22nd Annual

Blue Lobster Bowl

March 3, 2019

Sea Grant
Massachusetts Institute of Technology

NOSB
NATIONAL OCEAN SCIENCES BOWL
About the Blue Lobster Bowl
Massachusetts Regional Ocean Sciences Bowl

About the BLB

Host Institution:
MIT Sea Grant College Program

Regional Coordinators:
Thomas Consi (MIT Sea Grant College Program)
Lori Tsuruda (People Making a Difference*, MIT ‘89)

Chief Moderator: Richard Rigazio (U.S. Navy Retired)

Chief Science Judge: Carolina Bastidas (MIT Sea Grant College Program)

Chief Score Keeper: Sam Elder (MIT PhD ‘18)

The Massachusetts Blue Lobster Bowl is one of the 25 regional NOSB competitions held this year. The BLB is designed to inspire and challenge high school students, while testing the competitor’s knowledge of marine sciences. Seventeen teams from around the Commonwealth compete for the regional championship title and opportunity to advance to the NOSB National Finals competition.

Game Play
Each match pits two teams of four students against one another in an academic quiz bowl format. Competitors use a buzzer system to respond to rapid-fire multiple-choice and short-answer questions read by a Moderator. Additionally, teams work collectively to produce answers to complex “Team Challenge Questions.”

Tournament Format
During the first phase of the competition 16 teams compete in three divisions in a Round Robin Tournament, each team playing all other teams in its division. Following the Round Robin, eight teams advance to a Single Elimination Tournament, and the winner of the final round is our regional champion.

McDowell Science Challenge
The teams that do not compete in the Single Elimination Tournament will compete for the McDowell Award for Excellence in Academic Collaboration and Problem Solving. The McDowell Science Challenge is a competition element added in 2014 to strengthen and test students’ problem solving skills.
The National Ocean Sciences Bowl (NOSB) is a national academic competition for high schools on topics related to the study of the oceans. The NOSB is a nationally recognized and highly acclaimed high school academic competition that provides a forum for talented students to test their knowledge of the marine sciences including biology, chemistry, physics, and geology.

The NOSB is supported by the Consortium for Ocean Leadership and was launched in 1998, during the Year of the Ocean, to further its mission of supporting and expanding ocean science education. Since its inception, the competition has grown to include 25 regional competition locations with 300-350 schools and more than 2,000 students participating annually.

The winning team from each of the regional competitions advances to the NOSB Finals Competition held in a different location each year.

**2019 NOSB Finals Competition**

**Location:** Washington, D.C.  
**Date:** April 11-14  
**Theme:** Observe the Ocean; Secure the Future
All events take place on the first floor.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:20 am</td>
<td>Coach Check-In &amp; Team Photos (Lobby at entrance to 32-123)</td>
</tr>
<tr>
<td>10:00 am</td>
<td>Opening Session (32-123 Kirsch Auditorium)</td>
</tr>
<tr>
<td></td>
<td><strong>Stage 1</strong> Round Robin <em>(classrooms in Buildings 56 and 66)</em></td>
</tr>
</tbody>
</table>
| 10:20 am | Round 1 *(16 Teams)*  
|          | Division 1  Division 2  Division 3                                    |
| 11:15 am | Round 2                                                           |
| 12:00 pm | Round 3                                                           |
| 12:45 pm | Lunch *(Forbes Cafe in Building 32)*                               |
| 12:55 pm | Graduate Student Panel Q&A *(Building 32, Room 124)*  
|          | **limited space**                                                  |
| 1:30 pm  | Round 4                                                           |
| 2:15 pm  | Round 5                                                           |
| 3:00 pm  | Student Speaker & Seeding Announced *(32-123)*                     |
|          | *(top 8 teams)*  
|          | *(remaining teams)*                                                |
|          | **Stage 2** Single Elimination *(Building 56)*                      |
| 3:30 pm  | Round 6                                                           |
| 4:15 pm  | Round 7                                                           |
| 5:00 pm  | Championship Match *(32-123)*                                      |
| 5:45 pm  | Awards Ceremony *(32-123)*                                         |
|          | **McDowell Science Challenge *(Building 26, Room 152)*              |
|          | *(16 Teams)*                                                       |
|          | Division 1  Division 2  Division 3                                    |
Officials’ Roles

