science industries ($120K). Major industry partners include MedImmune, Glaxo Smith Kline (GSK), and Amarex, in addition to others.

IT/Cyber - Created an industry consortium of over 150 IT and cyber companies to collaborate with the college to address talent needs of this industry sector. This includes major companies such as Lockheed Martin, Amazon, and Apple.

BioTrac – Started as an external company, BioTrac partnered with MC to address training needs for professionals in the biotechnology industry and national labs. MC brought BioTrac into the College in 2019. BioTrac offers graduate/post-graduate handson laboratory training workshops for research scientists.

  - Taught by active research scientists and innovators from leading research institutes (NIH, USDA, FDA) and private industry
  - BioTrac courses deliver instruction on current research methodologies, including

RNA-Seq and Computational Analysis, Next Generation Sequencing (NGS), Flow Cytometry (FACS), Gene Editing with CRISPR, NGS and Metagenomics, Proteomics; Stem Cell (iPSC from Neural, Cardiomyocytes), Cell Line Authentication, Vaccine Development, Real-Time, Quantitative and Digital PCR.As a result of COVID, programs were offered virtually, resulting in a tremendous growth in enrollments and new exposure to international participants (over 2400 attended the first workshop worldwide).

- BioTrac has generated $1.5M (utilizing only one staff position) since coming in-house.

- **Partnership with Apple/Montgomery Can Code** – The College team developed a new partnership with the Apple Corporation, MCPS, and the Montgomery County Economic Development Corporation to bring free coding programs to low-income or otherwise underserved 6th, 7th, and 8th graders in our community. This model was based on successful Apple partnerships with other municipalities, including Chicago and Birmingham. The training is provided by the College's faculty at our campuses. Over 2,700 middle school students have participated in this gateway program since 2019. In addition, a new Innovation Hub (ignITe) was being built on the Rockville Campus to support Montgomery Can Code and similar initiatives.

- **Led Workforce Development and Continuing Education Unit**
  Completely self-sustaining with $20M in revenues – Considerable growth increase of 50% ($7M to $10.5M), state aid increase of 31% (from $6.1M to $8M), excess revenue before internal fund transfers increase of 1,150% ($.2M to $2.3M), and contract training revenues increase of 77% ($1.3M to $2.3M) by the time I left in 2023. Competitive grant awards total $54.6M over the last seven years (including those noted in partnerships above). Pre-pandemic, WD&CE had 46,129 enrollments, one of the College's highest enrollments ever (4,367 FTEs) throughout 50+ locations in the county; 5,000 students annually take WD&CE courses leading to licensure, certification and industry credentials; 1,500 students take both non-credit and credit classes in the same year; and nearly 4,000 students between 2021 and 2023 took a credit course after taking a non-credit course.

- **MC Awarded 2016 AACC Partnership Award** for the creation of the Pinkney Innovation Complex for Science and Technology Foundation (see below).

Statewide and County Leadership:

- Montgomery County's Amazon HQ2 Proposal – Member of the County's team and provided leadership for the talent section. Selected as one of the top 20 finalists.
- M4CAO – Maryland Council of Community College Chief Academic Officers ○ Implemented the CCRCCA (College and Career Readiness and College Completion Act of 2013) required K-16 collaboration and agreement ○ Statewide Guided Pathways Model Committee Co-chair: team developed considerations for the implementation of guided pathways and meta majors across the state.

- Maryland Association of Community Colleges Assessment and Placement Study Group - Led the study of assessment and placement of new college students using ACCUPLACER, SAT, ACT, and GED in 2017. ACCUPLACER, SAT, and GED all had new versions, and this study group evaluated the previous versions and provided recommendations to the presidents regarding cut score verifications. These recommendations laid the foundation for alternate/GPA-based placement for Maryland, resulting in thousands of MC students beginning in college-level English and math courses (9,000 from 2019-2021).
- MCEDC Board Member – The Montgomery County Economic Development Corporation is a 501c3 created to lead economic development for the county; member of the search committee to select the president; treasurer for 3 years; governance committee member.
- Maryland Tech Council Board Member – The Maryland Tech Council has collaborated on successful Department of Labor grants and other talent development initiatives with the College.

