

# MARYAM RAZA-RATCHFORD

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**SUMMARY:** Experienced industry professional skilled in process optimization, data analysis, and driving operational efficiency with a passion for innovation management. I now leverage my technical expertise and strategic mindset to shape project strategy and lead successful initiatives.

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**PROFESSIONAL SKILLS:** Lean Six Sigma (Yellow belt), Project Management, Market Research, Strategic Planning, Risk Management, Cross-functional Leadership, Stakeholder Engagement, Decision Quality, Negotiation, Communication, Adaptability, Team Operations & Meeting Facilitation, Patent Evaluation

**TECHNICAL SKILLS:** Power BI, Asana, Microsoft Office Suite (Word, Excel, PowerPoint, Project), SAS JMP, Salesforce, Trackwise, Data Visualization Tools, Design of Experiments, Collaborative Platforms (Teams, Zoom, SharePoint), Veeva, Biotech-Specific (Downstream Purification, Chromatography, Tangential Flow Filtration (TFF) Systems), Technical Writing

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## PROFESSIONAL EXPERIENCE

### PRODUCT MANAGEMENT SPECIALIST III | THERMO FISHER SCIENTIFIC | APRIL 2025 – PRESENT

*Supporting product strategy, supplier alignment, and portfolio optimization in the life sciences space*

- Improve e-commerce platforms for accurate marketing content and seamless customer experience.
- Support portfolio strategy through market and patent analysis to identify new investment opportunities.
- Provide sourcing and technical support to sales, enabling timely fulfillment of customer chemical needs.
- Manage supplier relationships, including business reviews and PCP process implementation.
- Develop sales tools and resources to enhance commercial team effectiveness and customer engagement.

### SCIENTIFIC ASSOCIATE II | CSL SEQIRUS | NOVEMBER 2020 – MARCH 2025

*Led cross-functional initiatives spanning process development, innovation strategy, and portfolio management*

- As SME, directed downstream purification R&D projects from concept through scale-up and tech transfer
- Led onboarding and portfolio integration of Next Gen assets by coordinating across legal, external collaborators, and internal R&D groups.
- Developed and maintained technology profiles, strategic timelines, and portfolio dashboards to support decision-making at the leadership level.
- Revived a stalled facility start-up project, introducing risk mitigation and financial planning processes—resulting in \$0.5M in cost savings.
- Created detailed project roadmaps, SOPs, and technical documentation to ensure regulatory alignment.
- Facilitated cross-functional communication and milestone tracking to enable commercial readiness.
- Presented updates and strategic insights at portfolio governance forums, influencing pipeline prioritization.

### SCIENTIFIC ASSOCIATE I | SEQIRUS INC | JUNE 2018 – NOVEMBER 2020

- Led proof-of-concept studies for a novel purification method, improving product purity.
- Managed downstream processing of Influenza batches (2L–200L) at benchtop laboratory and pilot scales.
- Analyzed data to support commercial vaccine production.
- Performed in-process analytics and executed small-scale experiments to troubleshoot bioprocess issues.

## CERTIFICATIONS & TRAININGS

- Lean Six Sigma – Yellow Belt | Solomon EOS, LLC | 2024
- After Action Review (AAR) | CSL Seqirus | 2024
- MS Power BI | Wake Technical Community College | 2024

## EDUCATION

**MBA** | UNC Chapel Hill | *SEPTEMBER 2025 – SEPTEMBER 2027*

**P.S.M – MICROBIAL BIOTECHNOLOGY (MMB)** | NC STATE UNIVERSITY | *AUGUST 2023 – MAY 2025*

Mastering biotechnology techniques, and market research & analysis skills through industry experiences. Integrating scientific knowledge with business strategies & driving innovative solutions in biotechnology.

**B.S – BIOCHEMISTRY** | NC STATE UNIVERSITY | *MAY 2017*

Minors – Microbiology, Biotechnology, BTEC Biomanufacturing (Downstream Processing)

## MULTI-DISCIPLINE ORGANIZATION SUPPORT | CSL SEQIRUS

- Safety Team Lead (June 2018 – September 2020), Support (September 2020 – March 2025)
- Site Sustainability/Green Team (January 2023 – March 2025)
- First Responder (June 2018 – March 2025)
- Global Scientific Practice Policy Champion (June 2023 – March 2025)

## GRADUATE CONSULTING PROJECTS | NC STATE UNIVERSITY

**INSECT BITE-PROOF CLOTHING** | VECTOR TEXTILES | *AUGUST – SEPTEMBER 2023*: Conducted a comprehensive market analysis of non-insecticidal insect bite-proof clothing, identifying key consumer demographics, evaluating demand, and recommending production pathways to meet market needs.

**ASEPTIC MANUFACTURING PROCESS** | FUJIFILM DIOSYNTH BIOTECHNOLOGIES | *SEPTEMBER – DECEMBER 2023*: Delivered a competitive landscape analysis of viral vector purification technologies, reviewed global CDMO competitors, and provided strategic recommendations for implementing an Aseptic Manufacturing Process (AMP) to improve operational efficiency.

**PLANT DISEASE DETECTION DIAGNOSTICS** | WEI RESEARCH GROUP | *JANUARY – FEBRUARY 2024*: Led the team in evaluating the manufacturing potential of a microneedle patch for crop disease detection, identified funding and collaboration opportunities, and analyzed competitive landscape trends to inform product development strategy.

**LICENSING PARTNERSHIPS** | COLLABORATIONS PHARMACEUTICALS INC | *FEBRUARY – APRIL 2024*: Spearheaded the identification and negotiation of licensing partnerships for an AI-driven drug discovery pipeline, conducting detailed market assessments and competitor analysis to strategically position CPI's drug candidates.

**OCULAR INNOVATIONS** | GLUCK TISSUE ENGINEERING LAB | *AUGUST – SEPTEMBER 2024*: Led a team in performing a comprehensive analysis of the ocular wound repair technology manufacturing landscape, assessed patenting potential, and developed commercialization strategies to overcome patent-related challenges.

**SUSTAINABLE FOOD SYSTEMS WITH BIOSOLUTIONS** | NOVONESIS | *SEPTEMBER – DECEMBER 2024*: Led a team in identifying profitable growth opportunities in the food & beverage sectors, performed in-depth industry and regulatory analysis, and provided strategic recommendations for applying bio-solutions in product development.

**REAL-TIME HEALTH MONITORING INNOVATIONS** | MMB CAPSTONE | *JANUARY – APRIL 2025*: Developed a commercialization strategy for a diagnostic device for real-time health monitoring, incorporating patient/provider surveys, KOL interviews, market analysis, and unmet needs assessment. Built a business model outlining revenue streams (licensing, B2B sales, subscriptions, and direct-to-consumer), along with regulatory, IP, and licensing pathways, while addressing adoption challenges and mitigation strategies.