**Moderator:** Runs the room and asks the questions

**Science Judge:** Rules on science challenges

**Rules Judge:** Ensures rules are followed

**Time Keeper:** Times the match

**Score Keeper:** Tallies team scores

**Science Room Graders:** Grade Team Challenge Questions (TCQs) and resolve science challenges

**Runners:** Move communications to and from Ocean Bowl Central and control traffic in/out of competition room during matches

Competitors

Each team has one captain, three players at any given time, plus at least one coach. During the break, a team’s alternate player may rotate in for a six-minute buzzer half.

Match Format

Each match is composed of two, 6-minute, rapid-fire buzzer segments, two team challenge questions (TCQs), and a break.

Buzzer Questions

Players buzz in to answer toss-up, multiple-choice questions. If a student is recognized by the moderator but the answer is incorrect, the Moderator gives the opposing team a chance to respond. If the answer is correct, the team gets a chance to answer a bonus question. Teams may consult up to 20 seconds on bonus questions, but only the team captain may give the answer. Bonus questions may be multiple-choice or short answer.

Players can respond to multiple choice questions using the letter (W, X, Y, Z) or the word answer, exactly as specified, with the exception of articles such as “a,” “an,” and “the.” Anything else is unacceptable. The first answer stated is the one that counts.

During toss-up questions, consultation among team members is NOT allowed.

Please respect the integrity of the competition and the considerable effort made by team and officials in preparing for this event. Spectators are welcome in competition rooms but may not:

- Enter or leave a room during a match
- Take pictures, notes, or any recordings in the competition room
- Grade papers, solve puzzles, read, doodle, use phones, tablets, computers or Apple watches, or listen to music
- Communicate with each other or competitors during matches
- Talk in the halls outside competition rooms during matches

The Blue Lobster Bowl follows the official rules of the National Ocean Sciences Bowl (www.nosb.org). Below are some of those rules.
If the Moderator has said the format (i.e., multiple-choice) of a toss-up question and a player “blurs” an answer without buzzing in or without being recognized by the moderator, his/her team loses its opportunity to answer the toss-up question.

**Buzzer Use**
The buzzer is used only for toss-up questions. If a player buzzes in before the Moderator has completely read the question and all possible answers, the Moderator will recognize the player (and announce an interrupt) and the player can answer the question. If the answer is acceptable, the team earns 4 points and the chance to answer the bonus question. If the answer is unacceptable, the team loses 4 points and the question can be read in its entirety to the opposing team.

**Timing**
After each toss-up question is read, teams have 5 seconds to buzz in. After being recognized, a player must begin his/her response within 3 seconds. After each bonus question is read, the team captain must start his or her answer within 20 seconds. Teams are allowed 2-5 minutes to respond to TCQs, depending on the complexity of the question.

**Scoring**
- **Toss-up question:** 4 points
- **Bonus question:** 6 points
- **Interrupt, recognized, but answered incorrectly:** -4 points
- **Blurt answer, unrecognized:** 0 points; team loses chance to answer the question
- **TCQ:** 0-20 (partial credit possible)

**Challenges**
Active players (not audience members, alternate players, coaches, or officials) may challenge the rules or scientific answers to a toss-up or bonus question before the Moderator begins reading the next question’s format. The Time Keeper stops the clock, officials confer, and the appropriate Judge makes the ruling. If unsatisfied with this ruling, student may re-challenge before the next question, in writing; Ocean Bowl Central, whose rulings are final, will rule.

Players may not challenge TCQs.

**Team Challenge Questions (TCQs)**
Two, handwritten short response TCQs are asked during each match to test teams’ critical thinking and collaboration skills.