Vice President and Provost (equivalent to Campus President), July 2009 – November2013
Germantown Campus (Interim 2009-2010)

Primary Responsibilities:

- Chief Academic Officer and Chief Executive Officer of the Germantown Campus; Chief Student Affairs Officer until 2012 (VPP position was restructured to remove the CEO role in 2014)
- Promoted the College's mission as the chief spokesperson for the Germantown Campus, internally and externally.
- Coordinated the planning and management of campus and College resources to accomplish the teaching/learning mission of the College and to promote student success.
- Coordinated the planning and management of campus and College resources to accomplish campus student life activities, including athletics and club offerings, as well as services including the bookstore, cafeteria, learning center, and library.
- Led campus efforts to implement the College's mission, goals, and objectives.
- Served as campus and College lead for the Germantown Development Project, which included construction of Holy Cross Hospital, the Bioscience Education building, and the Germantown Innovation Center.
- Advocated for campus and College interests with elected and appointed officials, as well as business and community leaders.
- Worked with College Facilities and county and state agencies to maintain and update the Germantown Campus Facilities Master Plan that incorporates a 40-acre Science and Technology Park and County-operated Germantown Innovation Center (GIC).
- Led all campus academic and student services planning activities in coordination with Collegewide planning efforts, as well as developed, enhanced, and assessed academic and student support programs.

- Led and participated in faculty and staff shared governance activities and encouraged increased civic engagement among faculty, staff, and students.
- Led student success efforts and initiatives.

Accomplishments:

- **Creation of Pinkney Innovation Complex for Science and Technology Foundation** – From concept to completion, assisted the College with the development of the Foundation, which supported the Life Sciences Park, providing an integrated academic, business, and research environment. Through the Foundation, Montgomery College provided space for economic development. Entrepreneurs are provided a resource-rich location. Students gain access to internships and opportunities to interact with industry professionals. The anchor tenant was (and currently is) Holy Cross Germantown Hospital, the first hospital built on a community college campus (received the AACC Partnership Award for this project). The hospital project is one of the largest economic development projects in the state of Maryland.

- **Acquisition and Completion of Paul Peck Academic and Innovation Building -** This site houses classrooms and administrative, faculty, and staff offices on the first floor. The second floor was leased to Montgomery County for the Germantown Innovation Center, a bioscience and technology incubator. Through my efforts, the Innovation Center focused on the burgeoning life science industry with 25 excellent start-up companies working on projects and providing learning opportunities for our faculty and students. This project resulted in a $1M naming gift to the College.

- **Completion of the Bioscience Education Center -** The Bioscience Education Center is a 145,000 square-foot facility that houses a state-of-the-art teaching facility for Biotech and other STEM programs and provides opportunities for undergraduate research and the expansion of course and program offerings.

- **Development of Clinical Trial Management Program** – The Clinical Trial Management Program is a collaborative program among Montgomery College and Amarex Clinical Research, a pharmaceutical product development company. This program provides an introduction to project management of clinical trials in
  the pharmaceutical industry. To date, this program has created more than 200 new entrants into clinical trial management since its inception in 2012 creating a much-needed pipeline of qualified professionals for our region. During the pandemic, this program was critically important in addressing the increased need for clinical trial professionals in the region.

- **International Relationship Building - India** ○ Invited participant in Secretary John Kerry's delegation to India on US – India Higher Education dialogue in 2012 ○ Participated and assisted in planning of Governor Martin

O'Malley's trade mission to India. This resulted in more than $70 million investment in Maryland.

- U.S. State Department Grant, $195,000, for MC to develop a national community college symposium in Delhi, India, as well as develop a student/faculty exchange program and professional development opportunities for faculty.

- **Led the development of On-RAMP to STEM** – Through a National Science Foundation Grant, brought a cross-section of state, regional, and local stakeholders interested in STEM and workforce development together and provided guidance and expertise to the development of this project. This project provided scholarships to able and financially needy students majoring in biotechnology, biology, and mathematics who transfer to fouryear institutions or enter the workforce in life-science industries with a solid understanding of the interdisciplinary nature of biology and mathematics. Building on a record of successfully fostering STEM students by creating a learning community and providing intensive academic support, one-on-one mentoring, internships, and research opportunities, the project awarded approximately 125 scholarships and is supporting four cohorts of scholars.

