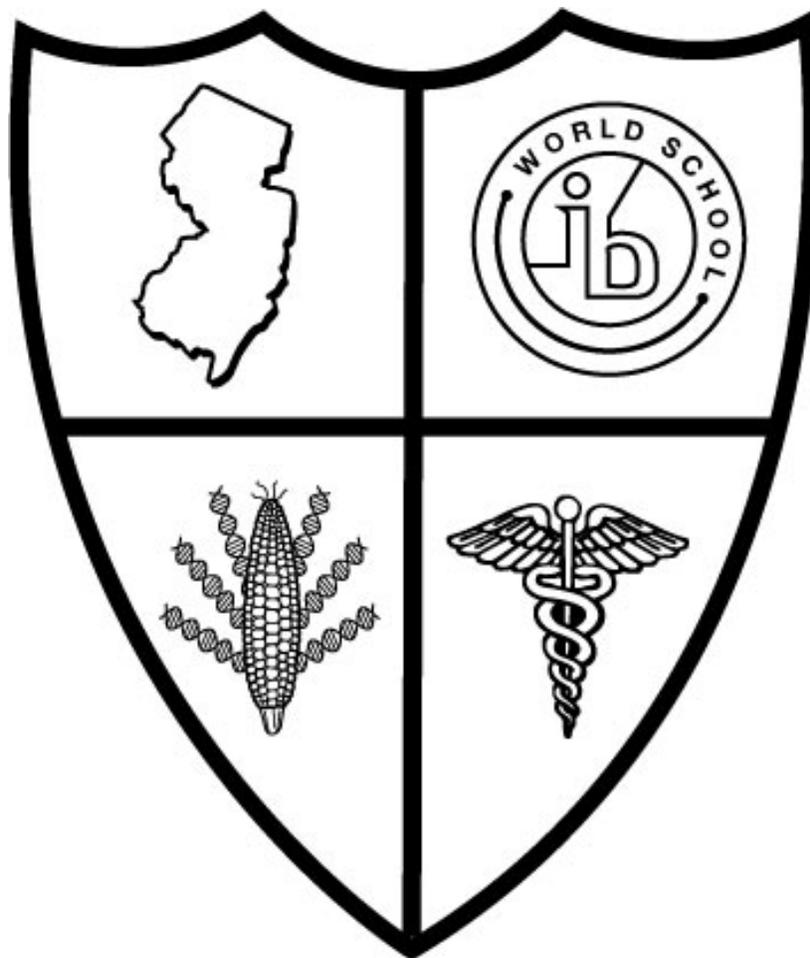


# ***Biotechnology High School***

***Monmouth County Vocational School District***

## ***Prospectus***

***2015 - 2016***



**Biotechnology High School**

5000 Kozloski Road | Freehold, NJ 07728 | Phone: 732-431-7208 | Fax: 732-431-1395  
[www.bths.mcvsd.org](http://www.bths.mcvsd.org)

***An International Baccalaureate World School***

***“Excellence is in our DNA”***

Balanced

Caring

Communicators

Inquirers

Knowledgeable

Open-minded

Principled

Reflective

Risk-takers

Thinkers

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Sean Meehan  
Principal

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Superintendent of Schools

Anthony J. Schaible  
Assistant Superintendent

Collette Flatt  
School Business Admin. / Board Secretary

Joseph Senerchia  
Director of School Counseling Services



# Mission & Vision

**Mission Statement:** Biotechnology High School, an International Baccalaureate (IB) 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.

**Vision Statement:** Biotechnology High School strives to prepare students to be innovative and influential leaders in the international scientific community.

# School & Community

Biotechnology High School (BTHS), an International Baccalaureate (IB) World School, is one of five Career Academies in the Monmouth County Vocational School District (MCVSD). Students admitted to the MCVSD Career Academies are selected through a highly competitive application and admissions process. The school population represents a cross section of students from more than fifty 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. Colleges and universities worldwide recognize IB as a rigorous high school program that provides excellent preparation for post-secondary success.



Biotechnology High School is a close-knit and supportive learning community of approximately 320 students and 27 world-class 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 over 20 clubs and 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. Clubs/organizations at BTHS include: Future Farmers of America (FFA), Technology Student Association (TSA) and Junior State of America (JSA). In the spring of 2015, the Arts & Entertainment Club conducted its first school musical performance, *Annie*.

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 classes are taught in a block-schedule format that are either full-year or semester-long. Teachers deliver creative lessons in which student-learning objectives are tightly linked with hands-on activities. Classroom learning is extended through the use of technology, guest speakers, and field trips. 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. In addition, each student completes a science-based senior internship. Partner sites include Jersey Shore University Medical Center, Johnson & Johnson, New Jersey Immunization Network, NJIT, 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 system.

