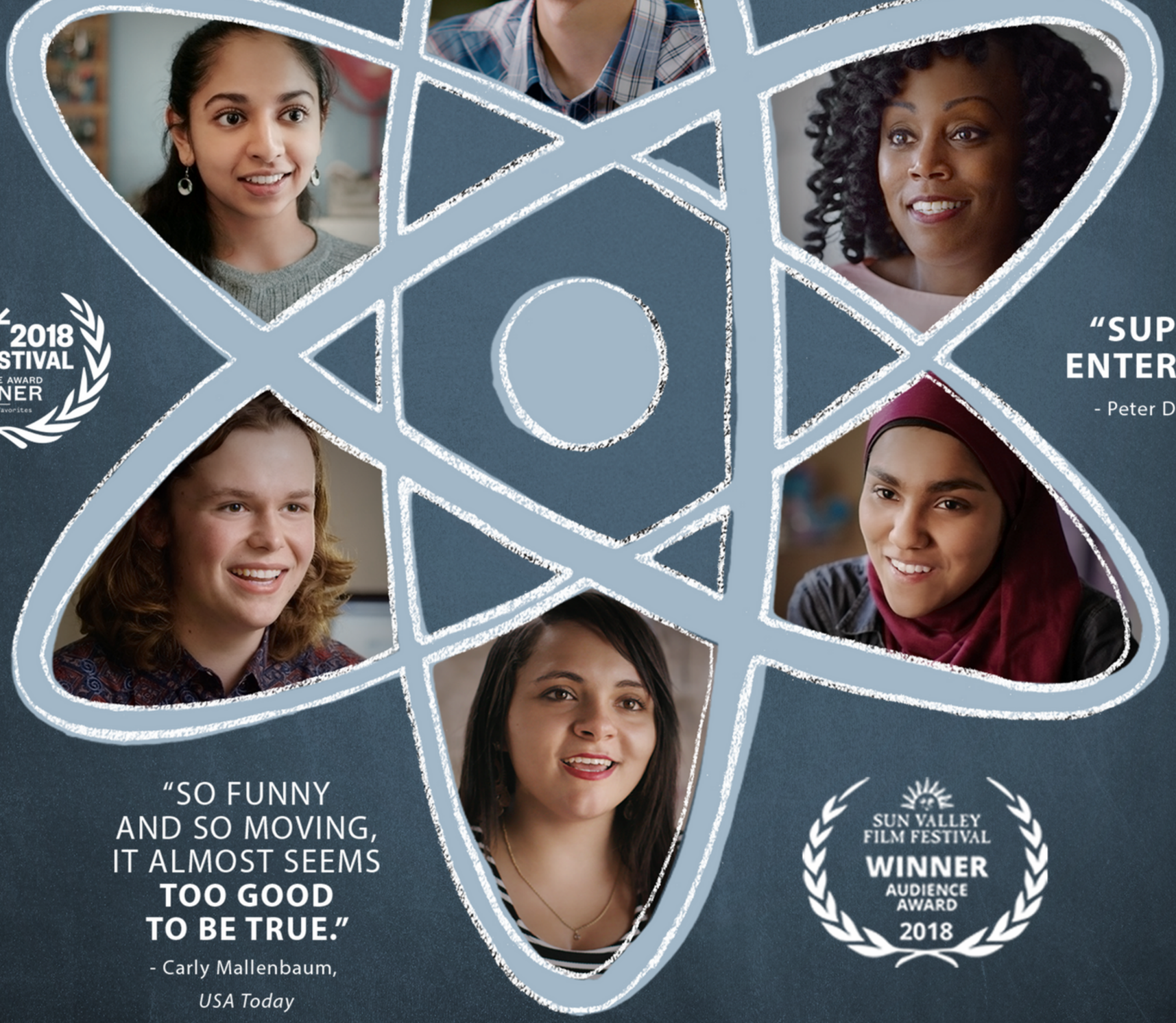
# SCREENING TOUR DISCUSSION GUIDE

# SCIENCE FAIR

**"INSPIRATIONAL** AND **INVIGORATING."**

- Kenneth Turan, *Los Angeles Times*

WINNER
FESTIVAL FAVORITE AWARD
sundance film festival



SXSW 2018 FILM FESTIVAL
AUDIENCE AWARD
WINNER
festival favorites

**"SUPREMELY ENTERTAINING."**

- Peter Debruge, *Variety*

"SO FUNNY AND SO MOVING, IT ALMOST SEEMS **TOO GOOD TO BE TRUE."**

- Carly Mallenbaum, *USA Today*

SUN VALLEY FILM FESTIVAL
WINNER
AUDIENCE AWARD
2018

PARENTAL GUIDANCE SUGGESTED
PG
SOME THEMATIC ELEMENTS AND BRIEF LANGUAGE
Some Material May Not Be Suitable for Children

ScienceFairFilm.com

NATIONAL GEOGRAPHIC
DOCUMENTARY FILMS

01

# A LETTER FROM NATIONAL GEOGRAPHIC

Thank you for hosting a screening of SCIENCE FAIR!
Community screenings are so exciting for us to launch because they encapsulate what we value most; like minds coming together to learn, discuss, and imagine.

