



## Biotechnology Career Plan at Palm Beach State College



# PALM BEACH STATE COLLEGE BIOTECHNOLOGY PROGRAM

## What is Biotechnology?

Biotechnology is the field of applied biology and chemistry. Biotechnology harnesses cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet. Application areas of biotechnology include medicine, agriculture, industrial and marine processes. Well-known accomplishments of biotechnology include the Human Genome Project, cloning and gene therapy. Within these disciplines, biotechnologists may work in the areas of research, development, manufacturing, analysis and education.

## Biotechnology Program Mission Statement

The mission of the Palm Beach State College Biotechnology Program is to foster a sense of career for scientific discovery, teamwork, critical thinking, effective communication, and a positive professional attitude in students.

## Biotechnology Program Goals

1. To provide students both academic instruction and professional training in the field of biotechnology to meet the employment needs of Florida and beyond.
2. To maintain both high academic and professional standards in the program so that students may upon graduation find work in the biotechnology field or continued with their education in science.
3. To serve as a resource for biotechnology laboratories in Palm Beach County area.

## Biotechnology Admission Requirements

1. Completion of high school or GED equivalent.
2. Meet current requirements for admission to PBSC.

For items 1 and 2, please check with PBSC Advising/Counseling at 561-207-5340 for advice on scheduling.

3. Have a minimum 2.6 GPA.
4. Have passed the following courses with a grade of C or higher:

BSC1010 Principles of Biology 1 (3 credits)
BSC1010 Principles of Biology 1 Lab (1 credit)
CHM1045 General Chemistry 1 (3 credits)
CHM1045L General Chemistry 1 Lab (1 credit)
MAC1105 College Algebra (3 credits)
ENC1101 College Composition (3 credits)
BSC2421 Introduction to Biotechnology (3 credits)
BSC2421L Introduction to Biotechnology Lab (2 credits)

5. Turn in the signed Acknowledgement of Receipt of Biotech Program Advising Manual
6. Turn in the signed Acknowledgement of Biotech Program Requirements

If you have questions about the program that Advising cannot answer, please contact the Biotechnology Department by calling 561-207-5055 or email Dr. Becky Mercer ([mercerb@palmbeachstate.edu](mailto:mercerb@palmbeachstate.edu)) or Dr. Gorgevska ([gorgevsa@palmbeachstate.edu](mailto:gorgevsa@palmbeachstate.edu)) for an appointment.

Notes:

- BSC2421 Introduction to Biotechnology qualifies as a general education course with no prerequisites and may serve as an introduction to the field.
- Successful completion of BSC1010 and /or College Algebra is strongly recommended before taking BSC2421.

## Biotechnology Program Options

PBSC students have several options:

### College Credit Certificate in Biotechnology (CCC)

The CCC 18-month program has been designed for those students who would like to pursue a biotechnology career and have a bachelor's degree in another academic discipline but need supplemental course-work in select courses to work in biotechnology or who are currently employed in the biotechnology industry.

The Biotechnology CCC provides the student with comprehensive knowledge, specific competencies, and lab techniques that enhance current skills while establishing a foundation for a successful bioscience career.

This 19-credit certificate offers courses in biotechnology principles, tissue culture, instrumentation, and bioinformatics and may include an internship with local bioscience firms and institutions.

### Associates of Science (AS)

**Degree in Biotechnology** This degree program is designed for students who will seek employment as biotechnology research technicians, biological technicians, cell culture technicians, positions in bioinformatics or biotechnology manufacturing technicians, or for persons wanting career advancement already employed in the field.

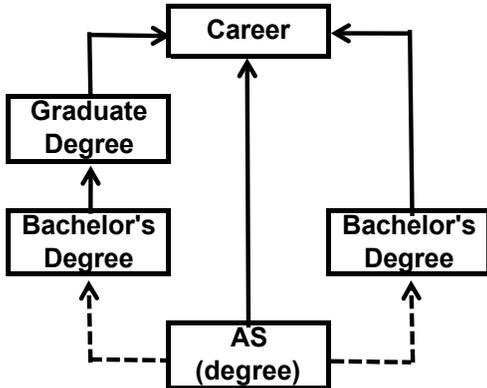
Program content includes core biotechnical laboratory techniques and industry workplace experience, biohazard and safety procedures, biology and chemistry concepts, algebraic and statistical analysis, and basic microbiology concepts.

