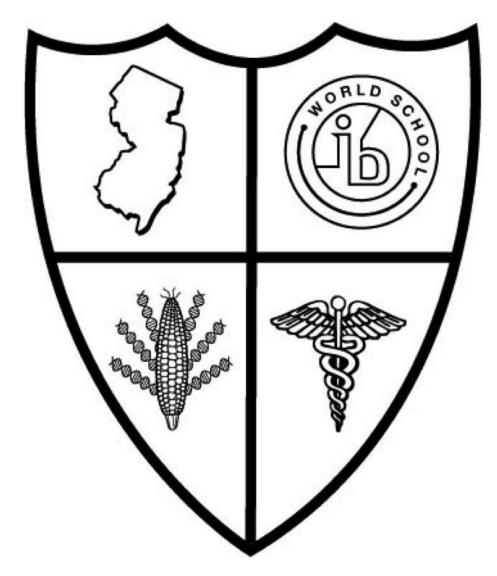
Knowledgeable

Reflective

## Biotechnology High School

**Monmouth County Vocational School District** 

## **Prospectus 2017-2018**



5000 Kozloski Road Freehold, New Jersey 07728 732-431-7208 bths.mcvsd.org

An International Baccalaureate World School "Excellence is in our DNA"

# Biotechnology High School

#### Biotechnology High School

5000 Kozloski Road Freehold, NJ 07728

Phone: 732-431-7208 Fax: 732-431-1395 bths.mcvsd.org

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Kelly Harmon Assistant Principal of Curriculum & Instruction

#### **Mission Statement**

Biotechnology High School, an International Baccalaureate World School, integrates life science, technology, and engineering into a rigorous curriculum that inspires students toward open-minded participation in the global community and prepares them for higher education and leadership in an increasingly demanding workplace through scholarly research, original investigations, and interactive partnerships.



#### **School & Community**

The Monmouth County Vocational School District (MCVSD) prepares students for an evolving workplace, lifelong learning, and further education. Biotechnology High School (BTHS), an International Baccalaureate (IB) World School, is one of MCVSD's five Career Academies. BTHS students are selected through a highly competitive application and admissions process. The school population represents a cross section of students from more than thirty resident districts throughout Monmouth County. BTHS provides students with an exceptional educational experience through a college preparatory curriculum emphasizing research, laboratory skills, critical thinking, problem solving, technology, leadership, and teamwork. BTHS is the only high school in New Jersey in which 100% of students are IB Diploma Candidates. Universities worldwide recognize IB as a rigorous high school program that provides excellent preparation for post-secondary success.

BTHS is a close-knit and supportive learning community of approximately 320 high-achieving students and 27 dynamic faculty members. The facilities and equipment at BTHS are state of the art, including two full biotechnology labs, a tissue culture lab and several 3D printers. The one-hour lunch/activity period allows students to be involved in a wide range of co-curricular activities, while also providing time to work individually with teachers, collaborate on group projects, and socialize with peers. BTHS employs a shared leadership model that involves all students in the management of the school community. Student clubs/organizations at BTHS include: Technology Student Association (TSA), DECA, and Junior State of America (JSA). BTHS does not offer sports, although many students participate in athletics at the high schools in their sending districts.

BTHS has an active Parent-Student-Faculty Association (PSFA) that provides the school with financial support for co-curricular programs, hospitality for community events, teacher grants, and student scholarships. BTHS also benefits from the involvement of its Advisory Board. The board includes members from both industry and higher education who work closely with staff on curriculum development, equipment selection, and in the procurement of grants and student internships.

#### Curriculum

BTHS operates on an alternating day four period block schedule in which classes meet for 82 minutes two or three times per week. Courses are either full-year (5 credits) or semester-long (2.5 credits). All core and themed courses, not otherwise designated as AP or IB, are taught at an honors level. Beginning in grade 11, all students become IB Diploma Candidates. As IB Diploma Candidates, students are required to take seven IB courses, write a 4,000 word senior thesis, and complete 150 Creativity, Action, and Service (CAS) hours. To earn the IB diploma, students need to achieve superior scores on externally assessed exams, projects, and essays.

BTHS students complete 160 credit hours of instruction, including a minimum of 45 credit hours in laboratory sciences and mandatory coursework in leadership and ethics. Additionally, each student completes a science-based senior internship. Partner sites include Freehold EMS, Monmouth Medical Center, NJ Sharing Network, Robert Wood Johnson University Hospital and Rutgers University.

#### **Grading System & GPA**

In accordance with MCVSD Board of Education policy, students are not ranked. The grade point average, computed at the end of each year, is unweighted and includes all courses. GPAs are based on a 100-point scale.

Non-Discrimination Clause: The Monmouth County Vocational School District does not discriminate on the basis of race, creed, color, national origin, ancestry, nationality, marital or domestic partnership or civil union status, sex, pregnancy, gender identity or expression, affectional or sexual orientation, reprisal or retaliation for prior civil rights activity, religion, age, disability, or socioeconomic status.