- **Donor Cultivation and Relationship Building –** Initiated contact with Frank Islam as part a naming opportunity conversation and gift. The communication resulted in an ongoing relationship with Frank Islam and the creation of the **Frank Islam Athenaeum Symposia** - an annual lecture series held at the Germantown Campus, whereby nationally known experts discuss timely issues in international affairs, the arts, politics, and economics. I facilitated the development of the **Hillman Entrepreneurs Program ($2M)**, a three-year scholarship and educational program that supports, develops, and graduates ethical leaders who want to energize and give back to their local communities. Students completed their associate's degree at Montgomery College and their bachelor's degree at the University of Maryland, College Park, and earned a minor in Technology Entrepreneurship.

Instructional Dean, Science, Engineering, and Mathematics, Rockville Campus July 2004 – July 2009

Accomplishments:

- Provided leadership to the second largest academic unit at the college with an enrollment of 6,500, 69 full-time faculty, 120 part-time faculty, and 25 staff.

- Advocacy efforts resulted in full funding, $54 million, for the new Rockville Science Center. Led the selection of an architectural/engineering firm and the design and

construction efforts for the Rockville Science Center, a 144,000 square foot academic building and the largest academic lab building in the state of Maryland at that time, to house the science and engineering department with full involvement of faculty and staff of the unit.

- Led design efforts for the renovation of Science East and Science West, which house studio classrooms, the Mathematics and Science Center, and the Mathematics Department.

- Advocacy with government relations in support of college funding on several projects with elected officials from the county, state, and on Capitol Hill.

- Significant growth in the science programs at Rockville Campus, particularly the engineering program being recognized as the largest engineering transfer program in the nation (from 700 students to 1,400 students).

- Signed MOUs with Montgomery County Public Schools, Georgia Tech and George Washington University.

- Grants**:** Provided leadership to secure highly competitive grants that support student success, particularly for women and underrepresented groups in science, engineering, and mathematics areas. Exceeds $2.5 million over the four years I served as dean. Some selected examples:
    - Principal investigator (PI), Project Portal to Success in Engineering - Funds for the Improvement of Post-Secondary Education - a prestigious U.S. Department of education grant program that is extremely competitive at the national level. In 2007, fewer than 20 FIPSE grants were awarded across the nation. Montgomery College was the only Maryland State recipient in 2006, and this proposal was awarded on the first application. The focus of this Project is to increase the number of women and minorities in engineering programs.
    - "*ACCESS* Engineering" (Achieving Community College Excellence, Success, and Scholarship), a four-year, $600,000 grant from the National Science Foundation (NSF) and Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM).

- Initiated an annual Science, Engineering, and Mathematics lecture series, SEM Exchange, to stimulate dialogue and debate on recent advances in sciences and their implications to the college and the local community.

- Organized a stakeholder meeting that involved extensive community-based representation, "Rising Above the Gathering Storm: The Role of Community Colleges in Preparing STEM Professional-Issues and Challenges," featuring a panel discussion with Mr. Norman Augustine (former CEO of Lockheed Martin) and various other prominent leaders from academia and the private sector to examine the role of the community college STEM education pipeline in the global economy and our nation's competitive

advantage with a view to advancing the nation's leadership in scientific research. This appeared in the *Chronicle of Higher Education.* (2007, https://www.chronicle.com/article/Leaders-Mull- Community/39854)

- Served as a member of the Associate of Science in Engineering Oversight Council – Maryland Higher Education Commission on the development of a statewide degree.

- Initiated the College's hosting of the Maryland State Science Bowl competition for the U.S. Department of Energy, which annually attracts high school teams from across the State. The winning team represents the State at the National Science Bowl. First community college in the state to host this event.

- Raised funds and implemented the U.S. Department of Education grant for the Mobile Classroom Project. Using mobile technology, science, engineering and mathematics faculty members teach introductory engineering classes at local high schools in collaboration with Project Lead the Way, a national outreach program to stimulate interest in engineering studies and profession. This grant enhanced the expansion of the engineering program to Germantown and Takoma Park/Silver Spring Campuses.

