

COMMUNICATING YOUR SCIENCE AND STORY

A guide for the engineering biology community

Engineering biology is expanding our capabilities to address big challenges in health, climate, food, and security. However, without robust public support and federal funding for research, we may never realize its full impact. Sharing your science and personal story is more important than ever to build public trust, inspire action, and realize the field's potential. This guide offers quick, practical steps to help you get started.

START WITH “WHAT?”, “WHO?”, AND “HOW?”

Before you can connect with others, you need to define your message and goals. Answering these questions will sharpen your focus and guide everything that follows:

WHAT?

Think about the core message you want to share, such as:

- Showcasing how research benefits everyday life
- Highlighting the local impact of biotechnology and biomanufacturing, such as creating jobs
- Protecting funding for engineering biology research at universities
- Raising public awareness about engineering biology, or dispelling myths about its safety
- Expanding support for STEM education, or inspiring future scientists and engineers

WHO?

Consider your intended audience, which could include:

- Congress, including your Senators and Representatives
- Executive Branch agencies such as the NSF, USDA, or NIH
- Specific groups like environmental advocates or educators
- A segment of the public with particular concerns you want to inform or address
- A given demographic, such as young voters, rural communities, or parents
- Your local community
- Your own family and personal networks

HOW?

Here are a few methods for getting your message out:

- Writing an OpEd for local media, including town or University newspapers
- Writing an OpEd for a national media outlet
- Appearing on local radio or television news
- Connecting with journalists (or other writers) to tell your story
- Meeting with elected officials or their staffers
- Outreach and engagement in your local community
- Social media

PUT IT ALL TOGETHER TO CRAFT YOUR PLAN

Once you've thought through your message, audience, and method, you can put them together into an effective story or action. Here are two examples:

- You are working on research critical to public health and want your **local community** to advocate for federal support. You might **write an OpEd in a local newspaper or speak at a community event, showing how your work connects directly to health outcomes in their lives.**
- You want to make the case for sustaining U.S. leadership in engineering biology and reach your **Congressional representatives** to **highlight the need for continued research investment.** You **schedule a meeting with a Congressional staffer** to explain how frozen or cut funding threatens innovation and future competitiveness.

TELL YOUR STORY EFFECTIVELY

A strong, personal message is a strong story. Whether you are writing an OpEd, meeting with an elected official, or appearing on local media, you want to tell a clear, compelling story that connects with your audience. Good stories (and good pitches) are short, personal, and easy to understand. When building your message, focus on the hook, problem, solution, and impact.

HOOK

Start with a striking fact, vivid image, or personal story to **grab attention**.

PROBLEM

Describe the **real-world challenge** your work addresses.

SOLUTION

Explain how your research contributes to **solving the problem**.

IMPACT

Show **why it matters now**, and the future you are working toward.

Here are a few additional tips to further strengthen your story:

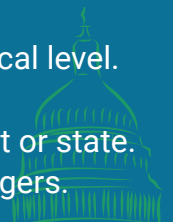
- **Keep it simple** by avoiding jargon and speaking plainly so your audience can connect easily.
- **Make it personal** through linking your science to the audience's needs or your own motivations.
- **Show genuine enthusiasm** to build trust and make your work feel more relatable.
- **Stay confident** and avoid caveats that downplay your contribution.

TURN YOUR MESSAGE INTO ACTION

After shaping a clear and compelling story, the next step is making sure it reaches the right audience in the right way. Here are some suggestions for effective communication across different formats.

TALKING TO ELECTED OFFICIALS:

- Find and focus on the officials who represent you, whether at the national, state, or local level.
- Research what committees they serve on to tailor your message.
- Keep it local by highlighting how research and engineering biology impact your district or state.
- Provide something tangible to remember your message, such as EBRC's state one-pagers.



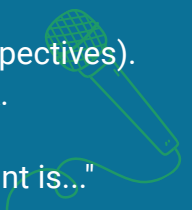
WRITING AN OP-ED:

- Local newspapers, community newsletters, or university publications are excellent outlets. They are often more accessible and have strong community reach.
- Tie your message to a current event or issue to make it timely and newsworthy.
- Focus on one clear argument and connect it to local impacts whenever possible.
- End with a clear call to action on what you want readers or policymakers to do after reading.
- Follow the outlet's submission guidelines carefully, and be ready to pitch your idea briefly if required.



APPEARING ON THE RADIO OR TELEVISION:

- Look for local opportunities like "community perspectives" segments (eg. KQED Perspectives).
- Pitch producers or reporters directly if you liked their previous work, flattery can work.
- Prepare a few key points. Remember, interviews are short, so be clear and personal.
- It's okay to pause, or say, "That's a great question." Redirect if needed: "The bigger point is..."



ADDITIONAL RESOURCES

The Op-Ed Project
AAAS Take Action Toolkit
Your university's Government Relations Office