



**INNOVATEBIO**

National Biotechnology Education Center

Envisioning the Next Bioscience Workforce: A  
Summit on Industry Trends and Needs  
Washington, DC  
June 26-27, 2023

Dr. Richard M. Rhodes  
**Chancellor, Austin Community College District**



# Agenda

- 1** About ACC
- 2** Biotechnology @ ACC
- 3** Our Students
- 4** Success Outcomes
- 5** Innovation + Collaboration in the Classroom
- 6** Transforming the Future of Biotech Education @ ACC

# ACC At-A-Glance



**Start Here. Get There.**



**11 Campuses Serving 70,000**



**Faculty with Real-World Experience**



**High-Demand Bachelor's Degrees**



**Hy Flex Learning Options**



**Diversity, Equity & Social Justice**

# Biotechnology @ ACC

15+ Years Building a Skilled Workforce in Central Texas

## Stackable Credentials



- **High School:** Dual Credit Classes
- **Entry-Level Career:** Level 1 Certificate
- **Career:** Associate of Applied Science Degree
- **Advancement:** Advanced Technical Certificate



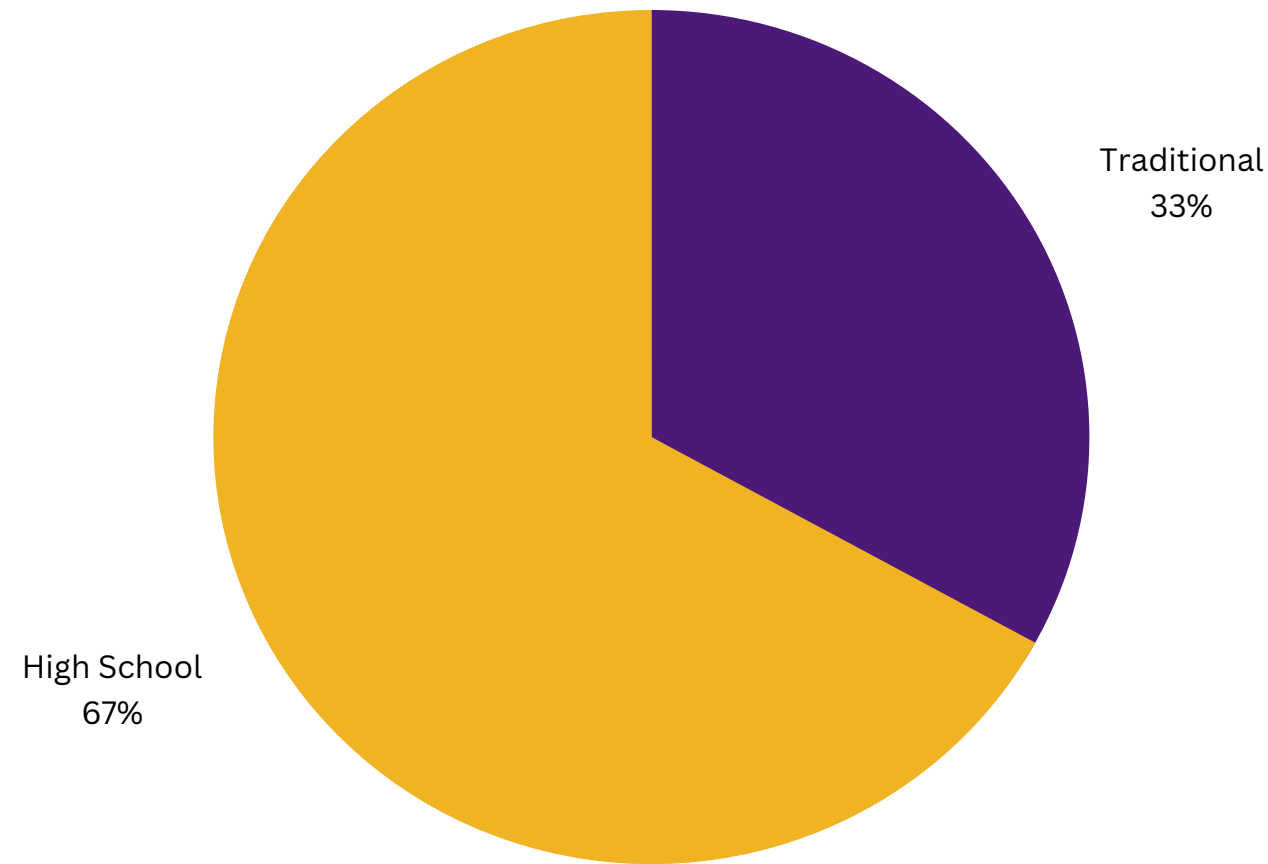
ACC Biotechnology Class

# Biotechnology Student Profile

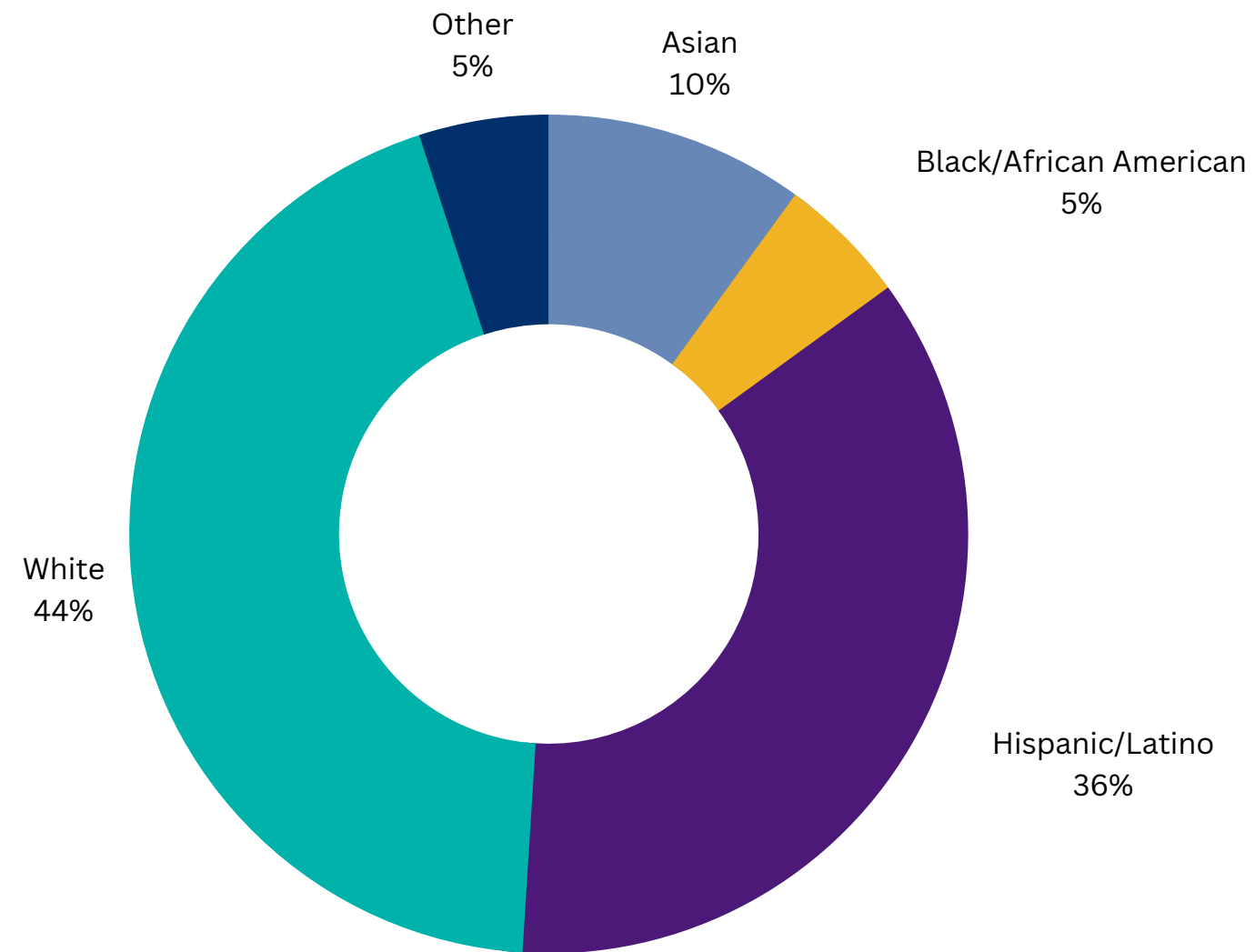
Fall 2022



## Course Enrollments



## Student Demographics



56% Female

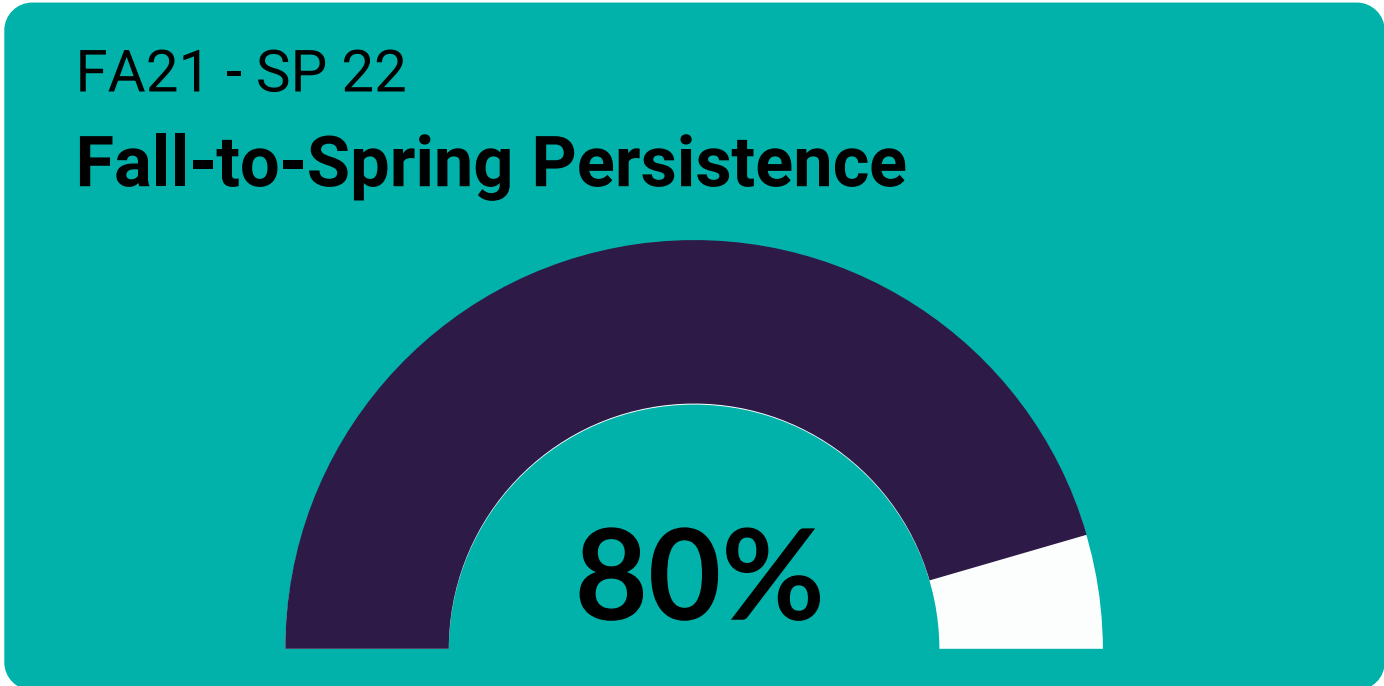
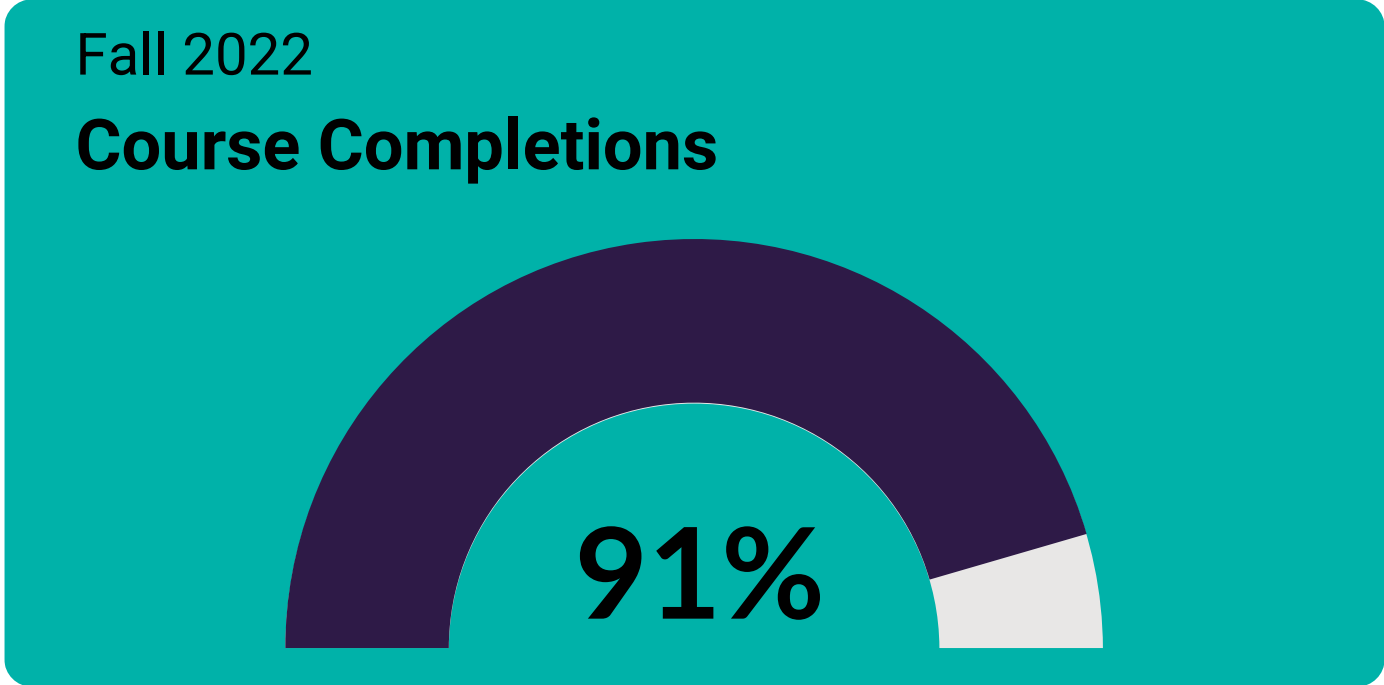


