

# **SCIENCE FAIR**

Directed by Cristina Costantini and Darren Foster



TRT: 90 min English, Portuguese and German w/ English subtitles

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#### PRESS MATERIALS

Photos: www.natgeotvpressroom.com

#### SOCIAL MEDIA

www.sciencefairfilm.com Facebook: www.facebook.com/sciencefairfilm Twitter: @sciencefairfilm Instagram: @sciencefairfilm

#### **SYNOPSIS**

Hailed by critics as "immensely likeable," "brilliant and quirky" and an "ode to the teenage science geeks on whom our future depends," and winner of the audience award at Sundance and SXSW, 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, from Fusion and Muck Media and directed by the duPont Award-winning and Emmy-nominated documentary filmmaking team of Cristina Costantini and Darren Foster, offers a front 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.

#### **DIRECTORS' STATEMENT**

**SCIENCE FAIR** is a love letter to the subculture that saved me. As a dweeby kid growing up in a sports-obsessed high school in Wisconsin, the international science fair became my lifeboat. 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 important, science fair is where I found my tribe.

The idea of doing a documentary about science fair has been an obsession of mine since I first went to the International Science and Engineering Fair as a freshman in high school in 2004. I had seen "Spellbound" the year before and when I got to ISEF, I thought, someone needs to make a documentary about this crazy little world. It had everything — an international cast of angsty teenagers and inspiring prodigies, all devoted to one very niche subculture, and all striving to make the world a better place.

At that point in my life, however, I had no real idea I would be telling stories for a living when I grew up. I thought I was going to be a psychologist or some kind of scientist. But in college, I started watching the work of two young investigative journalists, correspondent Mariana van Zeller and her producer husband, Darren Foster. Their work was unlike anything I'd seen before — they went to places no one else would go and uncovered stories of injustices and corruption that network news was missing. After seeing everything they had ever produced, I decided to switch career paths. Fast-forward a few years and we all got the opportunity to work together. – Cristina Costantini

My wife, Mariana, first introduced me to Cristina and we all worked together on "Death by Fentanyl," an investigative TV doc about how this powerful painkiller is turning the worst drug epidemic in U.S. history even deadlier. It was a tough project about a tough subject on a near-impossible deadline. If Cristina wasn't as awesome as Mariana had told me, it would have definitely come out on that project. It was clear from the start that Cristina was supremely talented and that we were kindred spirits when it came to our approach to stories. We worked really well together.

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By the end of that project, I needed a break from investigative work. I was definitely looking for something different. That's when Cristina told me about her idea of a documentary on science fair. I was a science kid, too, and participated in science fair, but the level that Cristina competed at was another world. What really sold me was this story about how she skipped the opportunity to go to the junior prom with her high school crush so she could compete at science fair. I won't do the story justice, you'll have to ask Cristina, but it was the nerdiest thing I ever heard. I was in. – Darren Foster

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## **Q&A WITH DIRECTORS CRISTINA COSTANTINI AND DARREN FOSTER**

## Why did you make this film?

From the beginning, Cristina's own experience with science fair was our north star. As a two-time alumna of ISEF, she not only had firsthand insight into the scene, but with some distance she could also look back and see how it shaped her life. With that very personal perspective, we set out to make a movie about the science fair journey as she remembered it: one of the most stressful, exhilarating, sublime, terrible experiences a young person could go through.

We wanted to tell the story of teenage prodigies trying to navigate the sweet, confusing purgatory between childhood and adulthood. But during the making of what was supposed to be a quirky competition documentary, things changed in our country. We realized that many of the characters at the center of our film — scientists, women, Muslims and immigrants — had suddenly found themselves at the center of very ugly national debates.

We thought a lot about how to incorporate these themes into our film. Should we remind the audience of the times we live in with bites of Trump talking about cutting science funding while American students are already lagging behind their peers? Should we include interviews with talking heads about how science is under attack? As we started to go down this path, we realized we were overshadowing the thing that makes this movie shine and were straying from the very thing that drew us to the science fair in the first place — the stories of amazing nerdy teenagers with a whole lotta heart. Instead, we realized we had to trust the audience knows the backdrop that these stories are playing against and let these issues come through in real moments that were true to our main characters.

## Did the film change from your original idea as you were filming or in post?

From that first shoot, we had a pretty clear vision for the film and for the most part, the final product doesn't stray too far from it. However, our original idea was to follow just students. But throughout production our camera kept gravitating toward one teacher. Dr. Serena McCalla is the science research teacher at Jericho High School in New York. Her only job at Jericho is to work with kids on their research projects and prepare them for science fair. We filmed her class and her amazing students over the course of the year. It wasn't until we were shooting the finale at ISEF that we realized she was going to be one of our main characters. It was a break from the format we envisioned, but her perspective on science fair was so compelling. And she is just a force. It was a late decision, but one of the best we made.

