

Open Hardware Creators in Academia Fellowship

Open Source Hardware in Academia FAQ

How do you convince higher-ups that you can have a successful career with open source hardware?

Negotiate from a position of strength. Point to the success of free and open source software. Talk about the significant industrial support. Show new business models. Talk about more reads and more citations. Point to this program for bringing in money. Point to more uptake in the community.

How can open source hardware help you as a faculty member?

When you are building your lab, using open source hardware will save you money, stretching your startup package further. Then, every time you would normally submit a paper, write two (1 normal and 1 open source hardware). This will boost your productivity and pull in more citations.





How do you balance the maintenance of open source hardware projects with academic responsibilities?

In the project documentation, describe the level of support/maintenance that is being offered with the project. If significant support or maintenance is needed, you may need to hire a research assistant to do the work. Grants can help with this.

Can I certify a project before it is publicly launched, like in a Journal?

Yes. You will need to provide links to the final documentation that you will make available at launch. OSHWA will then review your project and, if appropriate, grant you provisional certification. Once your project is live OSHWA will review the publicly available documentation in order to ensure that it matches the requirements. If the publicly available documentation matches the documentation used during the application process, the provisional certification will become formal certification. Email certification@oshwa.org for details.

Where should I publish my results?

Publish in open-access journals, if possible.

These include:

- Journal of Open Hardware: Platinum Open Access, no article processing charge (APC)
- PLOS ONE: Gold Open Access, APC=\$1,931 USD
- HardwareX: Gold Open Access, APC=\$500 USD
- Designs: Gold Open Access, APC=1400 CHF
- Nature Methods: Open Access if you pay an open access fee

Your university may be able to pay open access fees, especially if you have a grant supporting your project. You can also get APC waivers and often special issues waive the APC fee.

How can I involve my students in designing open source hardware?

Some of your current hardware might require expensive proprietary software solutions. By using open source software alternatives, for example, using KiCAD for PCB layout software, students will be able to use it both at school and at home, allowing them to contribute without any constraints.

How can I engage with a company that offers proprietary hardware to open up their ecosystem for research/open source hardware solutions?

Offer evidence that open source hardware can help them broaden their audience, reach new audiences and learn from a community of innovators. Show them the <u>collection of compelling case studies</u> available at the OSHWA site.

How can I make my work more visible outside academia to grow a larger community around the project?

Focus on the first steps that other people can take to use your projects. Provide a learning path to engage them, providing clear instructions that include text and images.

Offer this introductory content on the channels that your potential users might be using at the moment, like Facebook, TikTok, or posters around the city. When you get new users, verify what they use to learn about your project.