



## Free "LabXchange" Science Education Accelerator Launched By Amgen Foundation And Harvard's Faculty Of Arts And Sciences

January 22, 2020

**LabXchange by Amgen Foundation and Harvard's Faculty of Arts and Sciences Reimagines the Science Experience for Students around the Globe**

**Purpose-Built to Address Educational Barriers With Personalized Instruction**

**Virtual Lab Simulations Help Students Develop the Science Skills Needed to Solve Tomorrow's Challenges**

THOUSAND OAKS, Calif. and CAMBRIDGE, Mass., Jan. 22, 2020 /PRNewswire/ -- The Amgen Foundation and the Faculty of Arts and Sciences at Harvard University (Harvard FAS) today announced the global launch of LabXchange™, a free online science education platform that provides users with access to personalized instruction, virtual lab experiences and networking opportunities across the global scientific community. LabXchange is purpose-built to drive more inclusion in the scientific process and spark collaboration to build creative, team-based approaches to real-world problems.

Experience the interactive Multichannel News Release here: <https://www.multivu.com/players/English/8490258-amgen-foundation-harvard-labxchange/>

"Too many high school and college students lack the opportunity to directly explore the scientific process – where you build a hypothesis, understand a method, and determine how to apply it to an appropriate experimental problem," said Robert Lue, Ph.D., principal investigator of LabXchange and professor of the Practice of Molecular and Cellular Biology at Harvard. "For many students, science can feel like a collection of facts to memorize – which is contrary to what the scientific process is – it's a journey that requires bold thinking and deep imagination. With LabXchange, more students can come together and experience the joy of discovery."

Featuring virtual lab experiments developed at LabXchange along with other world-class assets created by validated partners, LabXchange brings the scientific process to life. By simulating key techniques in molecular and cellular biology, like using CRISPR to correct genetic defects, students can explore a wide range of scientific methods and build their acumen in harnessing science to solve real-life problems.

"Everyone needs science, and science needs everyone," said Robert A. Bradway, chairman and chief executive officer at Amgen. "At a time of remarkable scientific progress, we're excited by the potential of LabXchange to educate and inspire both students and lifelong learners of all ages."

LabXchange is designed to level the playing field for students and to promote science literacy for all. Key features of LabXchange include:

- Free access to a library of world-class educational content including videos, interactive simulations and assessments.
- Ability to mix and match materials, empowering teachers to create flexible learning pathways for classes or individual students that complement existing science curriculums.
- Global networking functionality, enabling teachers to collaborate beyond a single classroom, school or district.

LabXchange builds upon other Amgen Foundation programs that support science education, such as the [Amgen Biotech Experience](#) and [Amgen Scholars](#) that are also at Harvard FAS and institutions around the world. To date, the Foundation has contributed more than \$150 million to advancing science education programming globally as part of its mission to facilitate global collaboration on the United Nations Sustainable Development Goals (SDGs), notably SDG #4 on Quality Education, but also SDG #3 on Good Health and Well-Being.

For more information, please visit [www.LabXchange.org](http://www.LabXchange.org), and engage with us via [@LabXchange](#) on Twitter using #ScienceMadePossible.

### **About the Amgen Foundation**

The Amgen Foundation seeks to advance excellence in science education to inspire the next generation of innovators, and invest in strengthening communities where Amgen staff members live and work. To date, the Foundation has donated over \$300 million to local, regional, and international non-profit organizations that impact society in inspiring and innovative ways. The Amgen Foundation brings the excitement of discovery to the scientists of tomorrow through several signature programs, including Amgen Scholars and the Amgen Biotech Experience. For more information, visit [AmgenInspires.com](http://AmgenInspires.com) and follow us on Twitter [@AmgenFoundation](#).

### **About Amgen**

Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

For more information, visit [www.amgen.com](http://www.amgen.com) and follow us on Twitter [@Amgen](#).

### **About the Faculty of Arts and Sciences at Harvard University**

The Faculty of Arts and Sciences is the largest of the seven faculties that constitute Harvard University and is the only division of the university responsible for both undergraduate and graduate education. FAS advances knowledge, improves learning, and shapes leaders.

For more information, visit [www.fas.harvard.edu/](http://www.fas.harvard.edu/)

CONTACT:

Amgen, Thousand Oaks  
Jessica Akopyan, 805-447-0974 (Media)  
Trish Hawkins, 805-447-5631 (Media)

Harvard Faculty of Arts and Sciences, Cambridge  
Rachael Dane, 617-456-0106 (Media)



Running a Protein Gel

LAB NOTEBOOK  
Running a protein gel

PROTOCOL 1/6

1. Collect cells.

1. Set the temperature of the heat block to 40°C.
2. Set the P200 micropipette to 20µL.
3. Attach a P200 tip.
4. Move the micropipette so its tip is in the wild type cell culture.
5. Draw up the wild type cell culture by pressing the plunger to the first stop, immersing the tip in the solution and releasing the plunger slowly.
6. Close the wild type cell culture.
7. Move the micropipette so its tip is in the wild type cells tube.
8. Dispense the wild type cell culture into the wild type cells tube by holding down the plunger until it reaches the second stop.

Equipment shown: P2, P20, P200, P1000 pipettes; P2, P20, P200, P1000 tips; 1x Running Buffer; Polycrylamide Gel; Heat Block; Protein Gel Electrophoresis Box; Power Supply; Wild Type Cells Tube; Mutant Cells Tube; Protein Ladder; 4x 250 Sample Buffer; Wild Type Cell Culture; Mutant Cell Culture; Cell Culture; Cell Culture; Cell Culture; Microcentrifuge; Biohazardous Waste.





# AMGEN®

View original content: <http://www.prnewswire.com/news-releases/free-labxchange-science-education-accelerator-launched-by-amgen-foundation-and-harvards-faculty-of-arts-and-sciences-300990930.html>

SOURCE Amgen