#### A FISHBOWL FILMS PRODUCTION In Association With MOTTO PICTURES 19340 PRODUCTIONS SHARK ISLAND INSTITUTE HHMI | TANGLED BANK STUDIOS

# **INVENTING TOMORROW**

"inspirational and invigorating, and the young scientists they follow have a passion and enthusiasm that's a tonic to the soul." - Kenneth Turan, The LA Times

"It felt like this is the cavalry that's come to save us from ourselves. These extraordinary, driven, ecocompassionate children are cancelling the apocalypse." - Scott Beggs, The Nerdist



"an empowering celebration of an oft-mocked high school subspecies, the science nerd...the optimism of INVENTING TOMORROW is quite uplifting" - David Rooney, THR

"There wasn't a dry eye in the theater...If you're looking for a healthy dose of optimism, which can often feel in short supply these days, look no further than Laura Nix's new documentary *Inventing Tomorrow*." - Matthew Delman, Hammer To Nail

www.inventingtomorrowmovie.com

Facebook | Instagram - @InventingTomorrowMovie

Twitter |Snapchat - @InventingTmrw



Directed by: Produced by: Executive Produced by:

Edited by: Co-Editors: Director of Photography: Music by: Co-Producer: Co-Executive Producers:

Cast:

Laura Nix Diane Becker, p.g.a., Melanie Miller, p.g.a., Laura Nix, p.g.a. Julie Goldman, Christopher Clements, David J. Cornfield, Linda A. Cornfield, Sharon Chang, Ian Darling, David Guy Elisco, Dennis Liu, Patty Quillin, Andrea Van Buren Helen Kearns Geraud Brisson, Matthew Martin, Langdon Page Martina Radwan Laura Karpman Beth McNamara Leslie Berriman, Nancy Blachman, Carolyn Hepburn, Nion McEvoy, Lynda Weinman, Jenifer Westphal Jared Goodwin - Hilo, Hawaii USA Sahithi Pingali – Bangalore, India Shofi Latifah Nuha Anfaresi - Bangka, Indonesia Intan Utami Putri Jesús Alfonso Martínez Aranda - Monterrey, Mexico José Manuel Elizalde Esparza Fernando Miguel Sánchez Villalobos 105 minutes

Run Time:

#### For additional information please contact:

#### **FESTIVAL & PRESS INQUIRIES**

Fishbowl Films Melanie Miller - melanie@fishbowl-films.com 310-864-2091

#### DOMESTIC SALES

Submarine Josh Braun - josh@submarine.com 917-687-3111 Ben Braun - ben@submarine.com 917-287-9404 Matt Burke - matt@submarine.com 917-403-3235

#### **SYNOPSIS**

#### SHORT SYNOPSIS

Meet passionate teenage innovators from around the globe who are creating cutting-edge solutions to confront the world's environmental threats – found right in their own backyards – while navigating the doubts and insecurities that mark adolescence. Take a journey with these inspiring teens as they prepare their projects for the largest convening of high school scientists in the world, the Intel International Science and Engineering Fair (ISEF).

#### LONG SYNOPSIS

INVENTING TOMORROW follows six young scientists from Indonesia, Hawaii, India and Mexico as they tackle some of the most complex environmental issues facing humanity today – right in their own backyards. Each student is preparing original scientific research that he or she will defend at ISEF, the Intel International Science and Engineering Fair. Framed against the backdrop of the severe environmental threats we now face, we immerse the audience in a global view of the planetary crisis, through the eyes of the generation that will be affected by it most.

Considered the Olympics of high school science fairs, ISEF is the largest gathering of high school scientists in the world, attracting approximately 1,800 finalists from over 75 countries, regions and territories. All the finalists want to do a good job, but the heart of the story isn't about whether they go home with an award. As they take water samples from contaminated lakes, dig up the dirt in public parks, board illegal pirate mining ships, and test their experiments in a lab, we see each student display a tenacious curiosity, and a determination to build a better future. Motivated by the desire to protect their homes, these young people are asking questions about the issues they observe in their communities, and proposing innovative solutions to fix them.

The students spend close to 600 hours each on their projects, guided in their scientific quest by dedicated university mentors. At home with their parents, grandparents, and siblings, they compare the world their elders knew with the stark reality of the one they're inheriting.

But they're still teenagers, with their own unique struggles. We spend time with them in classrooms, at after-school jobs, behind the wheel as they learn to drive, and in their rooms hanging out with friends, and learn more about the obstacles they face just to get to the fair. As each finalist prepares to leave home, some for the very first time, we witness their unique intellectual and emotional journeys on the way to ISEF 2017 in Los Angeles.

Once they land in Los Angeles, our characters join a vibrant, excited community of young students from around the globe. They meet peers who are just as bright and determined as they are, competing in every category of STEM, from Robotics to Computer Science. The tension builds as they practice how to defend their research in front of 1000 volunteer judges, all specialists in their fields.

Beyond the gauntlet of judging, the week is a whirlwind of social activities, field trips, and exploring brandnew foods in the cafeteria. The students form bonds that many call life changing. Regardless of who wins an award, they all discover a community that celebrates their ingenuity and enthusiasm. They meet peers who turn into lifelong friends; other kids like themselves who believe in a shared vision of environmental stewardship and collective action.

When the fair ends, we follow our characters home to witness how they process their experiences. Some leave with a renewed sense of purpose and continue their project at university. Others are inspired to

pursue a new direction. But as they integrate their time at ISEF into the next phase of their lives, they all realize they're not alone. They've finally met other kids like themselves who believe in a shared vision of environmental stewardship and collective action.

#### **DIRECTOR'S STATEMENT**

We live during a time characterized by environmental degradation and climate change. Unprecedented drought, pollution, mass extinctions, rising sea levels, dramatic weather patterns, and an ocean that is slowly dying. It took me the majority of my adult life to come to terms with this reality, but teenagers today were born into this environmental chaos and instability. They face a daunting truth about the planet they're inheriting, as soon as they have the mental ability to comprehend it.

I wanted to create an immersive, emotional and cinematic experience about what it would be like to be one of those teenagers today; specifically a teen who is smart, observant and has some ideas about how he or she might address these extreme problems. When I first went to the Intel International Science and Engineering Fair (ISEF), I fell in love with the kids and immediately saw the story potential. There's built in tension and a unified narrative at the fair, but I always knew I wanted to push beyond the genre of a kids' competition doc. I was more interested in students whose research was motivated by a deep sense of purpose and personal motivation. I wanted to spend time following characters not because I thought they had a good chance of winning, but because their goal was bigger than scoring a prize at a science fair. Their science projects could help us survive.

As a kid who was invested in the arts and humanities, I grew up intimidated by science and math. But in order to confront the myriad of environmental crises we face, we all need to engage with the scientific community, and we need them to be able to communicate with us effectively. One of the most important lessons of the science fair is that students must share their research not only with the judges, but also with the general public, who don't know anything about their projects. In a time when powerful elements are attempting to suppress and deny the truth that science offers, we need the public to engage with the scientific community more than ever. I hope that the film contributes to a dialogue that normalizes and popularizes science.

