

September, 2019 Volume 2, Issue 9







The Future Ready Schools - NJ Monthly Newsletter

Welcome Back and Thank You to the 2019 Award Committee and Community Leadership Team!

Welcome back New Jersey educators of the Future Ready Schools - New Jersey community, I hope you had a fantastic summer!

Since the end of June and the last school year, FRS-NJ has been focused on the 2019 awards review process. About 260 school certification submissions have been reviewed by over a hundred educators and leaders who have volunteered their time and expertise to supporting their fellow #FutureReadyNJ community members. Leading this effort, and performing secondary reviews to ensure the balance and quality of certifications, were the chairs and co-chairs of the community leadership team. Without them, this process would be impossible to accomplish. Thank you all for your immense and critical service!

Over the next two weeks, all results will be finalized and notifications are planned for around September 15th. No certification status notifications will go out prior to that date. I am working now with the community leadership team to ensure that all reviews and results are accurate and balanced. We're almost there!

As a critical reminder to all of the schools and districts that submitted for certification: it is not the certification that matters, but the process of coming together as an inclusive, collaborative, and representative team to self-assess and act on the feedback provided by fellow educators on that self-assessment from across the community, whatever the outcome of the certification itself.

The next step will be the 2019 FRS-NJ Awards Ceremony at NJSBA's Workshop 2019 conference in Atlantic City on October 22nd. We invite you to join us in celebrating the accomplishments of the entire FRS-NJ community that has undertaken the process of self-assessment and certification submission. In the meantime, on behalf of the FRS-NJ team I wish you the greatest success in the coming school year!

- Jeremy Reich, Project Coordinator

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Community News

EdWeek's Back-to-
School Reading List

Education Week

Choices Reading Lists

International Literacy Association

Relationships that Last

- School and University **Collaboration**

DOE Digest (NJDOE)

Call for Nominations: NJSBA's 2019-2020 **Board Member of the Year Award**

NJSBA

Federal programs, partnerships can defray CTE costs

Education Dive

EdgeCon 2020 Call for Proposals

NJEDGE

Teaching in the Era of Bots: Students Need Humans Now More Than Ever

EdSurge

Cyber Robotics Coding Math Success Competition: Fall 2019 Initiative Holds True Season

CRCC

to Its Name

NJIT

NJIT's Center for Pre-College Programs to Host STEM Leadership Forum Oct. 3

NJIT

Social Annotation in the Digital Age

Edutopia

Implementing a Robotics Competition in your Classroom

Provided by Trevor Pope, CRCC Competition Master (@gocoderz)

Robotics competitions are currently at the forefront of our ever-changing technological world. In the modern day, it is important to learn skills that will help your students navigate the shift from traditional, old-school technology to newer and more advanced tech.

Robotics competitions can wake up the leader that each student has inside and can strengthen various abilities and skills - both hard and soft - that are needed in the 21st century like computational thinking, self-directed learning, creative problem solving, time management, teamwork and more.

It doesn't have to be expensive: Robotics should promote inclusivity! Implementing a robotics competition in your own classroom doesn't have to be complicated, nor expensive. The Cyber Robotics Coding Competition (CRCC) is an online robotics tournament that engages students in coding without the need of any hardware, making their preparation even more inclusive. Because, robotics should be for everyone, right?

The Cyber Robotics Coding Competition, organized by the ISCEF foundation, has been held around the US, and in a number of different countries both in Latin America, the Middle East, and Africa. Every single student got to practice and work with their very own virtual robot. Expensive hardware? No need!

This year, we will return to the New Jersey Institute of Technology for the state finals. Last year, nearly 90 schools participated in the NJ CRCC! The exact date of this year's finals is still in the works. Updates will be posted in the newsletter (see below)!

5 steps to have your own robotics competition in your classroom:

- 1. Join our mailing list! The newsletter will ensure you have the latest information. Additionally, the CRCC team is reachable and accessible, you can get in touch with the team if you have additional questions about how to implement a robotics competition in your own classroom. The CRCC team will be there for you during the entire time, ensuring an exclusive, comprehensive, extraordinary learning experience both for you and your students.
- 2. Register for CRCC, and let the fun begin! Get your

students excited about STEM. Show them how STEM will be present in our everyday lives in the future, and how its different applications will rule the way the workforce of the future structures itself. In order to engage them, you can talk about the importance of makerspaces, gamified learning environments, or even about the most amazing programming languages for kids.

- 3. Prepare yourself and your students! Join the teacher professional development webinars hosted in the first weeks of October. Details will be in the newsletter. Learn to program yourself, and your students will see that anyone can do it! Set up your student accounts, and have them complete the Bootcamp missions. Bootcamp can be done in teams or individually. It is important for your students to know that anyone can program their very own virtual robot. These gamified missions and challenges will prepare them for the Qualifier Round. Encourage them to find different ways for them to make their robot complete missions and emphasize that there are a number of different paths to success.
- 4. Create student teams for the Qualifying Round.
 Although each student works on an individual account, we recommend to start practicing working in teams of 2. This is how the finals are run. It is important that your students learn how to work in teams, when to lead, and when to be guided. Also, dividing them in teams will encourage collaboration while contributing to the "competition atmosphere" you want to create in the class. Encourage them to name their teams, to divide tasks, and to work together in solving the different challenges. The CRCC includes a leaderboard that students follow, and it motivates them to see their team on the top of the list.
- **5. Delve into the Qualifying Round and have fun!** Once the qualifying round begins, teams can complete challenges from any Internet-connected computer at anytime.

