

ARTHUR L. EDGE III

(703) 951-3343 | arthur@arthuredge.com | www.linkedin.com/in/arthuredge

PROFESSIONAL EXPERIENCE

ASTRAZENECA

Senior Director / Global Supply Chain & Strategy / Respiratory & Immunology

Senior Director / Global Supply Chain & Strategy / Oncology

Director / Global Technical Operations / Products and New Technology

Gaithersburg, MD

November 2024 – Present

November 2022 – March 2025

July 2020 – November 2022

Supply Strategy

- Reporting to Vice President, Global Supply & Strategy; accountable for tactical and strategic decisions across end-to-end manufacturing and supply network; directing multiple 50+ member teams across 20+ functions
- Directed global supply for FASENRA® across 84 countries, co-driving \$1.9B in revenue (14% YoY growth) through leadership on Global Product Team; enabled #1 biologic brand position (46% market share), treatment of 160K+ severe asthma patients, delivery of 1M+ units annually, and company's first-in-category launch in China
- Directed global supply for IMFINZI® across 97 countries, driving \$4.7B in revenue (17% YoY growth) and delivery of 4M+ units annually, supporting treatment of cancer patients
- Architected 10-year and 3-year manufacturing and capacity roadmaps, enabling 300% volume growth, sustaining 85% gross margin, and managing \$500M in inventory; received Global Operations Award
- Reduced lead times by 47% and optimized COGS via value stream mapping and redesign spanning 14 lanes and 10 nodes; sponsored sustainability projects delivering 98% carbon reduction and \$5M in logistics savings
- Resolved critical risk events and multi-region supply disruptions, preventing \$3M in write-offs
- Acted as Global Operations Lead for Antibody Drug Conjugate clinical-pipeline portfolio (10+ assets), accelerating launch timelines and establishing multi-sourcing procurement strategy; secured C-suite endorsement for \$1.5B capital investment for new production facility in Singapore
- Defined capability targets and supply chain resilience roadmap to 2030, orchestrated Nestlé cross-industry benchmarking forums; established framework for AstraZeneca's first Supply Chain Center of Excellence and supported rise from #22 to #4 in Gartner Supply Chain Top 25 standing

Technical Strategy

- Reported to Executive Director, Global Technical Operations; held Product Champion accountability for end-to-end technical strategy covering drug development, health authority engagement, launch, and commercialization, including clinical-to-commercial manufacturing strategy across Vaccine, Oncology, Respiratory, and Immunology portfolios; directed 120+ members across 6 product teams
- Executed accountability as Global CMC (Chemistry, Manufacturing, & Controls) lead for 2 commercial and 4 pipeline products, partnering with R&D, Quality, Regulatory, Supply, Finance, and Commercial to align technical and operational execution, define global product specifications, and deliver regulatory filings in 75+ markets
- Transformed cross-supplier analytics capability during COVID-19 pandemic, integrating process data from external manufacturing network to accelerate FDA filings and enable first-to-market approval for EVUSHELD™ for COVID-19 prevention, enabling \$2.19B in first-year revenue
- Built capability within 10+ product teams, establishing a standard business process for cost analysis, make-vs-buy manufacturing site selection, technical platform development, and launch readiness; cut launch timelines by 50%
- Managed complex strategic partnerships with Amgen (TEZSPIRE®, severe asthma) and Horizon Therapeutics (UPLIZNA®, rare neurological disorders), ensuring on-time launch, regulatory compliance, and market expansion; navigated new 50/50 profit-share alliance and supported diligence for product divestment, generating \$776M

GLAXOSMITHKLINE (GSK)

Senior Technology Manager / Manufacturing, Science, & Technology

Technology Manager / Manufacturing, Science, & Technology

Rockville, MD

May 2020 – July 2020

December 2016 – May 2020

- Reported to Global Technical Director; provided leadership and product lifecycle management for BENLYSTA® (lupus, immuno-inflammation) including risk, change, and knowledge management for US and South Korea.
- Appointed to Extended Leadership Team (ELT), co-owning site strategy; manufacturing SME and member of Raw Material Board, Change Control Board, and Quality by Design (QbD)/Control Strategy Community of Practice
- Managed 4 engineers and manufacturing campaign planning across 50+ matrix team, delivered 40+ readiness KPI; reduced deviations by 15%, reached 93% batch success at largest industry commercial scale, 20,000-liters
- Led tech transfer for first product into \$139M, 10K-liter scale facility retrofit, coordinating across 10+ suppliers
- Drove digital transformation of quality operations through AI/ML-based predictive modeling; advancing GSK digital roadmap and preventing defect-related product losses by \$15M
- Elevated employee engagement, boosting site pulse scores from 74% to 77% by launching Career Growth Network ERG and creating local STEM partnerships with University of Maryland, Johns Hopkins, George Mason University

EMERGENT BIOSOLUTIONS

Rockville, MD

Senior Process Engineer / Product Development / Bio-Defense Division

May 2015 – December 2016

- Reported to Director of Engineering and Operations; executed U.S. government biothreat and public health emergency response programs, including medical countermeasures for anthrax, Ebola, and Zika in controlled biosafety environment; direct partnership with HHS / Biomedical Advanced Research and Development Authority
- Led complex tech transfer for rapid manufacturing scale up and delivery of three antibody candidates for Ebola outbreak response; reported earned value on \$19.7M government procurement contract
- Overhauled global tech transfer procedures and innovation intake model, establishing company-wide standard for site-level maturity gap assessments and improving tech transfer efficiency across facilities to support Center for Innovation in Advanced Development and Manufacturing (CIADM) government designation
- Spearheaded capital projects exceeding \$500K to future-proof biodefense capabilities and support new contract wins; expanded R&D footprint, negotiated vendors, and acquired technologies to improve rapid-response flexibility
- Reduced development risk and advanced manufacturing readiness for Zika, tuberculosis, and ricin toxin vaccine platforms, advising design team via small-scale manufacturing models and Failure Mode Effects Analysis (FMEA) during pilot production, supported by National Institute of Allergy and Infectious Diseases (NIAID) funding