My last film, THE YES MEN ARE REVOLTING, addressed activism surrounding environmental issues and I've thought a great deal about how to get audiences to think about the topic in a way that leaves people with a sense of hope. My intention with INVENTING TOMORROW was to create an emotional and character-based story about what we might learn about our world through the eyes of the next generation. The issues that face our planet are severe. But we have options in front of us, and the opportunity to make good choices. I hope the film will motivate audiences to search for those options by witnessing the courage of a 16-year old as he or she tackles the greatest problems humanity has ever faced. Our student scientists are observing the damaged planet they've inherited, asking the right questions, and inventing solutions to create a path forward. Their commitment to action and their clarity of purpose offers a model for how we should all proceed.

#### **DIRECTOR Q & A**

#### What made you decide to do a film based around a high school science fair?

I was approached by my producers Diane Becker and Melanie Miller to make a doc about the science fair ISEF, so I attended the fair in Phoenix in 2016 to both film and scout and immediately realized there was a great story to tell there. First off it's huge – almost 1800 kids attend, and 1000 volunteer judges show up to evaluate their projects. However, outside of the educational and science communities, most people don't know about the fair. The sense of hopefulness and optimism there was infectious. I met some really advanced and inspiring kids whose projects just blew me away. I found I was the most struck however by kids I met who were doing research because of issues they were confronting at home – whether it was lack of clean drinking water, or air pollution, or some other type of environmental challenge. They weren't doing research because it would be cool on their college application, but because they were deeply and personally motivated to change where they lived. Those were the kids who made me want to make the film.

#### How did you find and decide on the students you followed?

We started by reaching out to science teachers and fair directors all over the world, and asked them to identify students who were working on projects with an environmental theme. We then spent months interviewing hundreds of kids from all over the world. We were looking for kids who were doing science with a sense of purpose; who were addressing an environmental issue that was local and personal. I was specifically looking for issues that were visual, and for students who could clearly describe their project to an audience. We also were looking for range of environmental issues that dealt with air, water, and earth. We purposefully went beyond the scope of just climate change, so we could tell a larger story of kids engaged in environmental stewardship.

It was really important to me to create an emotional and character-based film, so I was also looking for kids who had a personal story or an obstacle that was compelling, so I could show how they were working to overcome it. We wanted diversity of region, race, and religion, and a balance of girls and boys. I traveled all over the world to meet the kids we eventually decided to film, and I followed them without having any idea of what would happen once they arrived at the fair. I spent time with all of them because I believed in them as people, and because I was fascinated by their ability to pay attention and ask the right questions about the world around them.

# The film documents some pretty intense environmental destruction, all within heavily populated areas, as people are continuing to go about their daily lives. What was that experience like for you and your crew?

The reality is that if you take a closer look at where you live, most places are facing environmental degradation. In some areas, you're affected by it in a daily way. In others it might not be as visible, but dig a little deeper and you'll find something in your own neighborhood. I was impressed by these students' ability to observe where they were living, and identify what needed to be fixed. Whether or not they're able to invent a solution today, their willingness to tackle the issue is what matters.

The experience for me and my crew varied from place to place. When we first went to Bangalore to visit Sahithi PIngali, we saw lakes that had turned into fields, but it was a little hard for me to understand how serious the problem was. As Sahithi explained, you're looking at this lake and it looks like a field, so you think, "What's the issue?" But when you realize that this happened because of eutrophication — raw sewage being pumped into the lake — the problem reveals itself. Sahithi had described the foam caused by the untreated phosphates into the water, but when we saw it clogging streams and escaping into roadways, we really understood the severity of the issue. (One thing that doesn't come across onscreen is how bad it smells.) Sahithi also told us that that the city used to be known as 'the place of a thousand lakes', and now there's only 93 left. With millions of people depending on this water for drinking, the problem becomes increasingly dire. The fact that she was able to come up with a solution to track the data and encourage public officials to do something about it is astonishing – especially at age 16.

The place where Nuha Anfaresi lives – Bangka, Indonesia – is extraordinary, a tropical paradise. To see that beauty, and to see it contrasted with the lead pollution caused by tin mining was dramatic and severe. It's depressing; there's no way around it. I would ask Nuha, "Why do you believe you can turn it around?" She would say, "Because we have to." Her sense of optimism is inspiring. We were often shocked to see the environmental devastation, but our spirits were buoyed by the fact that the kids were undeterred. They haven't learned cynicism yet, and that sense of hopefulness is something we can all learn from.

When I talked to Jared Goodwin on the phone from Hilo, Hawaii, I was struck by his deep love of nature, and how much that motivated him to do the work that he was doing. A lot of the kids we met lived in urban areas and didn't have a deep relationship to the natural world. Jared does. He takes pictures of birds and lava and volcanoes, and this inspires him to look more closely at what's happening where he lives. He had heard for many years about arsenic contamination in a pond next to the house where he grew up. Because he's curious and smart, he wanted to understand more about it. When you go to the pond, it's beautiful, with ducks and fishing and kids. Then, you find out that a company was freely dumping arsenic into the pond for thirty years, using it as a receptacle for waste. This left a permanent mark on that area, especially because tsunamis regularly hit Hilo and spread the pond water into the surrounding

neighborhoods. Jared was sampling and tracking the path of contamination, and I was impressed by his ability to understand why this was important. Humans have been creating toxicity for decades and we need to know where it all ends up. This is a complicated issue for anyone to wrap his or her head around; but especially a 16-year-old. I was also struck by his deep personal connection to the area, because his grandmother took him to that pond as a kid, and his family had survived generations of tsunamis.

Monterrey, Mexico is a big city with millions of people – and one of the most polluted cities in Latin America. It was quite surprising to me that its industrialized areas are right next to residential neighborhoods. The boys we met in Mexico are basically living under a cloud of smog. They decided they wanted to address it because they were at a bus stop near their school every day, sitting in these clouds of diesel exhaust and looking at the sky, not being able to see the mountains—and realizing there's something they could do about it. They said they were motivated by their own sense of personal responsibility.

We do have options for how we as a culture can address these issues. But what really struck me about the kids was that they weren't saying, "We need to stop this industry." They were saying, "Industry is what gives people jobs where we live, so we need to engage in industrial remediation. There's a way we could support our economy that doesn't have to be so damaging." It was interesting to me that all of the kids were invested in working within the systems that were already there. They wanted to come up with common-sense ways of making things better.

## The film emphasizes the need for ingenuity and originality. After making it, how do you feel about the potential for ingenuity and originality to save humanity from itself?

I think each of our young scientists shows us a potential path forward, and it's really up to us to decide to empower those young people. I'm hopeful that the film will show the absolute value of STEM (Science, Technology, Engineering, Math) education in our culture. The key to creating innovative solutions for the future is access to high-quality STEM education.