## Course Options and Considerations for AA students

BSC2421/BSC2421L, Introduction to Biotechnology lecture and laboratory courses do not have biotechnology course prerequisites and students not majoring in biotechnology still needing course credits to transfer into subsequent science programs may wish to take BSC2421/BSC2421L, which are general education fulfillment courses.

## Biotechnology Program Roadmaps

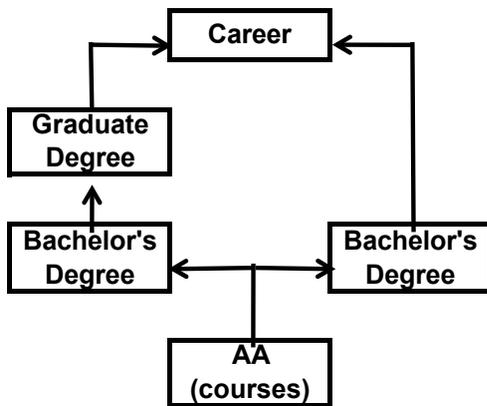
### Associates of Science (AS)



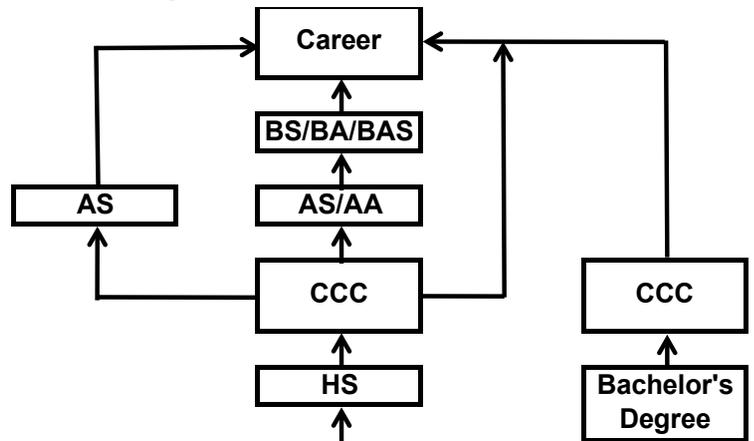
(- - -) Some classes may not transfer, thus an AS degree student may need to take additional courses.

We encourage AA students to consider adding the Biotech A.S. as a second degree objective to benefit from the advanced coursework and internship opportunities offered only to A.S. students

### Associates of Arts (AA)



### College Credit Certificate (CCC)



## Biotechnology Program Sequence and Length

### Suggested course sequence for AS degree (61 credits)

#### Semester 1 (14 credits)

- ENC1101 College Composition I (3)
- MAC1105 College Algebra (3)
- BSC1010 Principles of Biology 1 (3) (see note 1)
- BSC1010L Principles of Biology 1 lab (1)
- CHM1045 General Chemistry 1 (3)
- CHM1045L General Chemistry 1 lab (1)

#### Semester 2 (16 credits)

- Any course from Humanities – Area II (3)
- BSC2421 Introduction to Biotechnology (3) (see note 2)
- BSC2421L Introduction to Biotechnology lab (2)
- CHM1046 General Chemistry 2 (3)
- CHM1046L General Chemistry 2 lab (1)
- MCB2010 Microbiology (3) (see note 3)
- MCB2010L Microbiology lab (1)

#### Semester 3 (16 credits)

- Any course from Social Science – Area V (3)
- BSC2420 Biotechnology 1 (3)
- BSC2420L Biotechnology 1 lab (2)
- BSC2416C Introduction to Tissue Culture lab (2)
- BSC2426C Introduction to Biotechnology Instrumentation lab (2)
- CHM2210 Organic Chemistry 1 (3)
- CHM2210L Organic Chemistry lab 1 (1)

