STEM in Your Backyard: How Industry is Helping

Dr. Steven Thomas, Senior Director, Diversity, Equity, & Inclusion (DEI) and Talent Programs, PhRMA

Abigail Lore, MPA, Director of Policy & Research, PhRMA

#WIGDistrict2District
STEM In Your Backyard: How Industry is Helping

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A strong STEM workforce has many benefits

- High quality jobs
- Increase in new inventions/patents
- More innovative startups
- Sustained economic growth
- Global competitiveness

"The pace of innovation is accelerating globally, and with it the competition for scientific and technical talent. Now more than ever the innovation capacity in the United States – and its prosperity and security – depends on an effective and inclusive STEM education ecosystem."

- America’s Strategy for STEM Education (2018)
A strong STEM workforce is especially important to the biopharmaceutical industry

The future of medicine
- Medicines in development:
  - US = 4,500
  - Globally = 8,000

The reliance on STEM jobs
- 1 in 3 employees in the industry are STEM
- STEM workforce is 6.1 million; a 6.3% share of the workforce
- Biopharmaceutical industry has a STEM workforce concentration of more than 5X other industries

Challenges for the US STEM Workforce
- STEM workforce shortages
- K-12 math and science assessment rankings are behind other OECD countries
- STEM teacher shortages
- Racial/socio-economic achievement gaps in STEM for K-12 and college students
The Industry’s Sustained Commitment to Support STEM Education

Findings based on 2019 survey of PhRMA member companies

- Industry financial support totaled **$204 million** in the last 5 years
- **7.4 million students** have been reached by industry-sponsored STEM programs
- **25,000 teachers** have been reached by industry-sponsored STEM programs
- Companies and their foundations awarded nearly **2,500** STEM education grants
- **70+** STEM programs initiated by PhRMA members in the last 5 years
- Just **over half** of the reported STEM education programs are intentionally designed to engage underrepresented populations
Types of STEM Education Programs Supported by Industry

Activities to advance STEM education supported by the industry span a wide range of geographic regions, subject areas and points of emphasis.

- 71 specific STEM-related programs and activities
  - All education levels, majority K-12
  - Students and teachers
  - Target those underrepresented in STEM
  - 10 national programs; local and state specific spanning 29 states
Geographic Coverage of Industry-Supported STEM Education Programs
# Selected Examples of Programs and Initiatives

## Afterschool and summer education and research activities
- Undergraduate research program at 24 institutions, biotech-related research with seminars, networking and mentorship
- Summer camps

## Teacher or Student Scholarships
- For postsecondary and early-career physicians and scientists
- Annual college scholarships
- Company scholarship for a STEM focused school in Chicago

## STEM-focused Schools
- Support for and partnerships with specific STEM schools and academies
- Programs to help students understand life sciences career paths

## Classroom/on-site visits for hands on learning
- Companies host students to raise awareness about STEM careers
- Day long interactive educational sessions
- Partnerships with museums

## Science Fairs & STEM Competitions
- Companies support K-12 science fairs and festivals
- Serve as judges, mentors and/or coaches

## Teacher Workshops and Professional Development
- Sponsor annual event with K-12 schools, government and business to discuss best practices in presenting STEM opportunities
- Curriculum assistance
The Biopharmaceutical Industry: Improving Diversity and Inclusion in the Workforce

Survey: Late 2019 – early 2020

Contents of the Report

• Setting the Context on Workforce Disparities
• Value of D&I in the Workplace
• Biopharmaceutical Industry’s Role in Advancing D&I Employee Resource Groups
  ▪ Education and Training
  ▪ Councils/Teams
  ▪ External Partnerships
    ▪ Clinical trial diversity/health disparities
    ▪ STEM Pipeline
    ▪ Disproportionately impacted by COVID-19
    ▪ Driving systemic change
    ▪ Increasing diversity in industry’s supply chain/vendors
• Setting D&I Goals
Pathways to Success in Biopharma
Virtual Graduate Summit and Career Expo
October 27–28, 2021
An opportunity for... with the leading biopharmaceutical companies on career pathways and increasing diverse talent within the industry.
PhRMA Equity Initiative

Clinical Trial Diversity
Work towards clinical trials infrastructure that addresses health disparities.
Goal
Close the gap in clinical trial diversity to better reflect the intended treatment population.

Health Equity
Work with policymakers/stakeholders on policies that address social determinants of health
Goal
Drive proactive research/policies to expand data collection and use to improve health outcomes.

Talent
Grow the industry talent pool and create pathways to pharma.
Goal
Move towards census rep in entry and mid level hiring.
Census Rep, Top to Bottom, Side to Side

Committing to necessary, positive and long-term systemic change
Who

- HBCU / MSI **graduate students, post-doctorial trainees**, early careerists together with company recruiters and industry leaders

What

- Panels, breakouts, and a company **exhibition hall** spotlighting potential career opportunities in the industry

When

- Oct 27: panels from 11:30-4:45
- Oct 28: exhibition hall staffed 12-3
### October 27
**Day One: Panels & Speeches**

<table>
<thead>
<tr>
<th>TIMES (ET)</th>
<th>SESSION</th>
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<tbody>
<tr>
<td>11:30-12:15</td>
<td>What MSI’s Wished Our Member Companies Knew (Pre-event webinar hosted by UNCF / University Partners)</td>
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<td>MAIN EVENT</td>
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<tr>
<td>12:30-1:15</td>
<td>Opening Session / Welcome / Chief Diversity Roundtable and Q&amp;A</td>
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<tr>
<td>1:15-1:35</td>
<td>Breakout Rooms / Company Conversations</td>
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<td>1:45-2:30</td>
<td>“A Day in the Life of” Roundtable</td>
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<tr>
<td>2:30-2:55</td>
<td>Breakout Rooms / A Day in the Life of by Career Track</td>
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<tr>
<td>3:00-3:45</td>
<td>Getting Your Foot in the Door and Q&amp;A</td>
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<tr>
<td>3:45-4:05</td>
<td>Breakout Rooms / Company Conversations</td>
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<tr>
<td>4:10-4:45</td>
<td>Closing Session / Keynote / Fireside Chat</td>
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*Virtual Graduate Summit and Expo*
Sharing With Your Network

This is the first graduate summit hosted as part of PhRMA's Equity Initiative. We are excited to have you join us October 27-28 and encourage you to share with your network and follow us on social media for updates.

Twitter: https://twitter.com/PhRMA/status/1437793175045820423
Facebook: https://www.facebook.com/PhRMA/posts/6737299246284045
LinkedIn: https://www.linkedin.com/posts/phrma-the-biopharmaceutical-industry-has-a-history-activity-6843553650560835584-9sTM

Questions?
Steven Thomas: Sthomas@phrma.org
Rebecca Marklund: Rmarklund@phrma.org