In the United States, we are not competitive with the rest of the world in that regard, and there are states where STEM education is coming under political fire. This stands in direct opposition to empowering the next generation to confront the future. We are not blocked by a lack of technological solutions; we're blocked by political obstacles. Another thing that struck me about the kids was that they didn't approach their work from a political standpoint at all. I find that hopeful, because they don't see why politics should be an issue in addressing the environment. And they're right; it's not a political issue, it's a moral issue.

#### Were you a science geek yourself as a kid?

I don't have a STEM background. I was a band geek in high school, in college I studied history, and in graduate school I studied visual arts. But I think that was helpful, because I could serve as a proxy for the audience. The students' projects needed to make sense to me, so I could make sense of them for an audience.

One of my goals for the film is to lower the intimidation level around science. I think that many people, including myself, often have an attitude like, "That's something only scientists can understand." I'm hoping that these high school kids can help people realize that science is something that anyone can engage in.

I think one of the greatest values of competing in a science fair is that you learn how to communicate your project to the general public. The kids must defend their scientific research to a judge, and although the judge is an expert, the student must be able to talk about their project simply and clearly. In fact, explaining the project clearly makes up the biggest part of a student's score.

There's also a great part of the science fair called Public Day, when middle school students are bussed in and the participants must explain their projects to them. This was truly one of the most beautiful and hopeful things that I filmed; watching the older students speaking with younger ones and seeing the light bulbs go off in in their heads.

I also think the value of the fair is in creating a community of like-minded people. I wasn't interested in making another film that shows kids competing with each other; I was more moved by the community that I saw being formed. That seemed to be what the kids took from it, and that was more important to me than one of my characters winning a prize.

Another value of the science fair is that kids from different backgrounds and different parts of the world are physically brought together in one place. We live in a world where we communicate online, but it's so valuable to be in the same room with like-minded souls. The fact that these kids are doing intense scientific research means that sometimes they can be isolated at home, so it was enjoyable to see them meet other kids who were like them.

#### What was the visual approach you took to telling your story and why?

In collaboration with my director of photography, Martina Radwan, we decided to shoot the film from a first-person perspective, in order to tell an immersive story, favoring an intimate verité shooting style. We wanted to give the audience a sense of what it's like to grow up right now, facing these environmental issues. There's something about the way we look at things when we're young that's really special, and quite unique. I think it's because we haven't learned cynicism yet. So we wanted the audience to feel close to the kids.

To achieve this immersive feel, we mostly avoided using privileged points of view, including a conscious decision to not use any drone shots, even though it would've been a great way to shoot some of the scenes. We contrasted the more intimate shooting with wides of the landscapes where they lived, looking at photographers like Sebastião Salgado. The wides were necessary in order to tell the environmental story, and we wanted audiences to have a truly cinematic experience.

We shot the film on the Arri Amira because we wanted detail, depth, and lush imagery to tell this story. Even though it was difficult to lug the camera and lens package onto pirate ships in the South China Sea and through garbage dumps in India, it was important to me that the film was visually powerful and engaging.

# What was the biggest challenge you faced in the edit room to tell your story and how did you address it?

One of the challenges was to make science and environmental issues emotional – two topics that are not often thought of as being steeped in feeling. It was also really important to my editor Helen Kearns and I that we find the unique emotional arc for each kid. In the edit room, this meant finding the right balance of the kids' personal stories, the environmental issues they were facing, and how they were addressing them with their science projects. The audience needs context and information so it all makes sense, but the challenge was keeping the information to a minimum, so we could stay engaged with our characters.

#### What other formal approaches did you incorporate and how did they impact the final film?

From very early on, I knew that I wanted a score that did not try to evoke the various places and locales where we filmed. I wanted the score to be universal and timeless. I also wanted it to contain themes and variations that would develop over time and be applicable to any character anywhere in the film, whether they were working in the lab or experiencing how small they were in relation to these overwhelming issues. I worked with Laura Karpman, a classical composer, to create a score as powerful as the ideas the students are grappling with. We were able to record it with a full orchestra and a youth chorus, which was came from John Burroughs High School in Los Angeles, where the television show *Glee* was based. These young vocal performers were just astonishing, and we feel really lucky to have worked with them.

#### Any other hopes for the film once it's released?

As a storyteller, when you're trying to engage audiences regarding environmental issues, you need to use everything in the toolkit. Films that lay out the facts are important, but it's also vital to show stories of change. I really hope our film makes people believe there is a path forward. And I hope that the kids will inspire audiences as much as they inspired me.

#### CAST BIOS

#### JARED GOODWIN - Age at Filming: 15

Hilo, Hawaii USA Project: Arsenic Contamination Through Tsunami Wave Movement in Hawaii: Investigating the Concentration of Heavy Metals in the Soil from the 1960 Hilo, Hawaii Tsunami.

Jared passionately documents his love for his home of Hawaii through nature photography. His project studies the contamination of a local pond where arsenic was dumped by a company for nearly 30 years. Inspired by his family, who survived two major tsunamis in Hilo, he developed a new model to study tsunami debris patterns, so he could track the disbursement of arsenic into local neighborhoods. He wants to use his project to motivate state officials to create more accurate safety measures for land use zoning.

#### SAHITHI PINGALI – Age at Filming: 16

Bangalore, INDIA Project: An Innovative Crowd-Sourcing Approach To Monitoring Fresh Water Bodies

After seeing the lake behind her home burst into flames, Sahithi decided to combine her love for science and social activist skills to create an innovative method for citizens to gather and share data about the severe water pollution in Bangalore. In order to protect her local lakes, she is developing technological solutions to amplify citizen voices, in an effort to stop the dumping of raw sewage into the watershed.

#### SHOFI LATIFA NUHA ANFARESI & INTAN UTAMI PUTRI - Age at Filming: 16

Bangka, INDONESIA Project: Bangka's Tin Sea Sand - Fe3O4 as A Removal of Pb(II) Ions in By-Product of Tin Ore Processing (Tailing)

Nuha and Intan live on an island in Indonesia called Bangka, which is the world's 2nd largest source of tin ore. They have seen legal and illegal tin mining expand to the point where the bright blue waters around their home are now brown, and have observed the local fish and coral reefs dying. They are developing a filter that would process the effluents from the dredging process to protect the fragile oceanic ecosystem of their island, allowing the local fish supply to flourish again.

#### FERNANDO MIGUEL SÁNCHEZ VILLALOBOS, JESÚS ALFONSO MARTÍNEZ ARANDA,

JOSE MANUEL ELIZADE ESPARAZA - Age at Filming: 17, 17, 18 Monterrey, MEXICO

Project: Photocatalytic ceramic paint to purify air

Fernando, Jesus and José live in one of the most polluted city of Latin America: Monterrey, Mexico. After a lifetime of riding diesel-powered public buses that exposed them to harmful pollutants, they decided to try and address local air quality as well as global warming. While holding part-time jobs – and riding the bus several hours to meet with their university mentor – they invented a photocatalytic paint. This paint could remove two pollutants that contribute to global warming from the air: sulphur dioxide and titanium dioxide. The first in their families to attend university, the three friends were ecstatic to visit the United States when they attended ISEF.