#### Semester 4 (13 credits)

- BSC2427 Biotechnology 2, Molecular Biology, Cell and Immunobiology (3)
- BSC2427L Biotechnology 2, Molecular Biology, Cell and Immunobiology lab (2)
- BSC2435 Introduction to Bioinformatics (1)
- CHM2211 Organic Chemistry 2 (3)
- CHM2211L Organic Chemistry lab 2 (1)
- STA2023 Statistics (3)

#### Semester 5 (2 credits)

- BSC2945C (2) Biotechnology Internship



## AS Degree Notes

1. BSC1010 has course section (currently taught by Dr. Fairbanks) that will emphasize biotechnology and students with a biotechnology major are encouraged to, but are not required to, enroll in this section.
2. Although BSC1010, CHM1045, and MAC1105 are not required for BSC2421, it is strongly recommended that students take one or more of these courses before enrolling in BSC2421.
3. MCB2010 is the required microbiology course for the Biotechnology AS Program. However, MCB2010 will not transfer as a required microbiology course at most four-year colleges, when transferring as a biology major. Most Florida four-year colleges will only accept microbiology courses that are MCB with final two numbers as 20 or higher. Examples of these courses are MCB2020, MCB3020, and MCB3023.
4. Likewise STA2023 some four year schools will not accept STA2023 as their required statistics course. One notable exception is the University of Florida, which accepts STA2023 for all their biology majors' programs. PBSC students should be aware of these limitations and exceptions and plan accordingly.

## Advanced Placement Core Curriculum

Qualified high school students who have successfully completed four years of a local biotechnology academy [at Seminole Ridge, Spanish River or Palm Beach Lakes High Schools], with a grade of C or better in all biotech coursework are eligible to take a PBSC Biotechnology Challenge Exam. This exam is composed of three parts: Lecture, Lab-theoretical and Lab-hands-on. A passing grade of 80% on all parts of the exam is required in order to receive five college credit hours for BSC 1404C, which would then allow the student to enroll directly into Biotechnology I (BSC 2420) Lecture & Lab.

## Biotechnology Program Progression

In order to successfully progress through PBSC programs, the student must:

- Meet all program course and GPA requirements.
- Complete pre-requisite courses before progressing in the program, which for all the biotechnology courses is BSC2421/BSC2421L.
- Be enrolled in co-requisite courses at the same time (may not drop lab and keep lecture course for any co-requisite biotechnology course).
- Achieve a minimum grade of "C" in all courses.
- Satisfactorily meet course objectives.
- Receive faculty assessments indicating the positive likelihood for the student to have a successful internship.

## PBSC Course Descriptions

### **BSC2421 Introduction to Biotechnology**

This lecture course provides a comprehensive approach to the concepts of biotechnology both in a historical and current context. It will take the students through the basic principles of genomics proteomics with DNA protein structure function. It will emphasize in the molecular biology aspects of genetic engineering and recombinant DNA technology. Ethical, legal, social concerns and implications of biotechnology will also be addressed. A grade of C or higher is required for this course to be used as a General Education course.

### **BSC2421L Introduction to Biotechnology lab**

Co requisite: BSC2421 This laboratory course provides hands on experience for basic and common biotechnology laboratory techniques in the areas of laboratory safety, aseptic techniques, measurements and calculations, preparation of solutions, use of pH meters, spectrophotometers, centrifuges, etc., as well as training in specific biotechnology techniques, including DNA extraction and amplification, gene cloning, nucleic acids and protein isolation and identification. A grade of C or higher is required for this course to be used as a General Education course.

### **BSC2420 Biotechnology 1**

This course provides a specific approach to the main topics of biotechnology, starting with Genomics and Recombinant DNA Technology and Genetic Engineering, continuing with Proteomics, with protein expression, structure, processing, production, and purification. All these followed with examples of microbial biotechnology including: fermentation, bioreactors, and industrial microbiology with biotechnology. It also includes biotechnology in plants, animals and agricultural industry, bioremediation and the environment, as well as aquatic biotechnology. There is a strong emphasis in biomedical and forensic biotechnology including vaccinology, pharmacogenomics, the human genome, regenerative medicine, gene therapy, cloning, and stem cell applications and implications. Prerequisites: BSC2421/BSC2421L.

