ASU faculty and students embrace their passions, creativity and curiosity to make the unknown known. By continually searching for new ways to translate their groundbreaking discoveries into accessible and meaningful information, researchers invite decision-makers and the community at large to join in their journey to apply this knowledge for the creation of a better world.
“Knowledge mobilization brings discovery to the public, puts it directly in the service of solving social and cultural problems, enriching the arts, industry and cultural discourse. It marks the link between research and change, between the academy and the public it serves.”

– Alfredo Artiles
Dean, Graduate College
After spending several stints studying endangered sea turtles along the Pacific Coast of Mexico’s Baja Peninsula when he was a conservation biology master’s student, Jesse Senko realized many of the sea turtles he was trying to track did not survive the long fishing nets that local native fishermen used to catch halibut. This unintended bycatch often included up to 16 endangered sea turtles a day, greatly impacting the entire ecosystem. Senko soon set his sights on how to solve this problem through continued doctoral research at ASU with the goal of also preserving the livelihoods of the local fishers he had come to know and respect.

“That’s what really drives the research I do. I think that’s where conservation biology often comes up short,” says postdoctoral researcher Jesse Senko. “There is too much emphasis on how to save the animal or ecosystem, and not enough on the need to inspire people and empower them to become part of the solution.”

By partnering with the National Marine Fisheries Service and exploring the social and cultural dimensions of sustainable solutions, Senko helped develop and field test a simple LED light which attaches to the net and illuminates it in the dark ocean waters, effectively cutting the unintended nighttime sea turtle bycatch by 50 percent. Better yet, the solution surprisingly increased halibut catch by 25 percent, improving the livelihoods of the fishermen and increasing the likelihood they will adopt the solution and work with Senko on refining and implementing the product widely.

Senko won the postdoctoral category of the Knowledge Mobilization Graduate Impact Awards for his dedication to working with the community to develop his research approach, which was the key to their receptiveness and collaboration on the design and implementation. His commitment to the well-being of the community that would be impacted by his solution built the necessary relationships to successfully bridge research and practice.

About the awards
In an effort to bring scientific discovery to the public to solve social problems, the ASU Graduate College introduced the Knowledge Mobilization Impact Awards in 2017. This small grant award funds master’s, doctorate and postdoctoral student projects that are designed to make their research accessible and usable to broader public audiences. Judges evaluated each of the nine finalist projects based on broad-scale intellectual significance of the topic, effective communication to a non-specialist audience, clarity and presentation delivery.

The course
GRD 791: Knowledge Mobilization Studio
Challenges students from all disciplines to experiment, innovate and design new ways to communicate research to a broader audience, including honing skills in blogging, op-ed article writing, film and performances, TED Talk-style presentations and infographics.

OPEN ACCESS
Expanding access to knowledge
In 2017, ASU became one of 70 open access universities in the U.S. that promote policies to make peer-reviewed research accessible to the public at no cost to the user.
How might we engage the public in making informed decisions about science and technology despite the highly technical nature of the topics? This is one of the questions the ASU Center for Engagement & Training in Science & Society is attempting to answer through their Participatory Technology Assessment citizen forum approach.

To inform NASA about which space missions offer greater public value, CENTSS convened a demographically representative group of 100 citizens and immersed them in asteroid science and policy. Afterward, CENTSS facilitated a guided deliberation to extract the participants’ views, opinions and priorities as they related to different space exploration options. The initiative not only provided opportunities to increase scientific literacy and policy engagement among citizens, but also expands pedagogical approaches for how to effectively engage the public in science and technology policy. The Center plans to conduct a similar citizen forum in Fall 2017 in Arizona on issues of drought and extreme heat.

CENTSS advances several initiatives which seek to dissolve the barriers between science and technology decision-makers as well as the communities and public those decisions impact. This includes partnering with museums to learn how various games, exhibits, experiences and specialized communication skills can promote conversations about the impact of science and technology on our lives, now and in the future.

TEDxASU started two years ago with the mission to serve as a conduit for visionaries from across a multitude of disciplines to share innovative ideas and inspire a broad cross section of the ASU and Phoenix communities. This year, the student-organized event, TEDxASU: Innovators, held at the Tempe Center for the Arts, brought together over 600 people to celebrate innovation in student and faculty research. The event featured 18-minute talks from 12 distinguished faculty and students who have changed the way the world looks at education, research and entrepreneurship. “The diffusion of research and knowledge is not only important for the university but for the entire community surrounding ASU — from businesses to individuals,” said Chase Harris, Business Data Analytics and Marketing Barrett student and Director of Marketing for TEDxASU. “The TEDxASU platform goes beyond the simple sharing of ideas to spark dialogue and innovation within our community. It is about taking knowledge and inspiring meaningful change as a result.”