1. During the Team Challenge portion of the competition, the audience must remain quiet and seated without reading or writing, even on the official programs.
2. Team members are encouraged to work together on these questions; however, only the answer sheet submitted by each Captain will be taken to be graded in the science room.
3. Only answers written left-to-right, parallel to the question text will be considered.
4. If $n$ multiple answers are requested, only the first $n$ written answers will be considered.
5. We will only award points to a team that writes its complete school name and applicable team letter, the competition room building# and room#, and round# on the backs of its TCQ answer sheets.
6. TCQ scores will be revealed and added to overall scores before the second buzzer halves begin, regardless of when TCQs are administered.
Competition Structure

Keep Track of the Competition!
http://www.pmd.org/s/BLobster19.htm

Team Check In

**Time:** 9:20am - 9:45am  
**Who:** All Coaches  
**Location:** Lobby Area in Front of Entrance to 32-123 Kirsch Auditorium

All coaches check-in their teams. Each coach must designate the four or five pre-registered students (who have photo identification with them) for each team that competes in the round-robin and single-elimination tournament. Team photographs will be taken immediately, before the opening session.

*Note: For teams not progressing to the single-elimination tournament, all pre-registered students may compete in the science challenge.*

Please have your official team photo taken immediately after you check in!

Opening Session

**Time:** 10:00am - 10:15am  
**Who:** All teams and coaches  
**Location:** 32-123 Kirsch Auditorium

16 competing teams from 8 different Massachusetts schools (and 2-3 non-competitive (NC) school teams that will play during bye rounds) will begin the competition with a welcome and overview of the day.

Round Robin Competition

**Time:** 10:20am - 12:45pm and 1:30pm - 3:00pm  
**Who:** All teams and coaches  
**Location:** Buildings 56 and 66 (see division assignments on pg 12-14)

Teams **MUST** be in their assigned rooms ready to begin round 1 by **10:25am**, Late teams will forfeit this round.

All competing teams are divided into three divisions of 5 or 6 teams each. During the first stage of the competition, Round Robin, 5 rounds are played. During these first five rounds, teams will play one match with each team in their division.

**Scoring**

Teams accumulate points based on the number of wins, ties, and losses (not by raw points scored). Follow along with the competition by keeping track of scoring: win = 2 points; loss = 0 points; tie = 1 point
Advancing

The top two teams in each division plus the top two, third-placing “wildcard” teams will advance to an 8-team Single Elimination tournament for the 2019 Blue Lobster Bowl championship.

The remaining teams (and both Cape Cod teams) will compete for the McDowell Award for Excellence in Academic Collaboration and Problem Solving.

Tie Breaks

In case of a tie in the round robin results, the tie will be broken according to:

- Head to head win/loss record for the round-robin matches
- Average points scored per non-bye round
- A coin toss

“Wildcard” Team Selection

The three teams which finish in third place in each division will be ranked first by score and second by average points scored per non-bye round. The top two teams will join the Single Elimination tournament.

Lunch

**Time:** 12:45pm - 1:25pm  
**Who:** All teams and coaches  
**Location:** Forbes Cafe (Building 32)

During the Round Robin competition (between rounds 3 and 4), teams will break for lunch and the new “career event,” a Graduate Student Panel Q&A.

Coaches must pick up and distribute pre-requested, special meals for each student who requested one before the whole team can process through the lunch line.

**NOTE:** Teams **MUST** be in their assigned rooms ready to begin round 4 by **1:30**. If a team is not on-time, it will forfeit the round.
**Competition Structure**

**Presentation**

**Time:** 3:00pm - 3:30pm  
**Who:** All teams and coaches  
**Location:** 32-123 Kirsch Auditorium

After the Round Robin Competition, all teams will gather for the student speaker and announcements about the remainder of the competition.