DSM-FIRMENICH

Columbia, MD

Bioprocess Engineer III / Biotechnology, Research & Development

March 2014 – April 2015

Bioprocess Engineer II / Biotechnology, Research & Development

November 2012 – March 2014

Senior Research Associate / Biotechnology, Research & Development

November 2010 – November 2012

Research Associate / Biotechnology, Research & Development

December 2009 – November 2010

- Reported to Senior Manager, Biotechnology R&D, drove upstream and downstream process innovation to turn algae into biofuels, human health, and animal health product lines for multiple global business units
- Led pilot-to-commercial scale-up of novel extraction method, improving yield from 50% to 90% across 28 runs; saved \$450K annually by eliminating variability across oil extraction processing steps using Lean Six Sigma
- Investigated waste stream valorization; prioritized options by strategic fit, tech maturity, and implementation readiness; secured \$150K to lead DSM Sinochem Pharmaceuticals business assessment
- Established gap analysis method to compare lab and commercial scale process models. Trialed drying, separation, and purification technologies at vendors. Completed techno-economic analysis for seven designs and facilitated down select to two with >50% capital savings
- Led workstreams in \$10M algae-to-biofuel research program with BP. Conducted experiments with fermentation, cell physiology, and molecular engineering teams. Delivered biodiesel for 2012 London Olympics BMW fleet

EDUCATION

THE JOHNS HOPKINS UNIVERSITY

Baltimore, MD

Master of Engineering, Chemical & Biomolecular Engineering

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

Bachelor of Engineering, Chemical Engineering

BOARD LEADERSHIP

- **Montgomery County Public Schools / Chair, Engineering Advisory Board (2016-2023):** Led assessment of curriculum, overseeing \$200K budget and 5K+ student enrollment. Advised Assistant Superintendent on organizational restructuring and strategic planning to enhance student readiness for college and workforce
- **National Society of Black Engineers / National Professionals Chair / Board Chair (2021-2024):** Partnered with CEO to define and execute 5-year Game Change 2025 strategy; oversaw ~\$18M budget impacting 40+ staff, 700+ chapters, and 24K+ members globally; strengthened governance contributing to >\$20M annual revenue milestone
- **National Society of Black Engineers / Director, Healthcare Innovation (2019-2021):** Led 10+ industry-academia partnerships, reaching 1,200+ professionals; launched workforce development program with White House and National Institute for Innovation in Manufacturing of Biopharmaceuticals (NIIMBL); received Ambassador Award

SKILLS & LANGUAGES

- Strategy Development • Product Development • Change Management • Capital Planning
- IP Evaluation • New Venture Due Diligence • Business Intelligence • AI-Powered Decision Support
- Project Management • Risk Analysis • Process Improvement • Techno-Economic Modeling
- Spanish (Intermediate)

INTERESTS

- Swing Dance (performance & competition), Tennis, Bowling, Mentoring emerging leaders, Startup Advising

EXECUTIVE EDUCATION & LEADERSHIP DEVELOPMENT

- Reuters NEXT Leadership Summit, New York, Dec 2025
- Committee, DISCOVER Supply Chain Summit, New York (DISCOVER, Pfizer), Oct 2024
- Management Accelerator Program, 2024 Cohort, (McKinsey & Company), Apr 2024 – Aug 2024
- Gartner Supply Chain Symposium/Xpo, May 2024
- Roundtable on Black Men and Black Women in Science, Engineering & Medicine, (National Academies), Oct 2023
- Speaker, Leading Supply Chain Sustainability. (Pharma Supply Chain & Logistics Innovation Programme), Oct 2023
- Speaker, Building a Culture of Innovation in Manufacturing (Pharma Manufacturing & Outsourcing Summit), Oct 2023
- NSF ADVANCE Grant: Amplifying the Alliance to Catalyze Change for Equity in STEM Success, Jun 2023
- Illuminate™ Workshop, Communication Strategy & Change Management (Duarte), Jan 2022
- EmTech MIT Conference, (MIT Technology Review), June 2020
- Leader, Big Data Workshop (National Institute for Innovation in Manufacturing of Biopharmaceuticals), Jun 2019
- Design Thinking Bootcamp (DC Service Jam), Mar 2018
- Situational Self Leadership (Emergent BioSolutions, Ken Blanchard), Sept 2016
- QbD - Quality by Design Course - 160 hrs (Emergent BioSolutions, Tom A. Little Consulting), Jun 2015 – Feb 2016
- Facility Layout Design for Lean Operations, (Emergent BioSolutions, Maryland World Class Consortia), Feb 2016
- Earned Value Management (Emergent BioSolutions), Jul 2015
- Project Management Essentials Certification (DSM), Sept 2014 – Nov 2014
- Lean Six Sigma Greenbelt (DSM, Paloma Consulting), Jul 2012 – Nov 2012