

# BIO-RAD Explorer™

HANDS-ON INQUIRY-BASED SCIENCE EDUCATION



**BIO-RAD**

**Life science is awesome and so much fun!**

*Story inside*

## A life science program opens doors . . .

**Jamie Allison** had no idea what he was in for but he knew that for the sake of his students and their futures it was the best thing to do. He began his biotechnology program in 2005 on a leap of faith.

Looking for any help he could get for his new program, Jamie went to the NSTA Annual Conference in Dallas, Texas. There he met the late **Ron Mardigian**, the founder of the Bio-Rad Explorer program, and he was off and running.

*“I took every Bio-Rad workshop I could. There was always someone coming over and helping me, giving me tips. I was part of a family and I knew right there that I was going to be taken care of. When I went back to the classroom, I had confidence. If something else went sideways, I could always call Bio-Rad and someone would help me.”*



## Q&A With Jamie Allison

### Why start a biotech program?

There was an initiative in Ohio to support the growing bioscience industry by training workers. I wanted to be part of creating the biotech pathway for high school, so I let my administrators know. I got involved in creating the program and then did everything I could to learn. Bio-Rad really helped me out with that.

*“Once they start dreaming, you just let them go.”*

### How do you run your class?

After teaching the basics, I mostly get out of the way and let my students take their learning where they want. I had students decide to modify a wood router to make 3D *E. coli* gel cultures. One group did a whole project on measuring the sizes of mitochondria in *C. elegans* after exposure to pomegranate juice. Another group worked with a museum to help identify new species of birds using DNA sequencing. It’s amazing what my students have done.

*“I am so lucky to be able to teach this program.”*

**What has the program done for you?** I get to be someone who facilitates dreams for students. And I have made connections with organizations and teachers that I never would have made otherwise. Just recently I got to fly across the country to talk at an FDA-sponsored event about agricultural biotechnology. It was humbling and so exciting.

**Jamie Allison**  
Loveland High School  
Loveland, Ohio



### What are the positive outcomes for students?

My biotechnology course is 100% experiential for students. They really get to learn by doing and that seems to have greater impact than just reading about science. It's very powerful for students because it gets them dreaming.

I have students receiving scholarships, because of their work in my class, that they may not have received otherwise. And they're working at all sorts of companies, represented by my growing wall of company logos — I'm really proud of that. It's unbelievable to see where students have gone. At the end of each year when I am sending my seniors out the door it's really emotional. The mix of sadness that they are leaving and the pride is really something.

***“Partners are essential. I couldn't have done it without the help from the Bio-Rad family”***

**Any advice for teachers just starting?** Develop relationships. Find teachers and schools doing the same thing. It's really helpful to have a solid support group. Finding tricks and discounts, and discovering what supplies and equipment are the best, takes much of the stress off your plate.

## Free **Bio-Rad Explorer Catalog**

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