**Student Speaker**

**John Michael Reyes** is a fourth year undergraduate in Mechanical and Ocean Engineering at MIT. He studies marine robotics, with a focus on autonomy and sensing. Through his research he has worked on the Great Barrier Reef, and is currently working on several projects in autonomous environmental sensing. His aim is to use technology to monitor environmental health, so that the effects of climate change on the ocean and atmosphere can be better understood. His talk will focus on his current and past projects, and how they can help the environment.

**Room Assignments**

Following the presentation, all teams will receive room assignments for the remainder of the competition. The top eight (8) teams will be announced and will proceed to the Single Elimination Competition. Remaining teams will compete for the McDowell Award of Excellence.

*If you are competing in single elimination tournament, write your room assignment on page 17.*

**Single Elimination Tournament**

**Time:** 3:30pm - 5:00pm  
**Who:** Top 8 teams and coaches  
**Location:** Building 56

The eight advancing teams will compete for the Championship title in a Single Elimination Tournament. Two elimination rounds will be played yielding two winners who will go head-to-head in the Championship Round.
Competition Structure

3rd - 8th place teams will be determined by the win/loss record and total scores (buzzer round points and TCQ scores) from the single elimination tournament only.

In case of a tie in the elimination rounds, a series of five toss-up questions will be used to break the tie. (Alternates cannot enter the game under this circumstance. See rule #55.)

McDowell Science Challenge

Time: 3:30pm - 5:00pm  
Who: Teams in Places 9-16 and Teams from Cape Cod  
Location: 26-152

During the first half of the science challenge, teams will be introduced to a marine science topic as well as related tools and resources. During the second half of the challenge, teams will use their knowledge of ocean science and new skills and tools to work together to solve a real-world marine science challenge.

The team with the highest point total will receive the Judy McDowell Award for Excellence in Academic Collaboration and Problem Solving and passes to the Museum of Science donated by The MathWorks.

Championship Match

Time: 5:00pm - 5:45pm  
Who: All teams and coaches  
Location: 32-123 Kirsch Auditorium

All teams are required to watch the two remaining teams compete in the final match for the BLB 2019 Championship title, a team dinner donated by Legal Sea Foods, and passes donated by the New England Aquarium.

Awards Ceremony

Time: 5:45pm - 6:00pm  
Who: All teams and coaches  
Location: 32-123 Kirsch Auditorium

Following the Championship Match the 1st - 8th place standings are announced and trophies awarded to teams placing 1st - 4th place. The McDowell Award for Excellence in Academic Collaboration and Problem Solving is awarded.
**Schedule: Stage 1**

**Round Robin Division 1**

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**Division 1: Boston Harbor**

<table>
<thead>
<tr>
<th>Team</th>
<th>Wins</th>
<th>Losses</th>
<th>Ties</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acton-Boxborough C</td>
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<tr>
<td>Fitchburg A</td>
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<td>Lexington A</td>
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<td>Newton North C</td>
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<td>Newton South</td>
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<tr>
<td>Non-Competitive (NC) Team</td>
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**Round Robin Schedule**

<table>
<thead>
<tr>
<th>Round</th>
<th>Room 56-114</th>
<th>Room 56-154</th>
<th>Room 56-162</th>
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</thead>
<tbody>
<tr>
<td>Round 1 10:30am</td>
<td>Fitchburg A vs NC Team</td>
<td>Acton-Boxborough C vs Newton North C</td>
<td>Newton North C vs Newton South</td>
</tr>
<tr>
<td>Round 2 11:15am</td>
<td>Acton-Boxborough C vs Fitchburg A</td>
<td>Newton South vs NC Team</td>
<td>Lexington A vs Newton North C</td>
</tr>
<tr>
<td>Round 3 12:00pm</td>
<td>Newton North C vs NC Team</td>
<td>Acton-Boxborough C vs Newton South</td>
<td>Fitchburg A vs Lexington A</td>
</tr>
<tr>
<td>Round 4 1:30pm</td>
<td>Acton-Boxborough C vs Newton North C</td>
<td>Lexington A vs NC Team</td>
<td>Fitchburg A vs Newton South</td>
</tr>
<tr>
<td>Round 5 2:15pm</td>
<td>Lexington A vs Newton South</td>
<td>Fitchburg A vs Newton North C</td>
<td>Acton-Boxborough C vs NC Team</td>
</tr>
</tbody>
</table>