### **BSC2420L Biotechnology 1 laboratory**

This laboratory course includes hands on experience for the students with some of the basic and common biotechnology laboratory techniques in the areas of genomics, proteomics, genetic engineering, and recombinant DNA technology. Prerequisites: BSC2421/BSC2421L

### **BSC2416C Introduction to Tissue Culture**

Introduction to Tissue Culture is a course designed to provide students with hands-on experience in the proper laboratory methodology and techniques associated with various cell and tissue cultures. The purpose of this course is to introduce students to the components of a tissue culture laboratory (equipment, instruments, etc.) and provide them with a basic understanding of the proper use and care of these components. Students will be exposed to various cell culture lines and learn how to handle and maintain different cells, prepare various media solutions, carry-out general tissue culture assays (such as transfections) and perform a batch scale-up of cells using bioreactors. Prerequisites: BSC2421/BSC2421L

### **BSC2426C Introduction to Biotechnology Instrumentation**

This course is designed to provide hands-on experience in some of the basic and essential instrumentation skills required in chemistry, molecular biology, and biotechnology. Students will learn the basics of laboratory safety, aseptic technique, measurements, and calculations and preparation of solutions/samples. This knowledge will then be applied to advanced instrumentation utilizing spectrophotometers, centrifuges, thermal cyclers, automated DNA sequencing by PAGE, GC/MS, FPLC, and bioreactors. Students will also gain a well-rounded understanding of the maintenance of these various instruments; from ordering supplies to requesting technical support and daily/monthly maintenance. Prerequisites: BSC2421/BSC2421L

### **BSC2427 Biotechnology 2, Molecular Biology, Cell & Immunobiology**

This lecture course explores the basic foundations of modern biotechnology, specifically that of proteomics, which is the study of protein structure and function. Emphasis is on protein formation and interactions, along with molecular and cell applications of genetic engineering, recombinant DNA technology, including hands on lab-exercises in the main general techniques. It also includes molecular analysis of the latest advances in oncology, pharmacogenomics, and stem cell technology. The final part of the course focuses on basic concepts of immunobiology and medical immunology, which are relevant to biomedical biotechnology, particularly in the areas of applications of monoclonal antibodies, anti allergic medications, recombinant DNA vaccines, transplants, immunomodulation and gene therapy. Prerequisites: BSC2420L, CHM1045, CHM1045L; Corequisites: BSC2427L, CHM1046, CHM1046L

### **BSC2427L Biotechnology 2, Molecular Biology, Cell & Immunobiology lab**

This course provides a deep exploration of the foundations of molecular biotechnology, with emphasis on proteomics, which includes the study of protein structure, isolation, identification, and purification. We will explore areas of immunobiological assays, which are relevant to biomedical biotechnology, particularly in the areas of applications of monoclonal and polyclonal antibodies and antigen detection assays. Cell and tissue culture technology and techniques will also be addressed. Mutagenesis and protein engineering, including fermentation and bioreactors, and protein separation, analysis and interactions will also be addressed. Prerequisites: BSC2421/BSC2421L

### **BSC2435 Introduction to Bioinformatics**

Course includes current topics in bioinformatics and computational biology as well as methods for high throughput data collection, storing, and accessing biological data. Also included are programs and algorithms used to analyze data. Prerequisites: BSC2421/BSC2421L

### **BSC2945C Biotechnology Internship course**

This is a practical application of procedures in the real world settings with biotechnology and closely related disciplines. This experience will allow the student to perform hands on work and observation of biotechnology in any kind of institution directly or indirectly related with the field which includes but is not limited to; academic, governmental, private industry or research oriented institutions and other fields with similar

experiences. The pre-requisites for the internship include: CHM1046, CHM1046L, BSC2421, BSC 2421L, BSC2420, BSC2420L, BSC2427 and BSC 2427L.

Upon completion of this laboratory course a student should be able to: develop an individual career plan; write a resume and successfully interview for an internship position; demonstrate safety skills in the workplace; maintain positive relations with others through teamwork and supervision; maintain a work notebook; write a final report; prepare a presentation describing the internship; and analyze the organizational structure of the host bioscience company or research institution.