Finding the kids we wanted to follow was another story. We consider it both the biggest challenge and the biggest success of **SCIENCE FAIR**. There are more than 7 million kids around the world who participate in science competitions and about 1,700 from nearly 80 countries make it to ISEF. There are so many great kids with so many compelling stories that it was really difficult to narrow it down.

That process alone consumed us for months and we wound up following more students than actually made it into the film. Thanks in large part to Cristina's insider knowledge of the science fair world, we were able to place bets on who would make it to ISEF and who might win big. The Long Island schools and duPont Manual High School from Kentucky have been powerhouse programs for over a decade, so we initially looked to them to find a sure winner. But we were also keen to find some underdogs, students who didn't have much support or elite science programs behind them. In the end, one of the underdogs we followed — Kashfia Rahman from South Dakota — had one of the biggest and most heartwarming wins of the documentary.

# What do you want audiences to take away from this film?

By telling the stories of the incredible kids featured in the film, we want people to fall in love with the world of science fair as much as we have. We also hope the spirit and the commitment of our kids restores some hope at a time when the country seems to have turned its back on science. It would also be nice if people walk away with an appreciation for how science fairs foster the minds of some of our nation's brightest students who may or may not fit into traditional educational systems.

# Where do you find inspiration or who/what has influenced you as a filmmaker?

We rewatched a lot of our favorite competition docs in preparation for this, including "Mad Hot Ballroom," "King of Kong" and, of course, "Spellbound." The big difference in our doc is we didn't have access to the big moment for our kids, which is when they face the judges at ISEF. On the day of judging, only students and judges are allowed on the floor. Their teachers, mentors and parents wait outside for eight hours and they must fend for themselves.

It was a bit of a creative challenge to figure out how we'd cover this crucial moment, but it wound up being one of our favorite sequences in the film. Plus, it sparked the idea of tracking down other alumni of the event to reflect on what science fair meant to them. That led to another favorite moment in the film when we meet the winner of the first-ever national science competition, 93-year-old Dr. Paul Teschen, and the first girl to win after boys and girls were allowed to compete against each other, Dr. Nina Schor. It was really touching and remarkable how even decades later they still look back on science fair as such a pivotal moment on their lives.

# Anything else you want to add about the making of the film and its importance?

Fund science fair programs! They need all the support they can get right now. Oklahoma just cut its science fair from the state budget and ISEF just lost its principal funder when Intel announced it is pulling its support after next year. Science fairs may seem like just a nerdy extracurricular program, but for some of us, they made all the difference.

#### **SUBJECTS**



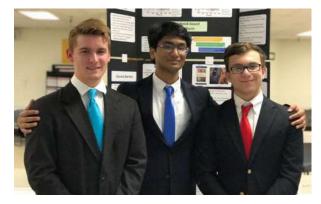
**Kashfia** is a soft-spoken Muslim girl at a massive, sports-obsessed high school in Brookings, South Dakota. When she can't find a teacher to serve as her research advisor, she forms an unlikely kinship with her school's head football coach. They know that a win at ISEF could be the ticket she needs to escape her conservative hometown. Kashfia dreams of attending college on the East Coast where she'll be judged for her intellect and not for her hijab.

**Myllena** and **Gabriel** are best friends and research partners from Ceará, one of the poorest states in Brazil. When the deadly Zika virus invaded their hometown, this dynamic duo headed for the laboratory, ultimately identifying a protein that can inhibit Zika's spread. They see the possibility of winning the international science fair as a means to escape poverty and to elevate their groundbreaking research.





**Robbie** is a math genius from West Virginia with a taste for loud shirts and mischief, who nearly failed out of his high school algebra class. He spends most of his days in his attic, building computers from parts he scavenges at a local junkyard, writing machine learning algorithms and daydreaming of a future surrounded by kids with similar interests. Robbie hopes that a win at ISEF will make up for his abysmal grades and get him into a good college. For their senior year at Kentucky's top science and engineering high school, **Ryan, Harsha** and **Abraham** have gone full Voltron, combining their considerable talents to build one science fair super project. They've built an electronic 3D-printed stethoscope that automatically connects to an online database of heart sounds, allowing doctors to diagnose heart abnormalities far more accurately. The boys hope their stethoscope program will be useful in the developing world, where medics are understaffed and underresourced.