#### DIRECTOR BIO

Laura Nix is a Chicken and Egg Breakthrough Filmmaker Award winner in 2018, and was awarded the Sundance Institute/Discovery Impact Fellowship in 2017. She previously directed THE YES MEN ARE REVOLTING, (Toronto Film Festival 2014, Berlinale 2015), which was theatrically released and broadcast in the US and in multiple international territories. Her film THE LIGHT IN HER EYES premiered at IDFA; was broadcast on the PBS series POV, and toured the world as part of Sundance's Film Forward program. Other feature directing credits include the comedic melodrama THE POLITICS OF FUR, which played in over 70 festivals internationally and won multiple awards including the Grand Jury Prize at Outfest; and WHETHER YOU LIKE IT OR NOT, about the phenomenon of HEDWIG AND THE ANGRY

INCH. Her films have been favorably reviewed in publications such as the New York Times, Variety, Indiewire and Time Out London. Nix has broadcast her work through various outlets including New York Times Op-Docs, and on television via Al Jazeera Arabic, PBS, HBO, Arte, ZDF, VPRO, CBC, NHK, Canal+, and IFC. Her work has received support from the Bertha Foundation, BritDoc, Cal Humanities, COBO Fund, the Danish Film Institute, the Redford Center, and the Sundance Documentary Fund. She has received fellowships from the MacDowell Colony, Film Independent and the Independent Feature Project, and is currently is a film expert for the U.S. State Department's American Film Showcase. Based in Los Angeles, she is the owner of Felt Films, a production company that produces non-fiction shorts and features.

#### PRODUCER BIOS

#### DIANE BECKER

Diane is an LA-based documentary and feature film producer and a graduate of the American Film Institute. She has worked with the award-winning Passion Pictures and Motto Pictures on films including SERGIO, MANHUNT, HOMEGROWN: THE COUNTER TERROR DILEMMA, CHICKEN PEOPLE, and LEGION OF BROTHERS. THE FINAL YEAR, chronicling the last year of the Obama Administration's foreign policy team, is being released by Magnolia Pictures in January 2018. She and producer Melanie Miller founded Fishbowl Films in 2009 and their latest feature film, ALASKA IS A DRAG, a grand prize winner of Poland's US in Progress, is currently screening in festivals around the globe. Her recent credits include WE ARE X, about Japan's biggest rock band in history (World Cinema Documentary Best Editing Award, 2016 Sundance Film Festival) and the Netflix documentary series FIVE CAME BACK, executive produced by Steven Spielberg and Scott Rudin. Diane is one of five of this year's Sundance Documentary Creative Producing Fellows. She is a member of the Producers Guild of America (PGA) and the Academy of Motion Picture Arts and Sciences (AMPAS).

#### **MELANIE MILLER**

Melanie Miller has over two decades of experience in the entertainment industry. During her tenure at Gravitas Ventures as Vice President of Acquisitions & Marketing, she played an integral role in the growth of the new paradigm of independent distribution. Prior to Gravitas, Miller was the Artistic Director at the Jackson Hole Film Institute and in 2009 co-founded Fishbowl Films with Diane Becker. Their films include William Dickerson's DETOUR which released theatrically in 2013, and Shaz Bennett's directorial debut ALASKA IS A DRAG which won the coveted US in Progress grant and is currently on the worldwide festival circuit. More recently Melanie was the Executive Vice President at Samuel Goldwyn Films, responsible for the company's distribution, marketing and PR strategy for all films. She has been a guest speaker at events such as the Alfred P. Sloan Foundation's Sloan Summit, the Sundance Institute, the Produced By Conference, and other industry events. Melanie is a member of the Producers Guild of America (PGA).

#### LAURA NIX (SEE ABOVE)

#### EXECUTIVE PRODUCER BIOS

#### JULIE GOLDMAN

Julie Goldman founded Motto Pictures in 2009. She is an Oscar nominated and Emmy Award-winning producer and executive producer of documentary feature films. Julie is executive producer of THE CLEANERS and INVENTING TOMORROW, both premiering at the 2018 Sundance Film Festival. Julie is producer of LIFE, ANIMATED and executive producer of WEINER, both of which premiered at the 2016 Sundance Film Festival. LIFE, ANIMATED won the U.S. Documentary Directing Award, was released by The Orchard and was a 2017 Academy Award nominee. WEINER won the U.S. Documentary Grand Jury Prize, was released by IFC Films & Showtime and was shortlisted for the 2017 Academy Award. Current releases include Steve James' ABACUS: SMALL ENOUGH TO JAIL, released by PBS Frontline and currently shortlisted for the 2017 Best Documentary Feature Academy Award, and THE FINAL YEAR, which premiered at Toronto International Film Festival and will be released by HBO and Magnolia Pictures in January 2018. In 2016, Julie produced and executive produced features including: THE MUSIC OF STRANGERS, INDIAN POINT, SOLITARY, ENLIGHTEN US, SOUTHWEST OF SALEM and

CHICKEN PEOPLE. Previously, Julie executive produced Emmy Award winning BEST OF ENEMIES and several Emmy-nominated films: 3<sup>1</sup>/<sub>2</sub> MINUTES, TEN BULLETS, THE KILL TEAM, ART AND CRAFT and 1971. Julie produced GIDEON'S ARMY, MANHUNT, the Oscar shortlisted GOD LOVES UGANDA, THE GREAT INVISIBLE, the Oscar shortlisted AI WEIWEI: NEVER SORRY, and the Oscar shortlisted BUCK, which was one of 2011's top five grossing documentaries. Julie consulted on the Academy Award-winning THE COVE and produced the Oscar shortlisted SERGIO. Julie is on the Board of the Producers Guild of America (PGA) and a member of Academy of Motion Picture Arts and Sciences (AMPAS).

#### CHRISTOPHER CLEMENTS

Christopher Clements is an Emmy nominated and Peabody Award-winning producer and partner at Motto Pictures. He executive produced WEINER, which won the U.S. Documentary Grand Jury Prize at the Sundance Film Festival and was shortlisted for the 2017 Academy Award and co-produced LIFE, ANIMATED, which won the U.S. Documentary Directing Award at the Sundance Film Festival and was nominated for the 2017 Academy Award. He executive produced SHADOWMAN, WHEN GOD SLEEPS, THE FAMILY I HAD, Steve James' ABACUS: SMALL ENOUGH TO JAIL, Kristi Jacobson's SOLITARY, Deborah Esquenazi's Emmy-nominated and Peabody Award winning SOUTHWEST OF SALEM and the CNN Films feature, ENLIGHTEN US. Christopher produced Alison Klayman's film THE 100 YEARS SHOW and THE YES MEN ARE REVOLTING. He also executive produced ART AND CRAFT, shortlisted for the 2015 Academy Award for Best Documentary Feature. Christopher's camera work was featured in Cindy Meehl's BUCK, which won the Sundance Film Festival's Audience award.