44% Male



# Biotechnology Course Outcomes

Persistence & Course Completions



# Biotechnology Career Outcomes

Earning Potential | AY 12/13 to AY 16/17 Completers



■ 1 Year Post Completion   ■ 3 Years Post Completion   ■ 5 Years Post Completion



**12,000 – 17,000**

Jobs in the Biotechnology Industry (Region)  
 There are too few trained Biotech workers to meet job growth



**15 – 16 %**

5-Year Job Growth Projection (Region)  
 National Growth Projection: 9 – 10 %

# Innovative Learning

The Bioscience Incubator @ ACC

*Austin's ONLY Wet Lab Space*



**Collaborative Space**



**Industry Partnerships**



**Startup Business Support**



**Workforce Education**



# Experienced Faculty

Meet Dr. Linnea Fletcher | ACC Biotechnology Department Chair



- Hands-on Training Approach
- Capstone Internship Course for All Students
- Experience & Connections with Business/Industry
- National Biotechnology Education Center
- The **Only** Dual-Credit Biotechnology Courses in Texas

# Engaged Students

Meet Mauricio T. | ACC Biotechnology Graduate



- Moved to Austin from Mexico in 7th grade
- Began dual credit courses while in high school
- Hired as one of the first two student interns at the ACC Bioscience Incubator
- Graduated ACC: Associate Degree in General Studies in Science
- Transferred to Texas State University
- Now, certified Medical Laboratory Scientist
- Specialty focus on molecular diagnostics through noninvasive prenatal testing



**ACC Biotechnology Program  
Student Internship Placement Rate**



# Collaborative Industry Relationships

What Local Employer, Disruption Labs, Says About ACC Graduates

## Proper Skillset

- Basic Biotech Lab Skills
- Experience: Equipment & Instrumentation

## Strong Knowledge

- Know Systems & Software
- Know Standard Operating Procedures



## Proper Mindset

- Collaborative work environment
- Value workflows & cross-training
- Failures = Learning opportunities

## Strong Work Ethic

- Importance of systemic & structured approach
- Importance of clear & prompt communication