**Anjali** is a child prodigy who attends the same powerhouse Louisville high school as Ryan, Harsha and Abraham. As a 13-year-old freshman, she scored a perfect 36 on the ACT. Now, as a sophomore, she's built an arsenic testing device that could save millions of lives. Whip-smart, ultra-competitive and uberconfident, Anjali must deal with an early setback at a qualifying fair on her road to ISEF.

On the banks of the Rhine River, we meet Ivo, a brilliant and endearingly awkward young

German looking to turn his childhood obsession into science fair gold. Ivo unearthed a century-old single-wing design that was poorly rated by modern aeronautics engineers. By questioning accepted beliefs in the field, Ivo redesigned the aircraft to make it more stable and more efficient. His project wowed the judges at the German National Fair and qualified him for ISEF, which will be his first international competition and his first trip to the United States.





**Dr. Serena McCalla** is a research teacher from Long Island ... and a force of nature. Known for her demanding, in-your-face style, she has transformed her team of young immigrants from Jericho High School — most of whom speak English as a second language — into one of the best science fair teams in the world. In an ultra-competitive scene where it's remarkable for any high school to have one or two students qualify for ISEF, Dr. McCalla had nine.

# FILMMAKER BIOS

## **Cristina Costantini - Director/Producer**

**SCIENCE FAIR** is **Cristina**'s first feature and second collaboration with Darren. The pair previously partnered on "Death by Fentanyl," a 2017 duPont Award-winning investigation about an opiate that's making the worst drug epidemic in U.S. history even deadlier.

Long before Cristina was an investigative journalist, she was a science fair nerd. As a dweeby high school kid from Wisconsin, the international science fair is where she found her tribe. The documentary **SCIENCE FAIR** is a love letter to a world that validated her during the dark years of high school. As a freshman, she placed fourth and it changed her life forever.

After attending Yale University, she reported and produced for the New Haven Independent, The Huffington Post, ABC News, Univision and Fusion. Her first TV documentary, which looked at sex trafficking in Mexico, was nominated for two Emmys, and her reporting on immigration has won awards from GLAAD and the National Association of Hispanic Journalists.

She now lives in Los Angeles with her husband, Alfie, and a pug dog named Harriet.

#### **Darren Foster - Director/Producer**

**SCIENCE FAIR** is **Darren**'s first feature and second collaboration with Cristina. The pair previously partnered on "Death by Fentanyl," a 2017 duPont Award-winning investigation into how a powerful painkiller is turning the worst drug epidemic in U.S. history even deadlier. The project was part of Darren's ongoing coverage of the opioid crisis, which began with his groundbreaking investigation "The OxyContin Express," which received a 2009 Peabody Award, a Television Academy Honor and an Emmy nomination.

Darren's other recent projects include "Chasing El Chapo," a short documentary about the hunt for El Chapo Guzman that was infamously name-checked by Sean Penn in his Rolling Stone interview with the drug lord; "Borderland," a critically acclaimed documentary series Darren directed for Al-Jazeera America, in which six ordinary Americans of different political persuasions make the journey across Mexico and the U.S. border (The New York Times called it "exploitative in a good way"); and "Inside: Secret America," an investigative series he co-created and produced for National Geographic.

Darren is co-founder of MuckMedia, the production company that produced **SCIENCE FAIR**. His work has appeared on VICE, Discovery, National Geographic, PBS, CNN, ABC, Channel 4 (UK), the CBC and Current TV.

Darren has an M.S. from Columbia University's Graduate School of Journalism. Born and raised in New York, he now lives in Los Angeles with his wife, Mariana, and son, Vasco.

#### Jeffrey Plunkett - Producer

**Jeffrey Plunkett** is a documentary producer/writer/director. In 2016 he followed the presidential election for Showtime's weekly documentary series "The Circus." Previously, he directed "The Opposition," a documentary for ESPN's "30-for-30" series about the collision of soccer and politics after Chile's 1973 coup, and "Borderland," a four-part series for Al-Jazeera America about the realities of undocumented immigration. During his tenure on Current TV's "Vanguard" documentary series, Jeffrey embedded with the far-right English Defense League to illustrate Europe's growing fear of Islam, traveled to the hills of Oaxaca to explore the roots of America's immigration problem, posed as a soccer agent in Ghana and France to understand the illegal trade in young African players and was thrown out of a tobacco industry conference in Jakarta while documenting big tobacco's aggressive push into the developing world. He was also a consulting producer on the feature doc "Keep On Keepin' On."