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**Lunch (Forbes Cafe)**

- Round 1: Acton-Boxborough C vs Newton North C
- Round 2: Lexington A vs NC Team
- Round 3: Fitchburg A vs Newton North C
- Round 4: Acton-Boxborough C vs Newton North C
- Round 5: Lexington A vs Newton South

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**Campus Map**

[Map of Building 56: 1st Floor with rooms 114, 154, and 162 marked]
### Division 2: Plum Island Sound

<table>
<thead>
<tr>
<th>Team</th>
<th>Wins</th>
<th>Losses</th>
<th>Ties</th>
<th>Score</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acton-Boxborough A</td>
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<tr>
<td>Bristol A</td>
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<td>Fitchburg B</td>
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<td>Lincoln-Sudbury A</td>
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<tr>
<td>Newton North B</td>
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<tr>
<td>Non-Competitive (NC) Team</td>
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#### Round Robin Schedule

<table>
<thead>
<tr>
<th>Round</th>
<th>Room 66-144</th>
<th>Room 66-154</th>
<th>Room 66-168</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1 10:30am</td>
<td>Newton North B VS NC Team</td>
<td>Fitchburg B VS Lincoln-Sudbury A</td>
<td>Acton-Boxborough A VS Bristol A</td>
</tr>
<tr>
<td>Round 2 11:15am</td>
<td>Fitchburg B VS Newton North B</td>
<td>Acton-Boxborough A VS NC Team</td>
<td>Bristol A VS Lincoln-Sudbury A</td>
</tr>
<tr>
<td>Round 3 12:00pm</td>
<td>Bristol A VS NC Team</td>
<td>Acton-Boxborough A VS Fitchburg B</td>
<td>Lincoln-Sudbury A VS Newton North B</td>
</tr>
<tr>
<td>Round 4 1:30pm</td>
<td>Bristol A VS Fitchburg B</td>
<td>Lincoln-Sudbury A VS NC Team</td>
<td>Acton-Boxborough A VS Newton North B</td>
</tr>
<tr>
<td>Round 5 2:15pm</td>
<td>Acton-Boxborough A VS Lincoln-Sudbury A</td>
<td>Bristol A VS Newton North B</td>
<td>Fitchburg B VS NC Team</td>
</tr>
</tbody>
</table>

### Lunch (Forbes Cafe)

- Round 1: Newton North B VS NC Team, Fitchburg B VS Lincoln-Sudbury A, Acton-Boxborough A VS Bristol A
- Round 2: Fitchburg B VS Newton North B, Acton-Boxborough A VS NC Team, Bristol A VS Lincoln-Sudbury A
- Round 3: Bristol A VS NC Team, Acton-Boxborough A VS Fitchburg B, Lincoln-Sudbury A VS Newton North B
- Round 4: Bristol A VS Fitchburg B, Lincoln-Sudbury A VS NC Team, Acton-Boxborough A VS Newton North B
- Round 5: Acton-Boxborough A VS Lincoln-Sudbury A, Bristol A VS Newton North B, Fitchburg B VS NC Team

### Campus Map

[Campus Map Image]

[Building 56: 1st Floor]

[Building 66: 1st Floor]
### Round Robin Schedule

#### Division 3: Buzzards Bay

<table>
<thead>
<tr>
<th>Team</th>
<th>Wins</th>
<th>Losses</th>
<th>Ties</th>
<th>Score</th>
<th>Rank</th>
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</thead>
<tbody>
<tr>
<td>Acton-Boxborough B</td>
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<td>Bristol B</td>
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<td>Non-Competitive (NC) Team</td>
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</table>

#### Round Robin Schedule

**Round 1**
- 10:30am: Lincoln-Sudbury B vs Shepherd Hill
- Room 56-169
- Room 56-180: Bristol B vs Lexington B
- Room 56-191: Acton-Boxborough B vs Newton North A

