Biomanufacturing Technician

Career Pathway

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Biomanufacturing technicians help produce medicines, vaccines, and other biotechnology products. Entry-level opportunities are growing rapidly in biotechnology hubs such as Missouri, North Carolina, and Texas, with strong career advancement potential in bioscience and chemical manufacturing, quality, engineering, and operations.

Key Skills

- Detail-oriented
- Excellent time-management skills
- Enjoys fast-paced environment
- Enjoys teamwork & collaboration
- Desire to learn
- Growth/improvment mindset
- Interest in science
- Enjoys hands-on work
- Enjoys operating machinery
- Reliabile
- Understanding of lab and workplace safety

Responsibilities:

- Prepare manufacturing materials and equipment
- Monitor production systems
- Perform cleaning and sterilization procedures
- Maintain batch records and documentation
- Follow quality and contamination control procedures
- Troubleshoot production and equipment issues
- Operate lab and manufacturing equipment





Career Pathway

High School Diploma

Entry Level (0-2yr):
- Biomanufacturing Tech I
- Manufacturing Associate
- Production Tech
- Cleanroom Tech

Early Advancement (2-5yr):
- Biomanufacturing Tech II
- Sr Manufacturing Associate
- Process Tech

$20–$25/hour OR **$41,000–52,000/year**

(Overtime, Weekend, Evening Pay Possible)

Career Pathway

Associates Degree

Entry Level (0-2yr):
- Quality Control (QC) Tech
- QC Analyst I
- Laboratory Tech
- Microbiology Tech

Early Advancement (2-5yr):
- QC Analyst II
- Stability Tech
- Microbiology Analyst
- Environmental Monitoring Tech

$22–$30/hour OR **$45,000–62,000/year**

(Overtime, Weekend, Evening Pay Possible)

Training Providers

- St. Louis Community College
- St. Charles Community College
- Jefferson College
- Mission: St. Louis
- Family Workforce Centers
- EmploySTL
- Washington University CAPS

Certifications

- Biotechnology Certificates
- Biotechnology Associate in Applied Science
- Bioscience Core Skills Institute Credentials

Companies in Greater St. Louis

- Thermo Fisher Scientific
- Jost Chemical
- Kindeva
- Millipore Sigma
- Par Health
- bioMeriéux
- ICL Group
- Apertus
- Inotiv
- Keurig
- Anheuser-Busch
- Nestle Purina

Want to learn more? Email workforce@biostl.org

Clinical Research Professional
Career Pathway

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Clinical research professionals help advance new medicines and treatments through carefully managed research studies and clinical trials. These professionals work in hospitals, universities, and research institutions where attention to detail, patient safety, ethics, and communication are essential. Entry-level opportunities are growing rapidly in healthcare, with strong advancement potential in clinical operations, healthcare research, regulatory affairs, and project management.

Key Skills:

- Strong attention to detail and accurate documentation
- Professional communication and interpersonal skills
- Knowledge of clinical protocols, regulations, and healthcare terminology
- Organization, time management, and multitasking
- Familiarity with electronic medical records and research databases
- Commitment to patient confidentiality and professionalism
- Interest in healthcare, clinical research, and improving human health
- Patient-focused, team-oriented approach
- Adaptability in fast-paced healthcare environments
- Willingness to learn and manage competing priorities

Responsibilities:

- Assist with patient recruitment and scheduling
- Collect and document research data
- Maintain ethical standards & regulatory documents
- Communicate with patients and study teams
- Monitor participant visits and follow study procedures
- Ensure studies follow safety and compliance requirements



Career Pathway

High School Diploma

Entry level (0-2yr):
- Clinical Research Study Assistant
- Clinical Trials Assistant
- Patient Recruitment Assistant
- Data Collection Assistant

Early advancement (2-5yr):
- Senior Study Assistant
- Clinical Research Specialist
- Regulatory Assistant
- Research Program Assistant

$18–$24/hour OR **$38,000–$50,000/year**

Career Pathway

Bachelor's Degree

Entry level (0-2yr):
- Clinical Research Coordinator I
- Clinical Trials Coordinator
- Research Coordinator
- Study Coordinator
- Clinical Project Assistant

Early advancement (2-5yr):
- Clinical Res. Coordinator II
- Clinical Research Manager
- Regulatory Coordinator
- Clinical Operations Specialist

$20–$34/hour OR **$42,000–$72,000/year**

Typical Work Schedule
Primarily weekday daytime schedules. Some patient-facing studies may require evening/weekend flexibility.