This is an internship course to be conducted in a bioscience company or research institution. The student will conduct 320 hours of research/work during the term. The training schedule will be determined by and agreed upon by internship supervisor and student. Students will submit timesheets on a bi-monthly basis. In addition, the student is required to meet periodically with a PBSC biotechnology professor on an as needed basis.



## **Career Opportunities**

### **The U.S. Biotechnology Industry**

The United States is currently the world leader in the research, development, and commercialization of biotechnology products. According to the Battelle/BIO State Bioscience Initiatives 2010 report, the U.S. employment in the bioscience sector reached 1.42 million in 2008, a gain of 19,000 bioscience industry jobs in the United States since 2007. Compensation in biotechnology companies is competitive and

includes incentives, such as stock option plans, 401K plans, company-wide stock purchase plans, and cash bonus plans.

## Careers in Biotechnology

The following is a list of typical, entry-level biotechnology positions. Note, salaries, which are based on information taken from: *Careers in Biotechnology a Counselor's Guide to the Best Jobs in the United States*. 3rd Edition by G. Frierman-Hunt and J. Solberg (available for download from Bio-Link (<http://www.bio-link.org/home/careers>)):

### **Entry Level Jobs**

#### ***Lab Assistant***

**Education:** High school diploma required, with biotechnology certificate preferred; AS or equivalent experience with scientific background

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$20,000 - \$33,000

#### ***Laboratory Automation Specialist***

**Education:** High school diploma required, with biotechnology certificate preferred; AS or equivalent experience with scientific background

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$20,000 - \$33,000

#### ***Lab Technician***

**Education:** High school diploma required, with biotechnology certificate preferred; AS or equivalent experience with scientific background

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$23,000 - \$35,000

#### ***Manufacturing Technician***

**Education:** At least some college with science and math courses

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$25,000 - \$40,000

#### ***Quality Assurance Specialist***

**Education:** Usually requires a bachelors degree

**Experience:** Minimum 0-2 years' related experience

**Approx salary range:** \$40,000 - \$60,000

#### ***Quality Control Technician***

**Education:** Usually requires a bachelors degree

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$30,000 - \$60,000

#### ***Research Associate***

**Education:** Usually requires a bachelors degree

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$30,000 - \$70,000

***Animal Technician***

**Education:** Usually requires associate degree in veterinary technician or similar field; may require American Association for Laboratory Animal Science (AALAS) certification

**Experience:** Minimum of 0-2 years' veterinary laboratory experience

**Approx salary range:** \$19,000 - \$25,000

***Bioinformatics Specialist***

**Education:** Bachelor's or Master's degree

**Experience:** Interest in biology and has computer skills

**Approx salary range:** \$45,000 - \$60,000

***Documentation Coordinator***

**Education:** High school diploma or associate degree

**Experience:** Minimum 0-2 years' related experience

**Approx salary range:** \$24,000 - \$28,000

***Forensic DNA Analyst***

**Education:** Usually requires a bachelors degree

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$30,000 - \$50,000

***Health and Safety Specialist***

**Education:** Usually requires a bachelors degree

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$40,000 - \$50,000

***Instrumentation/Calibration Technician***

**Education:** Need certificate in instrumentation or an associate degree in electronics, engineering or computers

**Experience:** Minimum 0-2 years' related laboratory experience

**Approx salary range:** \$30,000 - \$45,000

***Clinical Research Associate***

**Education:** Usually requires a bachelors degree or registered nurse training

**Experience:** Minimum 1-2 years' related laboratory experience

**Approx salary range:** \$35,000 - \$45,000

***Sales Representative***

**Education:** Usually requires a bachelors degree in life science field

**Experience:** Minimum 2 or more years' related laboratory experience

**Approx salary range:** \$45,000 - \$60,000

***Technical Service Representative***

**Education:** Usually requires a bachelor's degree in life science field, but some positions require only an associate degree

**Experience:** Minimum 2 or more years' related laboratory experience

**Approx salary range:** \$30,000 - \$60,000

***Alexandra Gorgevska, PhD (Wayne State University),  
Professor III, Department Chair, Biotechnology Program  
and Natural Sciences***