#### SHARON CHANG

Sharon Chang is globally recognized as a visionary who, throughout her career, has been a catalyst of social innovation, a creator of groundbreaking entertainment, an advocate for generative lifestyle, a leader in creative education, a philanthropist, entrepreneur and investor in transformational ideas and technologies. Sharon is a Future Architect. With a diverse range of building blocks, she envisions a blueprint for how we can all experience and manifest positive change in the world. Boldly questioning narratives that shape our culture, she reimagines systems that power our everyday activities - the way we eat, shop, travel, learn, work, think, dream - today and tomorrow.

From a film that inspires gender equality to a fashion brand that drives conscious consumption; a smart city community operating system to a fair-trade apparel factory in West Africa, all her projects challenge the status quo and delve into life-changing subjects with a gentle touch of optimism. A significant part of Sharon's work focuses on observing and reframing the relationships between capital, creativity and impact. Her approach to funding is artistic – supporting questions rather than answers, intention rather than outcome, imagination rather than reality.

She is one of the very few people deeply committed to investing in creativity that might have latent yet profound effects on humanity. Her own creative pursuits span the spectrum from established to emerging media, physical to virtual environments, all of which follow a consistent theme of using the power of story to unleash human potential. She likes to say that by choice she remains an outsider in every industry, but strives to be an insider in every community. Her generous approach to work and life has earned her deep trust from artists to executives, idealists to skeptics.

#### LINDA & DAVID CORNFIELD

David and Linda Cornfield are philanthropists and environmentalists who believe in the power of images and storytelling to spark curiosity, foster understanding and motivate action. After careers in the tech industry, they concentrate their philanthropy on education initiatives that enhance people's ability to innovate and to solve complex, real-world problems and on environmental conservation. Their environmental work focuses on pragmatic, sustainable approaches for better stewardship of the environment. Through film, they want to help audiences connect with environmental issues. David and Linda are the executive producers of Jeff Orlowski's Oscar nominated and Emmy award-winning film, CHASING ICE. Their latest collaboration with Orlowski, CHASING CORAL, premiered at the 2017 Sundance Film Festival and was released worldwide on Netflix.

#### IAN DARLING

Ian Darling is an award-winning documentary filmmaker based in Sydney. His director and producer credits include SUZY & THE SIMPLE MAN, PAUL KELLY – STORIES OF ME, POLLY & ME, THE OASIS, IN THE COMPANY OF ACTORS, ALONE ACROSS AUSTRALIA and WOODSTOCK FOR CAPITALISTS. He was an executive producer of UNREST and HOW TO CHANGE THE WORLD. He is currently in pre-production on THE GENESIS, film about homelessness in Australia. Ian is Executive Director of Shark Island Institute in Sydney. He is Chair of The Caledonia Foundation and was founder of Good Pitch Australia and Documentary Australia Foundation. He is a member of Impact Partners Advisory Board. He was recently named Australia's Leading Philanthropist by Philanthropy Australia.

#### KEY CREW BIOS

#### **HELEN KEARNS - Editor**

Helen Kearns is a documentary film editor based in Los Angeles, CA. Most recently, Helen was an editor on the Sundance documentary INVENTING TOMORROW and the Emmy-nominated documentary series for Netflix THE KEEPERS. Helen's other editing work includes GOOD OL' FREDA (SXSW 2013), THE CASE AGAINST 8 (Sundance 2014; associate editor to Kate Amend), JUDY CHICAGO: A BUTTERFLY FOR BROOKLYN (Doc Short 2015), THE MUSIC OF STRANGERS: YO-YO MA AND THE SILK ROAD ENSEMBLE (TIFF 2015), and SERENA (Epix 2016).

#### MARTINA RADWAN – Director of Photography

Martina Radwan, Director/Producer/Cinematographer – Martina, a native German based in NYC for over twenty years, has been the cinematographer for award-winning documentaries and features for over a decade. SAVING FACE, the 2012 Academy Award Winner for Short Documentary, earned her an Emmy nomination for Outstanding Cinematography in 2013. Her recent work includes THE FINAL YEAR (TIFF 2017), THE FAMILY I HAD (Tribeca 2017), THE EAGLE HUNTRESS, THE PROMISED BAND, THROUGH A LENS DARKLY, and HOT COFFEE.

#### LAURA KARPMAN - Composer

Four-time Emmy winner and composer of the Grammy-winning piece ASK YOUR MAMA, Laura Karpman maintains a vibrant career in film, television, videogames, and concert music. Her distinguished credits include UNDERGROUND, in collaboration with Raphael Saadiq and John Legend; STEP, a Sundance 2017 favorite; Eleanor Coppola's PARIS CAN WAIT; Kasi Lemmons' BLACK NATIVITY; Steven Spielberg's miniseries TAKEN; the Showtime series ODYSSEY 5; and MASTERS OF SCIENCE FICTION, for which she received several Emmy nominations. She also contributed to Sophia Coppola's 2017 THE BEGUILED, and scored THE REAGAN SHOW for CNN Films. Laura serves as an advisor for the Sundance Film Scoring Labs and is on the faculty of the USC Film Scoring Program. She is also the founding President of the Alliance for Women Film Composers and a governor of the Academy of Motion Picture Arts and Sciences.

#### COMPANY BIOS

#### **FISHBOWL FILMS**

Fishbowl Films is a full service entertainment company, whose primary focus is on developing and producing projects for film and television. The company's mission is to deliver the highest quality of entertainment to the marketplace in order to find each project's maximum audience, engaging them in the fullest possible sense, whether it be a daring, thought-provoking independent feature film, a richly told one-hour television drama, a laugh out loud comedy, or a consciousness shifting documentary film.

With over 30 combined years of hard work and experience in the entertainment and new media industries we believe our solid foundation of production, development, and marketing experience coupled with Fishbowl Films' talent for discovering new voices will establish us as a powerful player in the entertainment world.

https://www.facebook.com/FishbowlFilms

#### **MOTTO PICTURES**

Motto Pictures specializes in producing and executive producing documentary features. Motto secures financing, builds distribution strategies and creatively develops films with an eye toward maximizing the position of each project in the domestic and international markets.

https://mottopictures.com

Twitter: @MottoPictures | Instagram: @Motto\_Pictures

#### HHMI | TANGLED BANK STUDIOS

HHMI Tangled Bank Studios is a production company established and funded by Howard Hughes Medical Institute as an extension of its longstanding science education mission. Dedicated to the creation of original science documentaries for broadcast, theatrical and digital distribution, the company's awardwinning programs address important contemporary issues and capture compelling stories of discovery across all branches of scientific inquiry. For more information, please visit: www.tangledbankstudios.org.

