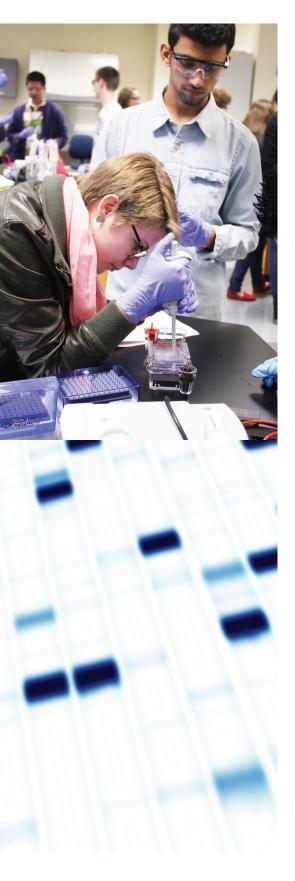
BIOTECHNOLOGY





INNOVATIVE TRAINING

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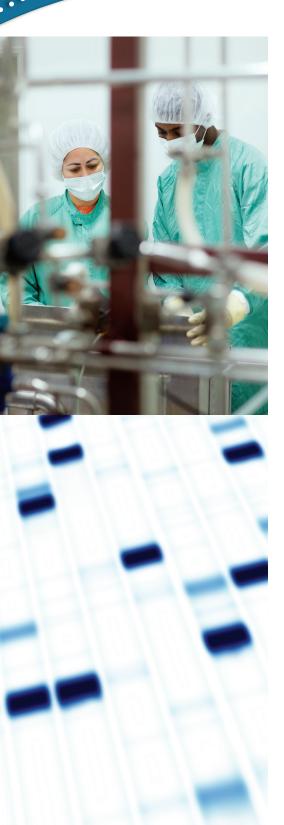
Florida State College at Jacksonville provides training, state-of-the-art facilities, and real-world experience to our students interested in cutting-edge science. Our biotechnology program partners with local schools and manufacturers to develop inventive ways to inspire curiosity and encourage promising scientists. At FSCJ's laboratory, students investigate areas such as cell culture and molecular research, and apply that knowledge to environmental and food testing. And through courses held onsite at industry facilities, such as an instrumentation course taught at Thermo Fisher Scientific, students gain not only college credit, but industry experience and recognition as well.

COMMUNITY OUTREACH OPENING A WORLD OF DISCOVERY

FSCJ partners with local schools to cultivate creative ways to present biotechnology to pre-college students. For example:

Recently, 60 students from **James-Weldon Johnson Middle School** visited FSCJ's biotechnology facility and completed a "Genes in the Bottle" experiment. They extracted DNA from their cheek cells and preserved it in a necklace. After touring the laboratory, employees from Eurofins spoke to the students about food safety and treated them to an entertaining theatrical performance on safety.

Darnell-Cookman High School instructor, Gayle Fiser, used the biotechnology courses she completed at FSCJ to help obtain grant funds from the State of Florida for classroom equipment and a biotechnology certification for her school. Students from her AP biology class recently completed a project using their own DNA cheek cells for a two-day Alu Insertion Polymorphism lab. They began their training in Ms. Fiser's classroom, where they reviewed basic biotechnology topics and practices such as micropipetting and gel loading. Next, at FSCJ's facility, the high school students performed advanced genetic techniques carrying out Polymerase Chain Reaction (PCR), DNA amplification and bioinformatics of their own inherited transposons or "jumping genes" at FSCJ's laboratory.



MANUFACTURER PARTNERSHIP - REAL-WORLD EXPERIENCE

Through partnerships with industry leaders such as Thermo Fisher Scientific, FSCJ biotechnology students have the opportunity to learn in an actual working environment. Onsite, students will learn:

- Solution Chemistry
- Extraction Techniques
- Chromatography
- · Regulatory Dogma
- LC, HPLC, UPLC & Mass Spectrometry
- Research, Planning & Optimization
- UV / VIS Spectrophotometry

Students complete six hours of personalized training in produce analysis at FSCJ before traveling to West Palm Beach, Florida for 20 hours of instruction at the Thermo Fisher Scientific facility. The course concludes with students presenting their own method for analyzing produce for the presence of pesticide residues to the class. In completing this opportunity, students receive:

- Three credits of biochemistry/biotechnology coursework
- A globally recognized industry certification
- Individualized attention in a top-tier industrial setting
- Travel and tuition supported by the National Science Foundation Grant

FOR MORE INFORMATION ON THIS VITALLY IMPORTANT FIELD, VISIT **FSCJ.EDU/BIOTECHNOLOGY**.



Five Campuses. One College.

Florida State College at Jacksonville is a member of the Florida College System and is not affiliated with any other public or private university or college in Florida or elsewhere.