

# Telluride

WINTER/SPRING 2015-2016



4.95 | PRICELESS IN TELLURIDE



## *Brains on Fire*

HOUSING IN PARADISE  
"PERFECT" TELLURIDE FAMILY  
CONFESSIONS OF A HOCKEY MOM



## Sarah Holbrooke

PROFESSION: EXECUTIVE DIRECTOR AT PINHEAD INSTITUTE

## TOOL OF THE TRADE: 3D PRINTER

Pay no attention to the woman behind the curtain. It's just Sarah Holbrooke, the wizard manning the helm of Telluride's Pinhead Institute, pulling the levers that are putting science education on center stage.

It might not seem like wizardry, running a nonprofit for educational science and technology programs, but consider this: Holbrooke took the executive director position a year and a half ago; in the first five months before she started Pinhead had 1,200 kids participating, but in the first five months of 2015, they more than doubled that with 3,000. That's not a standard deviation, or an anomaly, or an unprecedented spike. That's magic.

spark to finish, from launching make-shift rockets for young kids in the summer to getting high school students placed as interns in professional research environments, Pinhead is spreading the love of science. "We're like an incubator," says Holbrooke.

Holbrooke is making sure that the love gets spread far and wide, to all the communities in the region, but she noticed that there weren't as many girls as there were boys coming through the doors and the programs. How could she hook their interest? She had an idea: Maybe the institute could get a 3D printer. Maybe the idea of making something, like crafts or jewelry, would seem less intimidating. So they got one, and the response was great. "It was fun to have these kids take their ideas and try to figure them out with math equations. We had a mechanical engineer who volunteered to help us—sometimes it's as easy as dragging and dropping on an iPad—but with the higher level things, the kids that are motivated to see the end result, they learn a lot."

Holbrooke works in a similar way to the 3D printer. She starts with an idea, connects the dots, and turns it into reality. She travels a lot—this fall she was in Washington, D.C. meeting the Deputy Director, Office of STEM (science, technology, engineering, and mathematics) and then on to Los Angeles to raise money there and to meet people at the aquarium in Long Beach, trying to make connections she can call on to place students in new internships. She cultivates the talented people at home, too, people with skills that she calls "makers" who can help guide the programs Pinhead runs here. She attracts the students who are interested, raising money for scholarships for the kids who need financial assistance, and puts all the pieces together. She seems to have boundless energy, and Pinhead has picked up her momentum. "We're adding more programs outside. We used to send out six to eight interns into high level research programs in an area they were interested in. I placed 20 kids last summer."

But the most impressive of all her creations is the way she has transformed students into scientists, kids into coders, and young people into the innovators of the future. "It's super cool. We have great programs that people really respond to, and kids really love. It's high impact, and high payoff." \*



Sarah Holbrooke is used to getting results. She has been a "producer" for many years, at CNN, the Discovery Channel, the Katie Couric show, and also of three children. But when she moved to Telluride with her family and husband David (a filmmaker and executive director of Mountainfilm in Telluride), she turned her talents in another direction: producing scientists. She had studied psychology at Wesleyan University, spending much of her time in the lab, and even had a scientific paper published and met with UNESCO as an undergrad. She loves science, so running the show at a science institute seemed like a good fit. "Being a TV producer you just need to go with the flow and make things happen," says Holbrooke. "I'm also very good at asking people for things, which has come in handy for this job—asking for money, for vacationing scientists to come talk to students, for science labs to take our interns."

Pinhead Institute offers classes in robotics and coding, puts on science camps and labs for kids, hosts visiting scholar lectures in the schools, and secures internships for students. From

## TELLURIDE FACES

Reproduction is an art. All three of the Telluride Faces in this issue have something in common—they use a specific tool to reproduce a subject, and bring it to life. Meet projectionist Layton Hebert, artist Bob Franzese, and 3D printing maven Sarah Holbrooke.