Every day, we at National Geographic see amazing things achieved by innovators from all corners of the globe and we want you to join their ranks. We want you to seek solutions and change. Whether big or small; local, national, or international; in robotics or psychology, coding or biology.

Find your inspiration. Discover your genius. Invent your future!

Onward,
The Nat Geo Team

02

# ABOUT THE FILM

Hailed by critics as “infectious and exuberant” and “the funniest movie of the year,” National Geographic Documentary Films’ SCIENCE FAIR follows nine high school students from around the globe as they navigate rivalries, setbacks and, of course, hormones, on their journey to compete at the International Science and Engineering Fair. As 1,700 of the smartest, quirkiest teens from 78 different countries face off, only one will be named Best in Fair.

The film, directed by the documentary filmmaking team of Cristina Costantini and Darren Foster, offers a front-row seat to the victories, defeats and motivations of an incredible group of young men and women who are on a path to change  their lives — and the world — through science. SCIENCE FAIR won the audience award at Sundance and SXSW.

*“SCIENCE FAIR is a love letter to the subculture that saved me. It validated my passion for science, taught me how to dedicate myself to a goal and set my life on a trajectory that would have otherwise been totally impossible. But most importantly, science fair is where I found my tribe.” — Cristina Costantini, Director*

*“By telling the stories of the incredible students featured in the film, we want people to fall in love with the world of science fair as much as we have. Our subjects are brilliant and funny and from all walks of life. They truly represent the best of us.” — Darren Foster, Director*

03

# FAST FACTS

High school science fairs date back to 1942, when William Emerson Ritter and Edward W. Scripps created “The Science Talent Search.” The first American National Science Fair was won by 18-year-old Alan J. Fletcher, for his display on the laws of motion.

Science fairs became increasingly popular in the 1950s and ’60s. American leaders saw science as a way to both confront some of the greatest global challenges and progress as a society.

Science is one of the most important areas of study. Right now, over 9 million jobs relate to science, and more are being added every year.

ISEF is the world’s largest international pre college science competition. About 1,700 students from more than 78 countries compete every year for $4 million in prizes.

One of the film’s directors, Cristina Costantini, attended ISEF as a high school freshman, placing fourth. That year, all ISEF winners earned a named asteroid by the MIT Lincoln Laboratory.

There has never been a better time to study science, technology, engineering and math. The number of students pursuing STEM degrees has dropped by half since 1997, making STEM students more in demand than ever.

04

# DISCUSSION QUESTIONS

Kashfia found herself poorly represented and often unappreciated by her classmates and school. How do you suggest a student could increase his or her school's involvement in supporting science fair-related competitions? Have you ever felt discouraged from pursuing your interests? How did you motivate yourself to persevere?

Despite being very intelligent, Robbie didn't get into college after he graduated high school. But now, he's been featured on the cover of Bloomberg Weekly, created a fashion line with his Balenciaga artificial intelligence-influenced designs and is showing his AI-created art in Paris, France. How can you use Robbie as an influencer and role model to develop your interests? How can you learn or develop your unique interests outside school?

Anjali faced criticism for being "too competitive" or "too confident," but we saw that her intelligence and confidence helped her succeed and persist through challenges. She used her innate motivation to help herself and others. What steps can you take to feel confident in yourself while serving as a mentor to others?

04

# DISCUSSION QUESTIONS

Ryan, Harsha and Abraham went to different colleges but are still close friends. How might you maintain long-lasting friendships with peers met in science fairs or high school? Why are building and maintaining these relationships important?

Ivo turned his childhood love of planes and flight into an award-winning science fair project. What passion or interest could you turn into a project? What resources could you use to develop that project?

One pair that traveled hundreds of miles to compete at ISEF was Myllena and Gabriel. Explain how their determination to succeed despite limited resources inspires you.

Why does Dr. McCalla emphasize the importance of a cogent and confident verbal presentation? Why is how you sell your science/product important to obtaining success when sharing an idea or invention with others?

05

# DISCUSSION QUESTIONS

Who do you think had the most interesting project? The most important? The most fun to conduct?

If you could solve one issue in your community through science, what would it be? Can you think of a project you could use to address that issue? How can you use project-based learning, teamwork and learned skills to develop solutions?

Winning ISEF is the crowning achievement for young scientists. In your wildest dreams, what would you accomplish?

What scientific or STEM organizations can you get involved with in your community?

What type of science interests you the most and why? Some scientific disciplines include behavioral sciences, chemistry, robotics, geology, medicine and health, cellular and molecular biology, and environmental engineering.

07

# RESOURCES

Learn more about the International Science and Engineering Fair: student.societyforscience.org

Explore online learning and how to code: codecademy.com

Find science research-related tools and mentorship opportunities: iresearchfoundation.com

Find STEM resources in your community: theconnectory.org

Identify support-based resources: donorschoose.org

Utilize free education training and subject-based online tutorials: khanacademy.org

Learn more about the film: sciencefairfilm.org