Join the next Cyber Robotics Coding Competition (CRCC) starting October 14th 2019

Click here for more details

May the code be with you

NJIT's Master's of Science in Pharmaceutical Chemistry

Provided by NJIT's College of Science and Liberal Arts

The 30-credit option—comprised of project management, communications and biotechnology-based coursework—is designed to "prepare graduate students for leadership and management roles in the rapidly expanding biotechnology industry," and meet unmet employment demand among one of the greatest concentration of biotechnology and pharmaceutical activities in the world.

"This program complements NJIT's programs in pharmaceutical chemistry and pharmaceutical engineering and was deliberately developed in partnership with biopharmaceutical companies to address unmet workforce needs," said Kevin Belfield, dean of NJIT's College of Science and Liberal Arts. "We anticipate our graduates will be in high demand in the state's biopharmaceutical industry."

Currently, more than 400 private and public biopharmaceutical companies operate in the greater New Jersey area. Since 2011, New Jersey has seen a 10 percent increase in drug and pharmaceutical establishments according to New Jersey's 2018 Department of Labor and Workforce Development report.

NJIT neighbors internationally recognized biotechnology companies including Celgene, Amicus Therapeutics, Chromocell, Soligenix, Vicus, Genzyme, Roka Biosciences and PTC Therapeutics.

"We've received significant input from biopharmaceutical experts at Celgene, Novartis, Merck and the New Jersey Innovation Institute," said Belfield. "This program represents the opportunity for true innovation and partnership in education and workforce development with the rapidly evolving and extraordinarily important field of biological therapeutics." Courses include cell and gene therapy and applied bioprocessing for those without a biological sciences background to facilitate the transition of scientists and engineers to this exciting field. Recognized by the Professional Science Master's National Office, the biotechnology option will train scientists and engineers with background in the chemical sciences with advanced knowledge and experience in important biological sciences fields,



biopharmaceutical processing, professional and technical communication, and project management. Specifically, the courses will address cutting-edge research and current trends in the industry, from small molecule drugs and biologically derived materials, to proteins, antibodies and specifically engineered whole cells.

The program also requires a one-semester internship or practicum in the biopharmaceutical or biotechnology field, reinforcing and connecting knowledge acquired in the classroom to real-world problems.

"The program is forward-thinking, facilitating the transition of segments of the current pharmaceutical workforce into the bold new era of biopharmaceuticals," said Belfield.

For further program information and course details, visit: https://chemistry.njit.edu/sites/chemistry/files/biotechnology.pdf



Upcoming Community Events

FIRST Tech Challenge New Jersey Prospective Coach Webinar

September 10th, 2019 Webinars at 12 and 4 Strategies for Defense
Against the Constantly
Evolving Ransomware Threat

September 12th, 2019 Webinar Assistive Technology Summit (ATAC of DRNJ) 2019

September 24th, 2019 West Windsor Township, NJ

INCLUSIVE STEM Program for SPECIAL NEEDS

September 24, 2019 Metuchen, NJ **FRS Leadership Institute**

September 24-25th, 2019 Manchester, NH Planning Your Move to the
Cloud: Proven Use Cases and
Practical First Steps

September 26th, 2019 Webinar

STEM Leadership Forum

October 3rd, 2019 Newark, NJ Security as a Maturity
Process: Building &
Developing an Effective
Cybersecurity Practice

October 8th, 2019 Webinar **Pequannock Tech Summit**

October 11th, 2019 Pequannock, NJ

> FR SCHOOLS NEW JERSEY

Jersey Shore Makerfest

October 12th, 2019 Toms River, NJ Rethinking Grading and Homework

October 14th, 2019 Sparta Township, NJ **Insight Manville**

October 14th, 2019 Manville, NJ

NJTEEA Annual Conference

October 1th, 2019 Ewing Township, NJ edcampWL (World Language) The Cost of Cybersecurity:

October 19th, 2019 Edison, NJ The Cost of Cybersecurity:
How & Why to Proactively
Build a Cybersecurity Budget

November 14th, 2019 Webinar

National Digital Learning Day (#DLDay)

February 27th, 2020 Nationwide **FLENJ Annual Conference**

March 27th-28th, 2020 Iselin, NJ **EdCamp Happy Camper**

April 4th, 2020 Washington Township, NJ

Want to share your events with the FRS-NJ community?

Share them with by using the hashtag #FutureReadyNJ on Twitter or by emailing us at frs-nj@njit.edu!



If you see the FRS-NJ icon, we'll be there so come say hi!

Upcoming Program Events

2019 FRS-NJ Awards Ceremony at NJSBA's Workshop October 22nd, 2019

Atlantic City Convention Center, Atlantic City, NJ

Join us at NJSBA's Workshop 2019 in Atlantic City for this year's FRS-NJ Awards Ceremony to celebrate the accomplishments of the #FutureReadyNJ community! The exact timing is still to be determined, but the ceremony takes place each year on the first full day of the convention at the main state after the conference opening. Then, join us in the FRS-NJ Center to learn from fellow New Jersey educators who have been certified!

Stay tuned for more information and learn more about Workshop 2019 here: https://workshop.njsba.org/

We hope to see you there!



FRS-NJ By the Numbers

As of the date of publication, **131** NJ Districts have officially committed to support their schools' #FutureReady efforts (left).

From those districts, **435** schools have officially declared their participation in the program (right).

Find out which districts are committed, participating, and more on our official <u>FRS-NJ</u> Maps page!

Is your school Future Ready?

