Recognizing decision-relevant data and helping decision-makers find it

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In 2017, halfway through my Ph.D., I was eager to apply my expanding knowledge about microbial biogeochemistry to the environmental challenges facing society. Even though microbes play critical roles in so many of the environmental processes that affect human health and wellbeing, I was not sure how to make this connection happen. During a three month internship in the Critical Issues Program at the American Geosciences Institute (AGI), I found ways to turn my scientific interests into useful, findable resources for decision makers. In this presentation, I will share some of the approaches we used to engage with decision makers, and talk about some of the lessons that prepared me to continue this work on my own.

The Critical Issues Program targets local and state-level decision makers, who have traditionally received less outreach from the geoscience community than their federal counterparts or K-12 educators. To reach this dispersed audience, we used several forms of web content, including webinars, factsheets, and user-friendly map databases. For example, one piece I worked on, defining and explaining biologically-mediated mining ("biomining"), has been read more than 2,000 times and is the second hit for "biomining" on Google, demonstrating its relevance and the importance of making content discoverable by search engines.

My mentors at AGI helped me find a systematic way to develop these resources. First, differentiating "fun facts" from decision-relevant results helped me identify issues where my expertise could have an impact. Second, recognizing the distinction between teaching geosciences, something I had already been doing in school, and enabling non-scientists to use the geosciences, made it easier to tailor my communication to different audiences' needs. Using these strategies has helped make my interactions with decision makers more focused and impactful.