# "Excellence is in our DNA"

- Recognized by the US Department of Education as a National Blue Ribbon School in 2014
- Honored by the HealthCare Institute of New Jersey (HINJ) in recognition of leadership and achievement in STEM education
- Ranked #1 in *US News & World Report's* "Best High Schools in New Jersey"
- Ranked #19 in *US News & World Report's* "Best High Schools in America"
- 100% of faculty members are highly qualified; 19% hold a doctoral degree
- 93% of freshmen achieved Advanced Proficient on the NJ Biology End of Course Assessment



## Highlights

**Class of 2015 (78 students)**

- 95% earned an IB Diploma
- 90% pursuing a STEM-related major
- 435 college acceptances
- 6 Semifinalists in National Merit Scholarship Program
- 22 Rutgers Presidential Scholars
- 2 US Presidential Scholars Program Semi-Finalists
- 2 NCAA Division I scholarship athletes

## Achievements

**2014-2015 School Year**

- Governor's STEM Scholars (5)
- Intel International Science & Engineering Fair (3 qualifying teams)
- Jersey Shore Science Fair (39 winners, 7 first place)
- Delaware Valley Science Fair (14 winners, 3 first place)
- National FFA Convention (5 first place)
- National TSA Conference (3 qualifying teams)
- JSA Mid-Atlantic Conference Best Speaker Awards (13)

## Summary of Test Results

**Class of 2015**

### SAT & ACT Combined Comparison

Test	BTHS	US	NJ
SAT	2117	1490	1520
ACT	31.5	21	23.2

### SAT Reasoning Score Summary

Section	Mean	Middle 50%
Critical Reading	696	650 - 760
Math	727	690 - 770
Writing	694	650 - 760
<b>Total</b>	<b>2117</b>	<b>2050 - 2260</b>

### IB Assessment Scores

Subject	BTHS Mean Score	Worldwide Mean Score
Biology	5.56	4.34
Chemistry	3.93	4.49
English	5.28	5.09
History	5.83	4.65
Mathematics	5.33	4.43
Physics	4.84	4.68
Spanish	5.28	5.03

### Molecular Biology SAT II

BTHS Average Score – 731  
National Average Score – 652

### IB Biology HL Exam

59% of BTHS students scored a 6 or 7  
(compared to 21% worldwide)

### Perfect SAT I Section Scores

34 Total  
15 Writing, 10 Math and 9 Reading



# ***College Matriculation 2009-2015***

Albany College of Pharmacy	The University of Georgia	Pratt Institute
American University	Gettysburg College	Princeton University
Amherst College	Hamilton College	Purdue University
Arcadia University	University of Hartford	Quinnipiac University
Binghamton University	Harvard University	Ramapo College
Boston College	Haverford College	Rensselaer Polytechnic Institute
Boston University	University of Hawaii at Manoa	Rice University
Brandeis University	Indiana University at Bloomington	Richard Stockton College
Brookdale Community College	James Madison University	University of Richmond
Brown University	Johns Hopkins University	Rochester Institute of Technology
Bryn Mawr College	Kean University	University of Rochester
Bucknell University	University of Kentucky	Rowan University
California Polytechnic State University	Lafayette College	Rutgers University at New Brunswick
University of California, Berkeley	Lehigh University	Sarah Lawrence College
University of California, Los Angeles	Louisiana State University	University of the Sciences in Philadelphia
University of California, San Diego	University of Maine	Seton Hall University
University of California, Santa Cruz	Marist College	Skidmore College
Carnegie Mellon University	University of Mary Washington	University of South Carolina
Case Western Reserve University	University of Maryland, Baltimore County	University of Southern California
College of Charleston	University of Maryland, College Park	Stanford University
University of Chicago	University of Massachusetts, Amherst	State University of New York at New Paltz
Christopher Newport University	McGill University	Stevens Institute of Technology
Clark University	Mercyhurst University	Stony Brook University
Clemson University	Messiah College	SUNY College at Geneseo
Colgate University	University of Miami	Swarthmore College
Colorado State University	Michigan State University	Syracuse University
Columbia University	University of Michigan	Tulane University
University of Connecticut	Monmouth University	Union College
Cornell University	Montclair State University	Ursinus College
Dartmouth College	Muhlenberg College	US Air Force Academy
Delaware Valley College	University of New Hampshire	US Military Academy at West Point
University of Delaware	New Jersey Institute of Technology	Vanderbilt University
Denison University	The College of New Jersey	Vassar College
Dickinson College	New York Institute of Technology	University of Vermont
Drew University	New York University	Villanova University
Drexel University	The University of North Carolina at Chapel Hill	Virginia Commonwealth University
Duke University	Northeastern University	Virginia Polytechnic Institute
Elon University	University of Notre Dame	Wagner College
Emerson College	Ohio Northern University	University of Washington
Emory University	The Ohio State University	West Chester University
Fairleigh Dickinson University	Pennsylvania State University, Hazleton	Wheaton College
Florida Institute of Technology	Pennsylvania State University, University Park	Widener University
University of Florida	University of Pennsylvania	College of William and Mary
Fordham University	Pepperdine University	Worcester Polytechnic Institute
The George Washington University	University of Pittsburgh	Yale University
Georgetown University	Point Park University	Yeshiva University
Georgia Institute of Technology	Pomona College	York College of Pennsylvania