## "Excellence is in our DNA"

- Recognized by the US Department of Education as a National Blue Ribbon School in 2014
- Consistently ranked as a top 20 US high school by numerous publications (Business Insider, Newsweek, Niche, and The Daily Beast)
- 100% of faculty members are highly qualified; 19% hold a doctoral degree



Highlights Class of 2017 (82 students)	Achievements 2016-17 School Year
• 94% earned an IB Diploma	Delaware Valley Science Fair (8 winners)
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<ul> <li>83% pursuing a STEM-related major</li> </ul>	FFA National Convention (11 medalists, 2 first place)
<ul> <li>473 college acceptances</li> </ul>	Governor's STEM Scholars (5)
<ul> <li>11 National Merit Finalists, 34 Commended</li> </ul>	Jersey Shore Science Fair (25 winners, 6 first place)
<ul> <li>3 US Presidential Scholar Semifinalists</li> </ul>	National TSA Conference (1 winner, 4 qualifying teams)
<ul> <li>29 Rutgers Presidential Scholars</li> </ul>	New Jersey Academy of Science (1 winner)
• \$23,010,022 institutional merit aid offered	NJ Junior Science & Humanities Symposium (4 finalists)

#### Summary of Test Results - Class of 2017

SAT/ACT Mean Score Comparison				
Test	BTHS	US	NJ	
SAT	1474	1070	1076	
ACT	32.4	21.0	23.9	

SAT Reasoning Score Summary			
Section	Mean	Mid 50%	
Reading	731	680 - 760	
Math	745	710 - 780	
Total	1474	1390 - 1540	

IB Assessment Mean Scores				
Subject	BTHS	Worldwide		
Biology	5.57	4.32		
Chemistry	4.08	4.48		
English	5.46	4.95		
History	5.79	4.60		
Math	5.78	4.37		
Physics	4.63	4.65		
Spanish	5.94	5.08		

#### Molecular Biology SAT II

BTHS Average Score – 757 National Average Score – 650

#### **IB Biology HL Exam**

52% of BTHS students scored a 6 or 7 (compared to 21% worldwide)

#### **Perfect SAT I Section Scores**

25 Total 6 Reading, 19 Math

### College Matriculation 2009-2017

Albany College of Pharmacy American University Amherst College Arcadia University Australian National University Bard College Bentley University Binghamton University Boston College Boston University Brandeis University Brookdale Community College Brown University Bryn Mawr College **Bucknell University** California Polytechnic State University University of California, Berkeley University of California, Los Angeles University of California, San Diego University of California, Santa Cruz Carnegie Mellon University Case Western Reserve University College of Charleston University of Chicago Christopher Newport University Clark University Clemson University Colgate University Colorado State University Columbia University University of Connecticut The Cooper Union Cornell University Dartmouth College Delaware Valley College University of Delaware Denison University Dickinson College Drew University Drexel University **Duke University** Elon University Emerson College **Emory University** Fairleigh Dickinson University Florida Institute of Technology University of Florida Fordham University George Washington University Georgetown University Georgia Institute of Technology The University of Georgia Gettysburg College Hamilton College University of Hartford Harvard University Haverford College



University of Hawaii at Manoa Indiana University James Madison University Johns Hopkins University Kean University University of Kentucky Lafavette College Lehigh University Louisiana State University University of Maine Marist College University of Mary Washington University of Maryland, Baltimore County University of Maryland, College Park University of Massachusetts, Amherst McGill University Mercyhurst University Messiah College University of Miami Monmouth University Montclair State University Muhlenberg College University of New Hampshire New Jersey Inst. of Technology The College of New Jersey New York Inst. of Technology New York University University of North Carolina at Chapel Hill Northeastern University Northwestern University University of Notre Dame Ohio Northern University The Ohio State University The University of Oklahoma Pennsylvania State University University of Pennsylvania Pepperdine University University of Pittsburgh Point Park University Pomona College



Pratt Institute Princeton University Michigan State University University of Michigan Purdue University Quinnipiac University Ramapo College Reed College Rensselaer Polytechnic Institute University of Rhode Island Rice University Richard Stockton College University of Richmond Rochester Institute of Technology University of Rochester Rowan University Rutgers University Saint Louis University Sarah Lawrence College University of Sciences in Philadelphia Seton Hall University Skidmore College University of South Carolina University of Southern California Stanford University State University of New York Stevens Institute of Technology Stockton College Stony Brook University Swarthmore College Syracuse University Union College Tulane University US Air Force Academy US Military Academy at West Point University College London Ursinus College Vanderbilt University Vassar College University of Vermont Villanova University University of Virginia Virginia Commonwealth University Virginia Polytechnic Institute Wagner College University of Washington Weslevan University West Chester University Wheaton College Widener University College of William and Mary Williams College Worcester Polytechnic Institute Yale University Yeshiva University

York College of Pennsylvania Youngstown State University