# Career Exploration Transformation

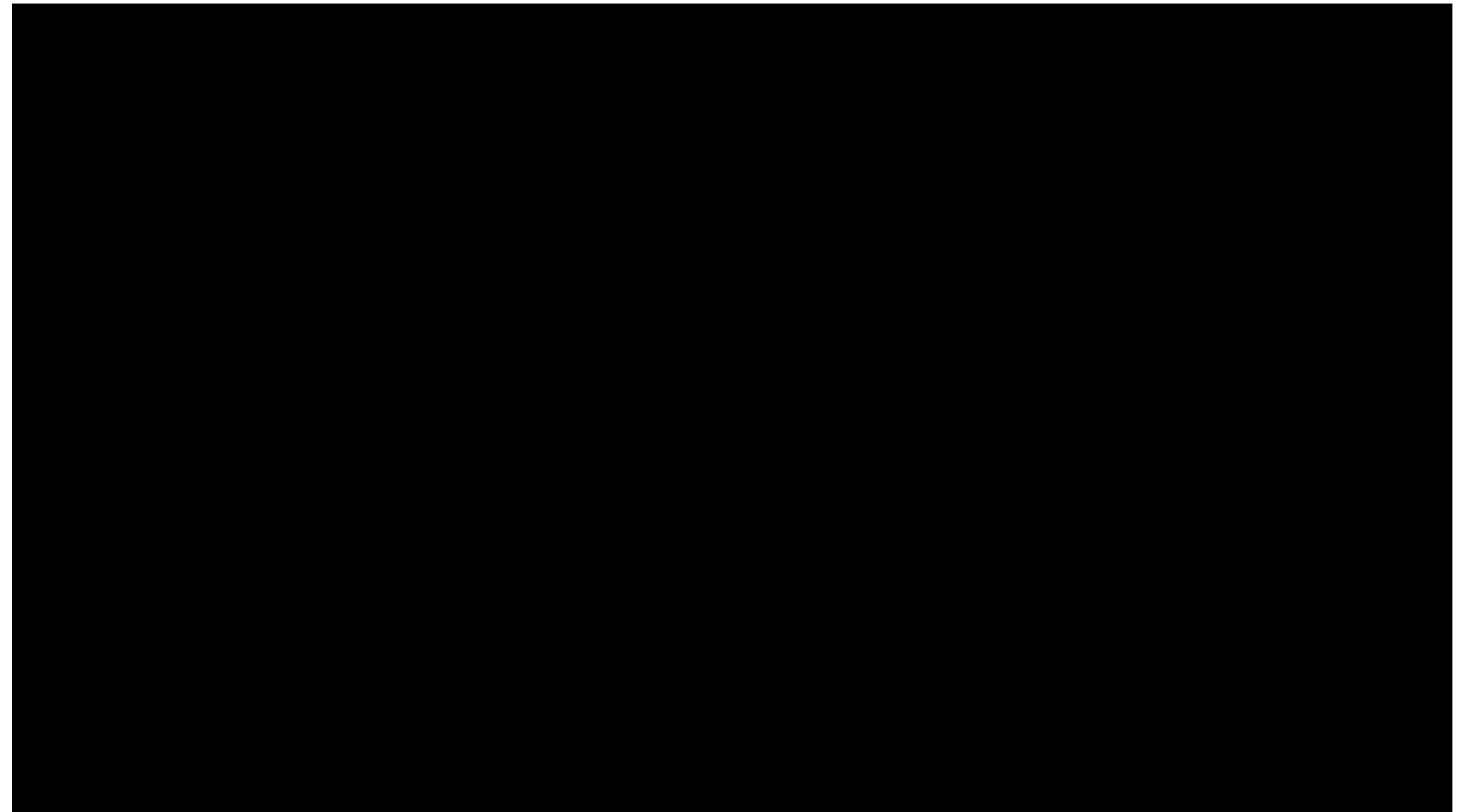
The Make It Center: Coming Soon

“

Don't spend your life trying to be good at what you're bad at. Spend your life getting great at what you're good at.

— Roy Spence

”





# Disclaimer



Funding for this project has been provided through the National Science Foundation's Advanced Technology Education Program, DUE 1901984. Any opinions, findings, conclusions, or recommendations expressed in this material are those of author(s) and do not necessarily reflect the views of the National Science Foundation, or its partners.