**Round 2**
- 11:15am: Bristol B vs Lincoln-Sudbury B
- Room 56-169
- Room 56-180: Newton North A vs Shepherd Hill
- Room 56-191: Acton-Boxborough B vs Lexington B

**Round 3**
- 12:00pm: Acton-Boxborough B vs Shepherd Hill
- Room 56-169
- Room 56-180: Bristol B vs Newton North A
- Room 56-191: Lexington B vs Lincoln-Sudbury B

**Round 4**
- 1:30pm: Acton-Boxborough B vs Bristol B
- Room 56-169
- Room 56-180: Lexington B vs Shepherd Hill
- Room 56-191: Lincoln-Sudbury B vs Newton North A

**Round 5**
- 2:15pm: Lexington B vs Newton North A
- Room 56-169
- Room 56-180: Acton-Boxborough B vs Lincoln-Sudbury B
- Room 56-191: Bristol B vs Shepherd Hill

### Campus Map

![Campus Map](image)
Congratulations to all NOSB seniors heading off to college or employment next year. We hope that you will continue to be involved in the program and stay in touch regarding your future careers. Now that you are a program alumnus, here are some tips for staying connected with the NOSB at the regional and national levels:

REGIONAL OPPORTUNITIES

Volunteer at a regional competition
Visit the competition map at www.nosb.org to find bowl dates and contact information.
Be sure to tell the bowl’s regional coordinator that you are a NOSB alumnus AND if you’ve volunteered at any other bowls.

Serve as a mentor to new teams
Email your regional bowl’s coordinator to see if they can match you up with a new team.

NATIONAL OPPORTUNITIES

Join the NOSB Alumni Group on LinkedIn

Follow NOSB on social media
Facebook: National Ocean Sciences Bowl
Twitter: @NOSBRocks
Instagram: @NOSBRocks

Serve as a competition question writer or reviewer

Participate each year in our past participant tracking study no matter your current major or field

Provide an Alumni Spotlight
As you start your career, tell us where you are working and the job you perform, as well as the NOSB’s impact on your personal and/or professional life. We’ll share your story online and in Ocean Leadership’s Ocean News Weekly.

Email nosb@oceanleadership.org for more information.
## Schedule: Stage 2
### Room Assignments for Stage 2 of the Competition

### Division 1: Boston Harbor

<table>
<thead>
<tr>
<th>Team</th>
<th>Single Elimination</th>
<th>Science Challenge</th>
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<tbody>
<tr>
<td>Acton-Boxborough A C</td>
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<td>Newton North C</td>
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### Division 2: Plum Island Sound

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### Division 3: Buzzards Bay

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<td>Newton North A</td>
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<tr>
<td>Shepherd Hill</td>
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Stage 2 of the Competition

Schedule: Stage 2

Single Elimination Bracket

Round 6 (3:30pm)
1. room 56-114
8. w.
4. room 56-154
5. w.
3. room 56-162
6. w.
2. room 56-180
7. w.

Round 7 (4:15pm)

Championship Round (5:00pm)

room 56-114
w.

room 56-154
w.

room 56-162
w.

room 56-180
w.