Follow us on Twitter, Facebook and Instagram. HHMI is a science philanthropy whose mission is to advance basic biomedical research and science education for the benefit of humanity. The institute is the largest private supporter of science education in the country.

#### SHARK ISLAND INSTITUTE

Shark Island Institute is a purpose-driven business based in Sydney, Australia. The Institute's activities include producing and supporting documentary films for impact, developing stories with filmmakers that need to be told, and managing and nurturing long-term impact campaigns. The Institute builds circles of influence and collaboration with a diverse cross-section of the community to achieve a more inclusive, just and healthy society.

For more information see: www.sharkisland.com.au

#### SOCIETY FOR SCIENCE & THE PUBLIC

Society for Science & the Public is dedicated to the achievement of young scientists in independent research and to public engagement in science. Established in 1921, Society is a nonprofit whose vision is to promote the understanding and appreciation of science and the vital role it plays in human advancement. Through its world-class competitions, including the Regeneron Science Talent Search, the Intel International Science and Engineering Fair, and the Broadcom MASTERS, and its award-winning magazine, *Science News* and *Science News* for Students, Society for Science & the Public is committed to inform, educate, and inspire. Learn more at <a href="https://www.societyforscience.org">www.societyforscience.org</a> and follow us on <a href="https://www.society4Science">Facebook, Twitter, Instagram</a> and Snapchat (Society4Science).

**CREDITS** 

\_\_\_\_\_

#### FISHBOWL FILMS MOTTO PICTURES HHMI

==

A Fishbowl Films Production

In Association With Motto Pictures --19340 Productions Shark Island Institute

HHMI Tangled Bank Studios

--

A Laura Nix Film

\_\_\_\_

Co-Executive Producers LESLIE BERRIMAN NANCY BLACHMAN CAROLYN HEPBURN

---

Co-Executive Producers NION MCEVOY LYNDA WEINMAN JENIFER WESTPHAL

---Co-Producer BETH MCNAMARA

---

Music By LAURA KARPMAN

Director of Photography MARTINA RADWAN

---

Co-Editors GERAUD BRISSON MATTHEW MARTIN LANGDON PAGE

----

Edited By HELEN KEARNS

---

Executive Producers PATTY QUILLIN ANDREA VAN BEUREN

---

Executive Producers DAVID GUY ELISCO DENNIS LIU

Executive Producer IAN DARLING

Executive Producer

#### SHARON CHANG

\_\_\_\_

Executive Producers DAVID J. CORNFIELD LINDA A. CORNFIELD

---

Executive Producers JULIE GOLDMAN CHRISTOPHER CLEMENTS

---

Produced By LAURA NIX, p.g.a.

Produced By DIANE BECKER, p.g.a. MELANIE MILLER, p.g.a.

---

Directed By LAURA NIX

INVENTING TOMORROW

END CREDITS

Directed By

Produced By DIANE BECKER, p.g.a. MELANIE MILLER, p.g.a. LAURA NIX, p.g.a.

Executive Producers JULIE GOLDMAN CHRISTOPHER CLEMENTS DAVID J. CORNFIELD LINDA A. CORNFIELD SHARON CHANG

\_\_\_\_

---Executive Producers IAN DARLING DAVID GUY ELISCO DENNIS LIU PATTY QUILLIN ANDREA VAN BEUREN

#### Edited By HELEN KEARNS

Co-Editors GERAUD BRISSON MATTHEW MARTIN LANGDON PAGE

Director of Photography MARTINA RADWAN

---Original Music By LAURA KARPMAN

Funding provided through generous support of Helen Gurley Brown's Glassbreaker Films

Additional Funding by the Lagralane Group Jason Lee Yvonne Huff Lee

#### [END CRAWL BEGINS]

Co-Producer BETH MCNAMARA

---

Co-Executive Producers LESLIE BERRIMAN NANCY BLACHMAN CAROLYN HEPBURN NION MCEVOY LYNDA WEINMAN JENIFER WESTPHAL

Associate Producers ELEASE LUI STEMP ANN ROGERS

Supervising Field Producer CHRISTOPHER BUCHANAN

> ---Featuring

Shofi Latifah Nuha Anfaresi José Manuel Elizalde Esparza Sahithi Pingali M. Akzarhan María Inés Isabel Hernández Amésquita Debra Denisse Martínez Aranda Mireya Annett Martínez Aranda Jesús Alfonso Martínez Aranda Jared Goodwin Fernando Miguel Sánchez Villalobos Eralú Villalobos Mercado Aruna Pingali Gopal Pingali Lalitha Pingali

Taylor Benning
Meghana Bollimpalli
Magdalena Aranda Escalón
Bruno Armando Elizalde Esparza
Cristhian Isabel Elizalde Esparza
Darío Samuel Elizalde Esparza
Jimmy Goodwin
Joy Goodwin
Cristhian Jeannette Esparza Hernández
Juan Manuel Elizalde Hernández
Venancio Martínez Jiménez
Corry Kristhna, S.H
Tereso Sanchez Luna
Dr. Steve Lundblad
Dr. Azael Martínez de la Cruz

Sreekari Pingali Manu Prakash Dr. TV Ramachandra Prashaant Ranganathan Professor Lutgarde Raskin Reniati Marcela del Rocío Rosas del Real Fadillah Sabri Adam Skora Dr. Rudi Subagja Christine Taylor Edgardo Alonso Sánchez Villalobos Victor Ulises Sánchez Villalobos Taylor Wilson Lillian Yamashita

#### INDIA PRODUCTION UNIT

Field Producers SATYEN BORDOLOI

#### CHRISTOPHER BUCHANAN

Director of Photography MARTINA RADWAN

Assistant Camera SATISH VENKATARAMANA

Production Sound Mixer GILES KHAN

Interpreter MOHIT KAYCEE

#### INDONESIA PRODUCTION UNIT

Field Producers RAMA ARDANA

CHRISTOPHER BUCHANAN

Director of Photography MARTINA RADWAN

Assistant Camera RESHA PERKASA

Production Sound Mixer GILES KHAN

Interpreters WIDYA HANDINI

FRANSISKA KHOE

#### **RIKO SULAIMAN**

### MEXICO PRODUCTION UNIT

Field Producers ANALUCIA ALBO DOMENE

#### MIGUEL VELASCO

#### JAVIER TRUJILLO

Co-Directors of Photography ALISON KELLY

SHANA HAGAN

Assistant Camera FELIX CANTU

DIT BERENICE JARAMILLO

Production Sound Mixers CARLOS VALDEZ BERRUETO

RODRIGO J. DE VEGA BENAVIDES

Interpreters MARIA DEL SOCORRO PEREZ

DANIEL CLINGAN

#### HAWAII PRODUCTION UNIT

Field Producer CHRISTOPHER BUCHANAN Director of Photography MARTINA RADWAN Assistant Camera GARETH SHEEHAN