**Dr. Alexandra Gorgevska** is a tenured professor of [Biotechnology](#) and Chemistry at Palm Beach State College. She also serves as Department Chair for the Biotechnology Program and the Department of Natural Sciences. She received her Bachelor's Degree in Biochemistry & Business Management from the [University of Michigan](#) and her Ph.D. in Biochemistry from the [Department of Chemistry at Wayne State University](#) specializing in DNA-protein cross-links. Her research involved the investigation and discovery of novel mechanisms and structures of formalin cross-link formation between DNA and proteins that form as a result of the fixation process during biopsy preservation. She has worked as a research technician in the Vascular Research Laboratory at [William Beaumont Hospital](#) and a research fellow at the [University of Michigan-Department of Physiology](#) studying peripheral vascular occlusive disorders. She was a post-doctoral research fellow at the [National Institutes of Health in the National Institute on Aging](#), where she investigated the mechanisms of premature aging disorders, primarily that of Werner's Syndrome.

Dr. Gorgevska has and continues to be involved with the development and expansion of biotechnology curricula to meet the needs of the emerging bioscience community. In 2009, she was honored with the [Distinguished New Faculty Award](#) at the 20th International Conference on College Teaching and Learning. She was a research mentor with the [U.S. Army eCybermission program](#). She also served as the Curriculum Development Manager for the Employ Florida [Banner Center for Life Sciences at Palm Beach State College](#); which was a 3-year 1.2 million dollar grant-funded strategic plan to modernize Florida's workforce in order to meet the workforce needs of the state. Dr. Gorgevska was recently the Principal Investigator for a [National Science Foundation](#) Advanced Training Education (NSF-ATE) grant, a 2-year \$200,000 funded project that helped to increase enrollment, retention and success of biotechnology students within the program and into their careers. She strives to provide high quality instruction by recruiting well-qualified adjunct instructors from industry. She provides career mentorship to students in addition to seeking new, relevant curriculum to help train a well-qualified workforce.

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**Tod R. Fairbanks, PhD (Rush University),  
Professor III, Faculty**

**Dr. Tod Fairbanks** is a tenured professor of Science Biotechnology at Palm Beach State College. He is also 38-year veteran of the healthcare industry. He began his career as a medical technologist/supervisor/clinical instructor at the Medical Center Hospital of Vermont/UVM, Burlington, Vermont and then moved to an Assistant/Associate Professor position in Laboratory Sciences at the University of Illinois at the Medical Center, Chicago. He received his Ph.D. in Immunology from Rush University, Chicago and subsequently moved to Abbott Diagnostics at Abbott Laboratories, North Chicago where he worked on new worldwide diagnostic products. From Abbott, Dr. Fairbanks moved into the pharmaceutical industry including Bristol-Myers Squibb, Pharmacia and Pfizer, where he worked for the last 17 years in global marketing, research, competitive intelligence, global new product development, global marketing, corporate development (M&A) and finally, oncology licensing. The licensing position included evaluations of several hundred biotech and university partnering opportunities per year. Most of his pharmaceutical experience involves oncology and pharmacogenomics. Dr. Fairbanks also has a Master of Science degree in botany (cell biology of algae) and Master of Education degree in foundations of education.

Currently, Dr. Fairbanks provides consulting services on drug development /licensing/ investing and personalized medicine. He is the Biology Cluster Chairman for Palm Beach State College.

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***Nick Bild, Master of Science (Grand Valley State University)***

***Adjunct Instructor, Faculty***

**Nick A. Bild** is an adjunct professor of Biotechnology at Palm Beach State College and a bioinformaticist at The Scripps Research Institute. He earned his B.S. in Information Systems and M.S. in Medical and Bioinformatics from Grand Valley State University. He has been involved in a number of large scale research projects, including the ENCODE and modENCODE projects during his time at the University of Chicago. His professional interests include the application of computational resources and algorithm development to solve big data problems in biology and health care.