Jeffrey has been nominated for two Emmys, won an Overseas Press Club award and premiered previous films at SXSW and Tribeca.

# **MORE INFORMATION**

# About Intel ISEF

The Intel International Science and Engineering Fair, a program of the Society for Science & the Public, is the world's largest international pre-college science competition. Each year, approximately 1,700 high school students from more than 78 countries, regions and territories are awarded the opportunity to showcase their independent research and compete for, on average, \$4 million in prizes. Today, millions of students worldwide compete each year in local and school-sponsored science fairs; the winners of these events go on to participate in Society-affiliated regional and state fairs from which the best win the opportunity to attend Intel ISEF.

Intel ISEF unites these top young scientific minds, showcasing their talents on an international stage, where doctoral-level scientists review and judge their work. The Society partners with Intel, along with dozens of other corporate, academic, government and science-focused sponsors who provide the support and awards for Intel ISEF.

# About National Geographic Documentary Films

National Geographic Documentary Films is committed to bringing the world premium, feature documentaries that cover timely, provocative and globally relevant stories from the very best documentary filmmakers in the world. National Geographic Documentary Films is a division of National Geographic Partners, a joint venture between National Geographic and 21st Century Fox. Furthering knowledge and understanding of our world has been the core purpose of National Geographic for 130 years, and now we are committed to going deeper, pushing boundaries, going further for our consumers ... and reaching over 730 million people around the world in 172 countries and 43 languages every month as we do it. NGP returns 27 percent of our proceeds to the nonprofit National Geographic Society to fund work in the areas of science, exploration, conservation and education. For more information, visit natgeotv.com or nationalgeographic.com, or find us on Facebook, Twitter, Instagram, Google+, YouTube, LinkedIn and Pinterest.

## **About Fusion Media Group**

Fusion Media Group is a media company that connects with the young, diverse audiences that are shaping our future. Through fearless journalism, provoking comedy and high-impact storytelling Fusion elevates the stories and issues readers and viewers are passionate about.

## About Muck Media

Muck Media specializes in hard-hitting investigative documentaries and character-driven series. Its work has been recognized by a duPont, a Peabody, a Livingston Award for Young Journalists, an Overseas Press Club Award and several Emmy nominations. Muck has produced projects for Netflix, VICE, ESPN, Nat Geo, Discovery, Fusion, ABC and more.

#### CREDITS

National Geographic Presents A Univision Production In Association With MUCK MEDIA

# SCIENCE FAIR A FILM BY CRISTINA COSTANTINI & DARREN FOSTER

Directed by Cristina Costantini Darren Foster

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Produced by Cristina Costantini Darren Foster Jeffrey Plunkett

Director of Photography Peter Alton

Edited by Tom Maroney Alejandro Valdes-Rochin

> Line Producer Jennifer Wood

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Executive Produced by Isaac Lee Daniel Eilemberg Keith Summa George Lansbury

Featuring Anjali Chadha Ryan Folz Harsha Paladugu Abraham Riedel-Mishaan Kashfia Rahman Ivo Zell Robbie Barrat Myllena Braz de Silva Gabriel de Moura Martins Serena McCalla Jack Andraka

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MUSIC PROVIDED BY "Jelly" Written by Tyrell "Big Baby Scumbag" Williams Performed by Big Baby

SPECIAL THANKS Intel Corporation Long Island Science & Engineering Fair New York State Science & Engineering Fair duPont Manual Regional Science Fair Eastern South Dakota Science & Engineering Fair MOSTRATEC Brazilian Science and Technology Fair

Jugend Forscht Jericho Public Schools duPont Manual High School **Brookings High School** Jefferson High School The Chadha-Ravichandran Family The Rahman Family The Folz Family The Barrat Family The Riedel-Mishaan Family The Paladugu Family The Zell Family The Braz da Silva Family The Martins Family The Diogenes Family Fabio G. Durand Alfie Koetter Mariana van Zeller Mario and Cathy Costantini Eduardo van Zeller Steve & Judy Foster Alexandra Pacheco Garcia Doris Fu & Family Lee Schmidt Glenn "Skip" Zwanzig Dr. Paul Teschan Dr. Nina Schor Dr. Martin Lo Anastacio de Queiroz Sousa Dawn Meyers Kendra Zhang Dr. Sven Baszio Michael Ostertag Eric Douat Melissa Rodriguez Al Hicks **Davis Powers** Maggie Mackay Jim Fraenkel Joey McAdams Núria Net Amy Sewell Paul Miller Jigar Mehta Mona Panchal Jacob Albert