Production Sound Mixers TOM VISSER

PRAHLAD STRICKLAND

LOS ANGELES PRODUCTION UNIT

UPM DIANE BECKER

Field Producers CHRISTOPHER BUCHANAN

RAMA ARDANA

SEAN LYNESS

ANAYANSI PRADO

Director of Photography MARTINA RADWAN

Additional Cinematography SHANA HAGAN

JERRY HENRY

ALISON KELLY

**MIKE PARRY** 

Assistant Camera	ALEX CASON
	DARYOUSH HOSSEINI
	MATT ISGRO
	JOEL JUAREZ
Production Sound Mixers	THERESA RADKA
	BRENT CALKIN
	GILES KHAN
	CALEB MOSE
DIT	TYLER GURD
	CIARAN VEJBY
First Assistant Director	JOSHUA OGNER
Production Assistants	KYLE DARE
	KATHY ESQUENAZI
	TJ GROF
	ROBERT SCHNEEWEIS
	DEVON YOUNG

#### MICHIGAN PRODUCTION UNIT

	Field Producer	SEAN LYNESS

Director of Photography MARTINA RADWAN

Assistant Camera AUSTIN PRUETT

Production Sound Mixer RICHARD POOLER

Production Assistant JENNY LARSON

### ARIZONA PRODUCTION UNIT

Field Producers CHRISTOPHER BUCHANAN

SEAN LYNESS

Additional Cinematography JOSH SALZMAN

Assistant Camera JONATHAN TAYLOR

Production Sound Mixer THERESA RADKA

JOSHUA GLADU

Production Coordinator ERICA CRABB

Production Assistant MATTHEW COLE

#### **BRAZIL PRODUCTION UNIT**

Researcher ALICE SPITZ

Production Services By GIROS PRODUCTIONS

**BELISARIO FRANCE** 

CLÁUDIA LIMA

Camera Operator MÁRIO FRANCA

### CHINA PRODUCTION UNIT

Field Producers RICHARD LIANG

RONGFEI GAO

Camera Operator ZHAO WEI

Assistant Camera RUNZE YU

Production Sound Mixer LIMING FAN

--duction Offi

Assistant Production Office Coordinator CHRIS NGUYEN

> Associate Editors DAVID ARISTIZABAL

Additional Editing JEFF GILBERT REJH CABRERA

\_\_\_

Assistant Editors BERENICE CHAVEZ CIARAN VEJBY LOUIS LEE

---

Graphics By LEANNE DARE

#### Animation DAN MEEHAN

VFX By DAVE VAMOS MARK TEAGUE

\_\_\_

Sample Reel Editors FAROUKH VIRANI BARNABY LEVY ALEX JUUTILAINEN MARAH STRAUCH

Translations LIAA RAQUEL CRUZ WIDYA HANDINI FRANSISKA KHOE YANTING LI SEKAR SOSRONEGORO PAUL STEPHEN RIKO SULAIMAN ERIKA SUWARNO IRENE WEI MING YANG RUOLIN YU

Researcher HAYA FATIMA IQBAL NICOLE KARSIN

\_\_\_

Science Advisors BILL & LORNA GLAUNSINGER

Production Assistants KATHY ESQUENAZI CHRISTINE MELTON RACHEL "RAE" PECKHAM JEE WOO CHOI PAUL PHOU

Digital Intermediate by DIFFERENT BY DESIGN

Digital Intermediate Colorist LUKE CAHILL

Online Editor HARRY LOCKE IV & SEAN MEYERS

Digital Intermediate Producers MATT RADECKI & GREG LANESEY ---

Post-Production Sound Services by Skywalker Sound

> a Lucasfilm Ltd. Company Marin County, California

Supervising Sound Editor E. Larry Oatfield

> Sound Designer Leff Lefferts

Re-Recording Mixer Pete Horner

> Foley Artists Jana Vance Geoff Vaughan

Foley Mixer Blake Collins

Sound Effects Editors Shaun Farley Mac Smith

Assistant Re-Recording Mixer Dustin Capulong

> Engineering Services Brian Long

Digital Editorial Support Ivan Piesch

Post Production Sound Accountant Daniela Pontoriero

Post Production Finance Manager Mike Peters

> Client Services Eva Porter

Scheduling Carrie Perry

Skywalker Sound Executive Staff General Manager Josh Lowden

> Head of Production Jon Null

#### Head of Engineering Steve Morris

---

FAME'S — Macedonian Symphonic Orchestra

Conductor Oleg Kondratenko

Sound Engineer Giorgi Hristovski

Pro Tools operator Atanas Babaleski

Stage Managers Riste Trajkovski - Ilija Grkovs

Score Mixed by Nora Kroll - Rosenbaum

Assistant to the Composer and Music Preparation Kyle La Porte

> Orchestrater and Pianist Laura Karpman

Choir Contracted and Conducted by Jasper Randall

CHOIR Yoni Fogelman Jordyn Holt Miranda Hyman Julian Jensen Sage McNeely Grace Sessinghaus Coen Sosa Zoe Ann Sparks

-

Production Accountant PROTEA GROUP ANDREW LAZARIAN

Production Legal Services REDER & FEIG LLP NOOR AHMED NICOLE PAPINCAK

---

Insurance Provided By MIB INSURANCE SERVICES, INC.

For HHMI Tangled Bank Studios Managing Director

#### ANNE TARRANT

Director of Communications ANNA IRWIN

Director of Public Relations & Impact JARED LIPWORTH

\_\_\_

For Motto Pictures MARISSA ERICSON SAMANTHA BLOOM

---Festival Publicity RYAN WERNER LAURA SOK

---

Sales Representation By SUBMARINE Josh Braun Dan Braun Ben Braun Matt Burke

> Impact Strategists MICHAEL BRACY TRACY TUCKER

> > ---

Additional Fundraising Support JENNIFER KANE AMANDA MCINTYRE

Fiscal Sponsorship Provided By INTERNATIONAL DOCUMENTARY ASSOCIATION

This film was supported by

Sundance Catalyst

Sundance Institute Documentary Film Program with support from Open Society Foundations JustFilms | Ford Foundation Science Sandbox, an initiative of the Simons Foundation The Kendeda Fund Discovery Impact Fellowship