Training Providers
- Washington University School of Medicine
- Saint Louis University
- St. Louis Community College (Clinical Lab Technologist)

Certifications
- Clinical Research microcredential
- Good Clinical Practice (GCP) Training
- Certificate in Clinical Research Management

Employers in Greater St. Louis
- Washington Univ. School of Medicine
- BJC HealthCare
- Saint Louis University
- Mercy

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Direct Support Professional
Career Pathway

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Direct Support Professionals (DSPs) help individuals with intellectual and developmental disabilities live independently and achieve personal goals. Working across residential, community, employment, and healthcare settings, DSPs play a vital role in person-centered care. With growing investment in this field, DSP careers offer meaningful work, paid training, and pathways to advancement in healthcare, behavioral health, and disability services.

Key Skills:

- Strong communication and interpersonal skills
- Compassionate, patient, and respectful approach
- Organization, time management, and accurate documentation
- Knowledge of safety procedures and medication support
- Problem-solving and de-escalation skills
- Ability to work independently and collaboratively
- Flexibility, reliability, and professionalism
- Commitment to disability advocacy, inclusion, and person-centered care
- Willingness to learn caregiving and behavioral support skills

Responsibilities:

- Support individuals with daily living activities
- Help individuals build independence and life skills
- Maintain documentation and service records
- Support health monitoring
- Provide emotional support and positive behavior assistance
- Maintain safe, respectful, and person-centered environments
- Assist with meal preparation and wellness routines



Career Pathway

High School Diploma

Entry level (0-2yr):
- Direct Support Professional (DSP)
- Community Support Asst
- Residential Support Staff
- Personal Care Assistant
- Behavioral Support Aide

Early advancement (2-5yr):
- Senior/Certified DSP
- Behavioral Support Specialist
- Community Integration Specialist

$16–$22/hour OR **$33,000–$46,000/year**

Career Pathway

Bachelor's Degree

Entry level (0-2yr):
- Behavioral Health Specialist
- Behavioral Support Specialist
- Community Behavioral Health Worker

Early advancement (2-5yr):
- Senior Beh. Health Specialist
- Behavioral Health Case Manager
- Clinical Support Supervisor
- Community Services Mgr

$20–$30/hr OR **$42,000–$67,000/year**

Typical Work Schedule
Shift schedules; Many organizations operate 24/7 residential support programs; Additional pay may be available for nights, weekends, holidays, or overtime. Full-time, part-time, and weekend schedules commonly available.

Training Providers

- Community Provider organizations
- Missouri Department of Mental Health - Missouri Talent Pathways (MO TAP) is a recognized apprenticeship for paid, earn-as-you-learn DSP careers.

Certifications

- Certified Direct Support Professional (CDSP)
- CPR and First Aid
- Positive Behavior Support Training
- Crisis Prevention & Intervention Training

Employers in Greater St. Louis

- Paraquad
- Boone Center, Inc.
- Sunnyhill Inc.
- Centers for
- Specialized
- Services
- St. Louis Arc
- Community Living, Inc.
- Emmaus Homes
- Sevita Health
- Bethesda Health

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Teaching and Classroom Support
Career Pathway

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Teaching apprentices support K–12 students while earning a paycheck, gaining classroom experience, and working toward teacher certification. Missouri's Registered Teacher Apprenticeship programs combine paid, hands-on training with coursework through partnerships among school districts, colleges, universities, and DESE.

Key Skills:

- Student observation and progress monitoring
- Classroom communication and relationship-building
- Instructional support, tutoring, and student supervision
- Organization, recordkeeping, and classroom technology
- Behavior management and student engagement
- Collaboration with teachers, families, and school staff
- Adaptability, patience, and teamwork
- Interest in education, youth development, and mentorship

Responsibilities:

- Support classroom instruction and learning activities
- Assist teachers with lesson preparation
- Monitor student performance and track learning progress
- Use classroom technology and A/V equipment effectively
- Reinforce classroom rules, safety procedures, and positive student behavior
- Work with students individually or in small groups
- Help maintain organized classroom environments
- Participate in training & professional development
- Communicate with teachers, staff, and families