room 32-123
w.
**2019 BLB Teams**

## Full Varsity Rosters

<table>
<thead>
<tr>
<th>School</th>
<th>Coach</th>
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<tbody>
<tr>
<td>Acton-Boxborough Regional High School A</td>
<td>Nancy Young - Coach</td>
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<tr>
<td></td>
<td>Damon Brown</td>
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<td></td>
<td>Noah Chinitz</td>
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<td>Collin Cooper</td>
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<td>Basil Sousounis</td>
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<td>Katrina Sousounis</td>
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<tr>
<td>Bristol County Agricultural High School A</td>
<td>Emily Perry - Coach</td>
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<td>Abigail Bruno</td>
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<td>Hannah Bruno</td>
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<td>Alexander Cameron</td>
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<td>Madison Kruger</td>
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<td>Jessie Power</td>
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<td>Nicole Simas</td>
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<tr>
<td>Fitchburg High School A</td>
<td>Laura Bolick - Coach</td>
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<td>Nevin Arsenault</td>
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<td>Samuel Boudreau</td>
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<td>Kato Bouthsarah</td>
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<td>Vence Henry</td>
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<td>Toua Vang</td>
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<td>Lexington High School A</td>
<td>Janice Compton - Coach</td>
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<td>Brendan Cantwell</td>
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<td>Sachiv Chakravarti</td>
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<td>Jeremy Fleming</td>
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<td>Fayza Jaleel</td>
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<td>Jonathan Jiang</td>
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<td>Jasper Nevis</td>
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<td>Ashwin Padaki</td>
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<td>Lincoln-Sudbury Regional High School A</td>
<td>William “BJ” Pegram - Coach</td>
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<td>Seamus Frey</td>
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<td>Kevin Ji</td>
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<td>Parker Simon</td>
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<td>Camille Slattery</td>
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<td>Newton North High School A</td>
<td>Sally Johnson - Coach</td>
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<td>August Betts-O’Rourke</td>
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<td>Grace Lam</td>
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<td>Marguerite McCarthy</td>
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<td>Laura Schmidt-Hong</td>
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<td>Andrew Trias</td>
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<td>Newton South High School</td>
<td>Paul Kim - Coach</td>
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<td>Lucille Dutton</td>
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<td>Kyle Hooker</td>
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<td>David Kim</td>
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<td>Kiran Mak</td>
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<td>Skye Tausig</td>
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<tr>
<td>Shepherd Hill Regional High School</td>
<td>Justin Sauvageau - Coach</td>
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<td>Chase Abbott</td>
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<td>Edison Doko</td>
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<td>Davone Keovongmanysar</td>
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<td>Emily Waterhouse</td>
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</tbody>
</table>
2019 BLB Teams

Full Junior Varsity Rosters

Acton-Boxborough Regional High School B
Michael Romano - Coach
Viraj Lawande
Nicholas Michaelidis
Jack Post
Aidan Rybicki
Malcolm Verrilli

Acton-Boxborough Regional High School C
Katelyn Saaristo - Coach
Bertalan Gyimesi
Nikhil Krishnamurthy
Paul Michaelidis
Samuel Seepersaud

Bristol County Agricultural High School B
Elizabeth Savage - Coach
Emma Forgit
Mackenzie Rumson
Hope Siddall
Alleynah Souza
Analise Thompson
Alexis Wells

Fitchburg High School B
Ann Taft - Coach
Julia Boudreau
Ava Gagne
Justine Gaynor
Marguerite King
Michaela Wakefield

Lexington High School B
Kari Darling - Coach
Sunwoo Baik
Lewis Hwang
Yul Kim
Parvati Kodendera
Edward Lacson
Beverly Liu
Kristina Wong

Lincoln-Sudbury Regional High School B
Regina Shopiro - Coach
Taiki Aiba
Reetom Gangopadhyay
Zoe Liu
Fiona Prendergast
Alison Quirk
Caitlyn Sams
Valerie Ungaro

Newton North High School B
Russell Morin - Coach
Skyler Bohnert
Austin Chen
Emily Davis-Morin
David Genis
Abigail Lau
Emily Ng

Newton North High School C
Curtis Betts - Coach
Yossie Lebedev
Cher Li
David Li
Yesha Thakkar

“Non-Competitive” Rosters

NC Cape Cod Academy
Abby Wood - Coach
Peter Saltsman - Assistant Coach
Lucas Guo
Jacky Haowen
Crystal Lin
William Liu
George Zhao
Sam Zhili

NC Nauset Regional High School
Rydell Welch - Coach
Liam Brister
Liam McCarthy O’Hara
Kieran Norton
2019 Volunteers

Thank you to all of our dedicated Blue Lobster Bowl volunteers, without whom the competition would not be possible.