Sundance Institute Documentary Film Creative Producing Fellowship

VERY SPECIAL THANKS CAROLINE LIBRESCO

#### (3 COLUMNS)

The Producers Wish To Thank Hopper-Dean Family Fund TTSL Charitable Foundation

Maya Ajmera Natalia Almada Anshul Amar Kate Amend Jen Arnold José Asunción Jeanelle Augustin **Greg Barker** Amanda Baskett John Battsek **Ryan Beardsley** Carol & Gerald Becker Miranda Becker Denise Bell Toni Bell **Bill Benning** Kelly Benning **Danielle Renfrew Behrens** Jason Berman John & Sheri Berry Joseph Beyer Sriram Bhat Paloma Bilson Hilary Birmingham Pia Wilson - Body Scott Bolen Ryan Boring Henry Bornstein Shonali Bose Enrique Pedráza Botero Neil Brandt Ali Brown Karia Brown Liz Brown Tom, TJ, and Luke Brunelle Mia Bruno **Brendan Burch Bruni Burres** Juaquin Cambron John Cardellino Eunice Amisadai Padilla Castillo Daniel Chalfen Leo Chiang Ramon Chibb George Chignell Maria Clement Kathlene Collins Laura Colucci Jennifer Cruz Jacqueline Dalgleish Andre Des Rochers

Stephanie Devaan Ramona Diaz **Claire Didier** The DiNinno Family Arthur Dix Katie Doering Lauren Domino Gail Dundas **Ben-Alex Dupris** Stephen Egts Bennett Elliott Kerstin Emhoff Malina Fagan Jinny Farrell Trisha Fast Kristin Feeley Charlie Feeney Ben Feingold Violet Feng Andrea Nix Fine & Sean Fine Tim Fino Heidi Fleisher Melissa Fondakowski Dwight Fujimoto Keith Fulton Laura Gabbert Elisa Gambino José Antonio Hernández García Cesar Garcia Mark Garcia Adam Pajor Gendron Jennifer Getzinger Michele Glidden Kristian Goddard Cait Goldberg Peter Goldwyn Martha Silvia Leal González Dimpna Gisela Morales Gonzalez **Bianca Grimshaw** Susanne Guggenberger Amy Halpin Zhang Haoyu **Dante Harper Ryan Harrington** Lisa Hasko Kate Haug Alana Hauser Tzeitel Hirni Johny Ho John Hoffman Roz Hudnell Lisa Icenroad Tabitha Jackson Aviva Jacobs Mary Jacobs Liza Johnson **Carolyne Jurriaans** Zhou Kaining

Gayle Kansagor June Kee Senain Kheshgi Stephen Kijak Simon Kilmurry Jennifer Kuwabara Grace Lee Meg Longo Cody Lucich John Mabry Scott Macaulay Jeff Malmberg Natasha Martell Steve Matousek The Maxwell Family Ryan McArdle-Jaimes Jamie McBriety Carrie McCarthy Andrea Meditch Julia Meltzer Martha Teresa Martell Mendez Chad Miller Sean Moor Hajnal Molnar-Szkacs José Díaz Montalvo Nancy Moulding Barbara Muffler Fernando Banda Muñoz Salvatore & Loretta Naimo **Rob Naples** Sheel Nimbalkar George Nix Cile Nix Leslie Norville Joshua Oppenheimer Jeff Orlowski Ramon Otero Swasthik Padma Anku Pande Vasileios Papapostolou Hardik Patel Lynn Pelletier Lou Pepe **Rick Perez** Frances Polhemus Stu Pollard Manu Prakash Fan Qiaochu William Quach Kellen Quinn Heather Rae Gowri Ramachandran **Diane Rashid** Jamie Redford Jeff Reichert Lisa Remington Karen Reyna Larissa Rhodes

Wallace Ricks **Kim Roberts** Scarlett Robertson Dennis Robinson Jose Leon Escorcia Robledo Marjan Safinia Loradria Saldaña **Colette Sandstedt** Claire Sanford Elizabeth Sanhueza Jordan Schwartzbach Raley Schweinfurth Sabrina Scull Julia Sessoms Marcela & Patrick Skora Craig Skotch Gavin Smith Ryan & Mannix Smith Sharon Snyder Matt Soraci Carlos Sosa Amanda Spain Roni Spitzer Maldika Sriram Agustina Stefani **Donnie & Quincy Stemp** Jason Sterman Nicole Stott Kimi Takesue James Taylor Rahdi Taylor Molly Telfer Ivonne Olivares Teran Amanda Tesse & Baby Adrian Haley Thompson Jill Tidman Wang Tie Thalia Alejandra Ayala Torres Cam-Tu Trinh Betsy Tsai Josh Uso Dave Vamos The Vecchiarelli Family Cristina Velasco Jose Gregorio Villarreal Sally Volkmann Nanfu Wang Wenxian Wang Jonathan White **Rhon Williams** Lauma Willis **Taylor Wilson** Karen Witt Samantha Wright Cindy Zeng Xin Miranda Yousef Farihah Zaman Patricia Zambrano

#### Martin Muñiz Zamarron Tomas Zuccareno CATALYST CLASS OF 2016

#### THE PRODUCERS WISH TO THANK THESE COMPANIES AND ORGANIZATIONS

(2 Columns)

INTEL SOCIETY FOR SCIENCE & THE PUBLIC

20/20 Sound Adorama Rental Co. ATA Carnet Autonomous University Of Nuevo León Birns & Sawyer Bishop Museum Chicken & Egg Pictures Consejo Nacional de Ciencia y Tecnología Cucina Alessa Curran Camera Escola Politécnica da Universidade de São Paulo Feira Brasileira de Ciências e Engenharia Indian Institute of Sciences The Indonesia Institute of Sciences JW Marriott at L.A. Live LA Convention Center Lightstone Rentals Location Sound LSI - Laboratório de Sistemas Integráveis Mexico National Film Commission Montreal Eventos Ninja Van Pacific Tsunami Museum Panavision Hollywood Passion Pictures Preparatoria No. 16, UANL **Prettybird Pictures** Rockdale Magnet High School, GA Sierra Vista City Hall Sierra Vista High School, AZ **Six Point Harness** Soccer Team Botafogo T-Stop Camera Trew Audio

Universal Studios Theme Park Hollywood University of Hawaii, Hilo University of Michigan Westin Bonaventure Hotel Instituto de Innovación y Transferencia de Tecnología de Nuevo Leon

#### LOGOS

#### MOTTO PICTURES

**19340 PRODUCTIONS** SHARK ISLAND INSTITUTE HHMI SUSTAINABLE FILMS **GLASSBREAKER FILMS** WAVELENGTH JULIA ROBINSON MATHEMATICS FESTIVAL REDFORD CENTER INTERNATIONAL DOCUMENTARY ASSOCIATION PANAVISION ENDCRAWL SKYWALKER SOUND INTEL ISEF PGA SUNDANCE CATALYST SUNDANCE DFP FISHBOWL FILMS

Copyright © 2018 IQ190 Productions, LLC. All rights reserved. First publication of this motion picture (sound recording and film): United States of America 2018. IQ190 Productions, LLC is the owner of the copyright in this motion picture. This motion picture is protected by the copyright laws of the United States of America and other countries. Any unauthorized duplication, copying or use of all or part of this motion picture may result in civil liability and/or criminal prosecution in accordance with applicable laws.

INVENTING TOMORROW