Career Pathway

High School Diploma

Entry level (0-2yr):

- Teacher Apprentice
- Paraprofessional Apprentice
- Instructional Assistant
- Classroom Support Apprentice

Early advancement (2-5yr):

- Certified Teacher
- Elementary Teacher
- Secondary Teacher
- Special Education Teacher

$18–$22/hour during apprenticeship or **$42,000–$46,000/year**

Career Pathway

Bachelor's Degree

Entry level (0-2yr):

- Teacher Resident
- Resident Teacher
- Clinical Teaching Apprentice

Early advancement (2-5yr):

- Licensed Classroom Teacher
- Instructional Coach
- Curriculum Specialist

$45,000–$65,000/year

Training Providers

- University of Missouri–St. Louis (UMSL)
- Missouri Sate University
- Saint Louis University School of Education
- Harris-Stowe State University

Certifications

- Registered Apprenticeship Credential
- Substitute Teaching Certification
- Elementary or Secondary Teaching Certification
- Missouri Initial Professional Certificate (IPC)

Employers in Greater St. Louis

- St. Louis Public Schools
- Special School District of St. Louis County
- Normandy Schools
- Hazelwood Schools
- Ferguson-Florissant School District
- Kirkwood Schools
- KIPP St. Louis

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Cell Culture and Research Lab Tech Career Pathway

bioSTL
At the Center of U.S. Bioscience

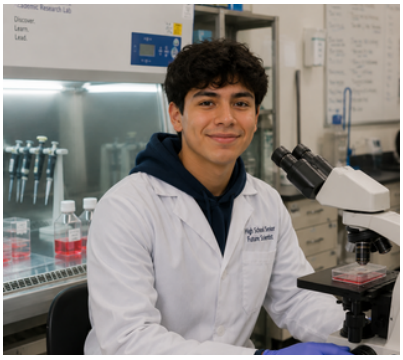
Cell culture technicians grow and maintain living cells for research, drug discovery, and biomanufacturing. Working in laboratories, biotech companies, universities, and healthcare settings, they use sterile techniques, precise documentation, and teamwork. Career paths include research, manufacturing, quality, and process development.

Key Skills:

- Attention to detail and accurate SOP documentation
- Knowledge of sterile technique, aseptic procedures, and biosafety
- Ability to follow detailed protocols in regulated environments
- Basic biology or chemistry knowledge
- Troubleshooting and equipment-handling skills
- Interest in biotechnology, cell culture, and hands-on lab work
- Willingness to learn new technologies and equipment
- Comfort with prolonged sitting and focused laboratory tasks

Responsibilities:

- Prepare media, reagents, and laboratory materials
- Maintain multiple cell cultures
- Perform sterile laboratory procedures
- Record experimental and production data
- Monitor cell growth, viability, and contamination
- Follow laboratory safety and quality procedures
- Assist with research studies and/or manufacturing production





Career Pathway

High School Diploma

Entry level (0-2yr):
- Laboratory Assistant I
- Research Laboratory Technician I
- Laboratory Assistant

Early advancement (2-5yr):
- Senior Research Technician
- Laboratory Coordinator
- Research Specialis
- Cell Culture Technician

$18–$25/hour or **$38,000–$52,000/year**

Typical Work Schedule
Primarily weekday daytime hrs. University benefits and tuition assistance may be available.

Career Pathway

Bachelor's Degree

Entry level (0-2yr):
- Manufacturing Associate
- Bioprocess Technician I
- Production Technician

Early advancement (2-5yr):
- Process Development Associate
- Manufacturing Specialist
- Upstream Process Technician
- Manufacturing Associate II

$22–$30/hour (shift sched) or **$45,000–$62,000 annually.** Additional pay may be available for nights, weekends, or overtime.

Training Providers

- St. Louis Community College
- St. Charles Community College
- Jefferson College
- Mission St. Louis
- Family Workforce Centers
- EmploySTL
- Washington University CAPS

Certifications

- Biotechnology Certificates
- Biotechnology Associate in Applied Science
- Bioscience Core Skills Institute Credentials

Employers in Greater St. Louis

- Universities and medical schools
- Research hospitals and institutes
- Thermo Fisher
- ICL Group
- Millipore Sigma
- Wugen
- bioMérieux

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