- Initiated Internship and REU (Research Experiences for Undergraduates) Program for SEM students at the Rockville Campus. In 2008, 14 SEM students participated in 10week-long REU programs across the nation (each student, on average, received a $2,400 stipend plus room/board and travel expenses). This project is still in effect and has served hundreds of students.

- Implemented a developmental mathematics program that led to course redesign of mathematics courses at the College. Led the creation of a Developmental Mathematics Task Force consisting of college math, English, and counseling faculty, Montgomery County Public School math teachers, and community business leaders -- all working together towards future directions for a successful developmental math program. This redesign has now been assessed and adjusted accordingly.

- Provided leadership that resulted in two National Science Foundation Course Curriculum Lab Instrument Projects with the University of Maryland-College Park to align our biology courses with the National Research Council's recommendations on BIO 2010.

- Helped secure a $2M bequest from a recently retired faculty member**,** the largest the College had received to date.

Professional Activities – Montgomery College:

- Executive Committee Member, Montgomery County Economic Development Corporation, 2015 – 2018, Governance Committee Chair, 2020 - 2022
- Board member, Maryland Tech Council (former Technology Council of Maryland), 2013-2023
- Board member, Governor's Life Sciences Advisory Board (2015-2023) and Chair of Talent Subgroup 2017-2019
- Chair, Maryland Council of Chief Academic Officers, 2015 – 2017, member 2014, 20172023
- Board member, Pinkney Innovation Complex for Science and Technology Foundation, 2012-2023
- Board member, Leadership Montgomery, 2010 – 2013
- Board member, Blackrock Center for the Arts, 2009 – 2013
- Board member, Indian Biomedical Association, 2009 – 2014
- Board of Directors, Germantown Gaithersburg Chamber of Commerce, September 2009 – 2014
- Commissioner, Montgomery County Commission for Women, 2008 – 2012

Selected Media Appearances - Montgomery College:

- MCTV, December 2021, "The Workforce of Tomorrow Series: IgnITing Montgomery County's Future Tech Talent"
- MCTV, August 2021, "5G Bootcamp @ Montgomery College!
- FB Live, July 2021, "The Workforce of Tomorrow: The Quantum Revolution and the Talent Pipeline - Live Stream" (The Quantum Revolutions & The Talent Pipeline - YouTube)
- MCPSTV, March 2019. "Dr. Sanjay Rai spotlights various options for gaining credits while still in high school" (https://www.youtube.com/watch?v=OzM0kw1eEcg&feature=youtu.be)
- Washington Post Live- Transformers: Education, January 2019. Students looking to avoid the debt associated with a college degree are turning to alternatives like skills-based training. University Ventures Co-Founder Ryan Craig, Kettering University President Dr. Robert McMahan, and Dr. Sanjay Rai, Montgomery College Senior Vice President for Academic Affairs, talk about the collegiate alternatives students are seeking to prepare them for the workforce https://youtu.be/o8rD2ELvYv0

Previous Higher Education Positions

Jacksonville University, Jacksonville, Florida

Jacksonville University was founded in 1934, currently serves nearly 4,000 students annually and offers 7 bachelor's degree programs and more than 70 majors, programs, and

concentrations. There are graduate programs in nursing, business, education, orthodontics, marine science, fine arts, math, and public policy.

- Chair - Department of Mathematics Fall 2001 - Spring 2004
- Tenured Full Professor - Department of Mathematics Fall 2002 - Spring 2004
- Associate Professor - Department of Mathematics Fall 1999 - Spring 2001

Texas A&M International University, Laredo, Texas

A member of the **Texas A&M University System**, serving over 8,400 students. Texas A&M International University is a globally focused institution located at the gateway to Mexico, serving a diverse and multicultural community. The university offers a wide range of undergraduate and graduate programs designed to prepare students for success in an interconnected world.

- Associate Professor - Department of Natural Sciences Fall 1998 - Spring 1999
- Assistant Professor - Department of Natural Sciences Fall 1994 - Summer 1998

Publications

Book Publications

Boudhraa, Z., Rai, S., and Quinn, T. (2020). Basic insights in vector calculus: with a supplement on mathematical understanding, World Scientific Publishing Co Pte Ltd.