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**Mark Clementz, Ph.D. (Loyola University Chicago)**  
**Adjunct Instructor, Faculty**

**Mark Clementz** is an adjunct professor of Biotechnology and Microbiology at Palm Beach State College. He completed his postdoctoral fellowship at The Scripps Research Institute in the laboratory of Susana Valente. He earned his B.S. in Biology from Benedictine University and Ph.D. in Microbiology and Immunology from Loyola University Chicago. In his predoctoral work, he studied antagonism of the innate immune system by SARS coronavirus. As a postdoc, he characterized host cell restriction factors of HIV replication as well as investigated the mode of action of an HIV Tat inhibitor along with generation and characterization of HIV mutant virus against this inhibitor.

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***Becky Mercer, PhD (Columbia University),  
Associate Dean of Academic Affairs, Adjunct Instructor, Faculty***

**Dr. Becky A. Mercer** is the Associate Dean of Academic Affairs at the Palm Beach State College Palm Beach Gardens campus. Dr. Mercer earned her Ph.D. in Metabolic Sciences from the Department of Molecular Medicine at Columbia University in New York City. During her graduate studies, she investigated cellular and genetic mechanisms involved in pulmonary emphysema and lung cancer, using mice, rabbits and guinea pigs, cell-based assays, and human lung biopsies. Her work has been published extensively in peer-reviewed scientific journals and presented at international conferences. Dr. Mercer began her science career as an undergraduate research assistant in Los Angeles at the University of Southern California's Neurosciences Department and in the USC Dental School, investigating mechanisms of bone remodeling, osteoporosis, and cell development, publishing her first scientific manuscript in 1998. Dr. Mercer served as a Senior Research Associate at Telios Pharmaceuticals in San Diego, CA and as an Editor at the Journal of Clinical Investigation. After grad school, Dr. Mercer came to Florida to pursue post-doctoral training in the Department of Cancer Biology at Scripps Florida, where she was a part of a research team that identified a novel protein involved in cAMP-activated gene transcription. After completing and publishing her postdoctoral work, Dr. Mercer was invited to join Scripps' High Throughput Screening group as the Associate Scientific Project Manager where she assisted in securing projects to identify novel chemical probes as part of an \$80 million grant from the National Institutes of Health (NIH). Dr. Mercer holds a Certificate in Project Management from Florida Atlantic University and is a Director at Ocean Ridge Biosciences, a Palm Beach Gardens-based genomics company. Dr. Mercer is an active member of several Palm Beach County economic and education committees, non-profits, and school advisory boards, and has developed teacher professional development, high school internships, and community STEM programs.

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**Additional information may be found at our website:**

Palm Beach State College Biotechnology Program:

<http://www.palmbeachstate.edu/areasofstudy/Programs/Biotechnology.aspx>

Palm Beach State College Biotechnology Program Sheet:

<http://www.palmbeachstate.edu/areasofstudy/programsheet/index.asp?id=72>

BLAST (Biotechnology Laboratory and Skills Training):

<http://www.palmbeachstate.edu/programs/biotechnology/blast.aspx>

**Additional information may be found at other websites:**

BioFlorida: [www.bioflorida.com](http://www.bioflorida.com)

BioFlorida Career Center:

<http://med.bio.fl.associationcareernetwork.com/Common/HomePage.aspx>

Bio-Link: [www.bio-link.org/home/](http://www.bio-link.org/home/)

Biospace.com: [www.biospace.com](http://www.biospace.com)

Biotechnology Industry Organization (BIO): [www.bio.org](http://www.bio.org)

Business Development Board: [www.bdb.org](http://www.bdb.org)

Career Builder.com: [www.careerbuilder.com](http://www.careerbuilder.com)

Employ Florida: [www.employflorida.com](http://www.employflorida.com)

Enterprise Florida: [www.eflorida.com](http://www.eflorida.com)

Florida Bio Database: [www.sidmartinbio.org/database](http://www.sidmartinbio.org/database)

Florida Biotech News: [www.floridabiotechnews.com](http://www.floridabiotechnews.com)

Monster.com: [www.jobsearch.monster.com/](http://www.jobsearch.monster.com/)

National Center for Biotechnology Information: [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)

NSF: [www.nsf.gov](http://www.nsf.gov)

Salary.com: [www.salary.com](http://www.salary.com)

The Lab Rat.com: [www.thelabrat.com/](http://www.thelabrat.com/)

Workforce Alliance: [www.pbcalliance.com](http://www.pbcalliance.com)