Kween Agba  Brian Kennedy  Janice St. Clair
Alia Al-Haj  Ian Lai  Elizabeth Sanford
Carolina Bastidas  Scott Lakin  Solveig Schilling
Tina Bergstrom  David Lassila  Kathleen Schwind
Jennifer Blackmon  Joshua Leung  John Seay
Alexandra Cao  Julia Leung  Cassandra Seltzer
Felicia Chen  Diane Li  Matthew Shorter
William Coney  Jade Lin  Elizabeth Sibert
Catherine Cooper  Sabrina Liu  Noah Singer
Ira Cooper  Hannah Mark  James Smith
Sarah Damassa  Christopher Miller  Katherine Sottilare
Kat Deabill  Laura Morse  Suzanne Stickley
Sam Elder  Tyler O’Keefe  Kevin Sutherland
Aidan Evans-Strong  Roshan Padaki  Lauren Thomas
Cleo Falvey  Allison Patton  April Thwin
Ken Finkelstein  Evan Patton  mrn Tomusiak
Patrick Flanagan  Ian Paul  Cici Wang
Roger Fu  Timothy Puopolo  Zhishan Wang
Albert Garcia  Samuel Rafter  Alyssa Wren
Noah Germolus  Elaine Rigazio  Alex Yoo
Evelyn Goroza  Rick Rigazio  Rachel Zhang
Evan Howard  Neal Rosen  Aric Zhu

Share Your Feedback with NOSB

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Coaches  https://www.surveymonkey.com/r/NOSB19Rcoa
Volunteers  https://www.surveymonkey.com/r/NOSB19Rvol
APPLY FOR A NATIONAL OCEAN SCIENCES BOWL SCHOLARSHIP!

The National Ocean Scholar Program offers tuition assistance (up to $1,000) to rising college freshmen planning to major in an ocean science related field.

To be eligible, students must:

- have participated in the National Ocean Sciences Bowl (NOSB®) at least once during high school.
- be graduating from high school this year.
- be planning to pursue a post-high school degree in an ocean related field this coming fall.

Application materials are online and due 5/10/19. www.nosb.org/opportunities/national-ocean-scholar-program

For more information or questions please contact Ocean Leadership at nosb@oceanleadership.org.

The NOSB is a program of the Consortium for Ocean Leadership.
Sponsor Organizations

**MIT Sea Grant College Program**

Founded in 1966 by Congress, the National Sea Grant College Program is a network of 33 programs working to promote the conservation and sustainable development of our marine resources through research, education, and outreach. Sea Grant is funded by the U.S. Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA).

The Massachusetts Institute of Technology was designated as a Sea Grant College in 1976, the first private institution of higher learning to be appointed as such. Our rigorous research program, dedicated outreach programs and integrated educational projects are aimed at providing real-world solutions to coastal questions and at helping to inspire the coastal stewards of tomorrow.

**People Making a Difference®**

People Making a Difference® (PMD) promotes informed and responsible volunteerism by involving people in meaningful, one-time, hands-on work that meets the needs of local charities and by assisting companies and charities in building successful community involvement programs.

**Consortium for Ocean Leadership**

The Consortium for Ocean Leadership is a Washington, D.C.-based nonprofit organization that represents leading public and private ocean research and education institutions, aquaria and industry with the mission to advance research, education, and sound ocean policy. The organization also manages ocean research and education programs in areas of scientific ocean drilling, ocean observing, ocean exploration, and ocean partnerships.
Special Thanks & Sponsors

Thanks to Noah Germolus G and Evan Howard PhD ’17 for developing and implementing this year’s McDowell Science Challenge.

Special thanks to Diane Alicea for her administrative support without which the competition would not be possible.

Thanks to Kathleen Schwind ‘19 and Kevin Sutherland G from the Northeast Regional Middle School Science Bowl for their collaboration and cross-support.

Special appreciation to MIT Biological Engineering, Chemical Engineering, and Mechanical Engineering for their generosity and support.

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