Quinn, Terrance and Rai, Sanjay (2009) Pathways to real analysis**.** Narosa Pub. Co., April 2009. ISBN: 978-81-8487-008-4.

Selected Additional Publications

Carter M.J., Pollard D., Rai S. (2014). *India and US Community Colleges.* In: Rumbley L.E., Helms R.M., Peterson P.M., Altbach P.G. (eds) Global Opportunities and Challenges for Higher Education Leaders. Global Perspectives on Higher Education. Sense Publishers, Rotterdam, pp 169-172.

Quinn, T. and Rai, S. (2012) *Variation of Parameters in Differential Equations (A variation in making sense of variation of parameters),* PRIMUS, 23:1, 25-44, DOI: 10.1080/10511970.2012.694016

Quinn, Terrance and Rai, Sanjay (2008) *Discovering the Laplace Transform in Undergraduate Differential Equations*, PRIMUS, 18:4, 309-324, DOI: 10.1080/10511970601131613

Misra, P., Quinn, T.J.C., and Rai, S. (2004), *A four dimensional functional differential equation for the dynamics of CD4+ T-Cells and HIV-1*, International Journal of Differential Equations and Applications, vol. 9, number 1.

Rai, S. and Robertson, R. (2002), *An age-structured population model with state-dependent delay*, International Journal of Differential Equations and Applications, 2002, Volume 6, No. 1, 7791.

Rai, S. and Robertson, R. (2002), *Analysis of a two-stage population model with space limitation and state-dependent delay*, Canadian Quarterly of Applied Math, Vol. 8, Number 3, 2000, 275291, Appeared Fall 2002.

Rai, S. and Sastri, C.C.A. (2001), *Group classification and invariant boundary conditions for generalized Burgers Equations*, Indian Journal of Mathematics, Vol. 43, No. 1, April 2001, 99118.

Rai, S. and Brewer, D. (1997), *Analysis of a nonlinear FDE for an age structured population*, Journal of Natural Geometry, University of London, 11, 57-74.

Rai, S. and Sastri, C.C.A. (1997), *On the simplification of the Ovsiannikov's Method for the construction of partially invariant solutions*, Indian Journal of Mathematics, Vol. 39, No. 1, 6574.

Presentations While at Montgomery College

Selected Presentations

- *Impetus for Open Education,* ACCT Annual Leadership Congress, NYC, co-presenter, October 3, 2022
- *Thinking Broadly about STEM Skills in the Workforce and How to Prepare Students,* National Academies of Sciences, Engineering and Medicine (NASEM), panelist, October 24, 2022
- *39th Convocation, Keynote Address,* Deen Dayal Upadhyaya (DDU) Gorakhpur University (67,613 graduates from DDU and 341 affiliate institutions), India. April 12, 2021
- *So Long Silos: Building Strategic Alliances between Colleges and Workforce Boards,* National Association of Workforce Boards (NAWB) Annual Meeting, Washington D.C., March 25, 2018.
- *Bridging the Cybersecurity Skills Gap in Maryland,* Montgomery County Cyber Assets Meeting, March 19, 2018.
- *Improving Course Success Rates While Reducing Student Textbook Costs*, DREAM 2018, Nashville, TN, February 22, 2018.
- *Montgomery College's Institute for Part-Time Faculty Engagement and Support,* American Association of Community Colleges, April 11, 2016
- *White House Panel on STEM Pathways for Underrepresented Groups,* October 2014.
- *Leadership Lessons,* Leadership Development Institute, November 2014.

- *Creating Opportunities for Community College Transfer Student Success,* National Institute for the Study of Transfer Students, 2014.
- *Partnerships to Promote Student Success,* Eastern Association of College and University Business Officers Executive Summit, 2013.
- *Project Portal to Success in Engineering*, Innovation 2010, Baltimore, March 2010.
- *Student Success Initiative through External Funding: FIPSE funded Project Portal to Success and Other Possibilities*, Jacksonville University, April 3, 2008.
- *Modeling US Population and other real data with Differential Equations*, Science Engineering Lecture Series, Jacksonville University, April 3, 2008.