The First Steps to Starting a LIGHTS Program or Similar Lab Equipment Donation Program on a College Campus

1. Find a "Home" for the Program on Your Campus

Potential "Homes": College of Science, College of Engineering, Sustainability Office

Prepare an informational sheet or brochure (an electronic version is sufficient if funds are unavailable for hard copies) outlining the mission of the donation program, who can donate, and who can receive instrumentation. A basic outline of the program cycle is helpful for others to see how it will be run.
Pitch the program and present the associated information to the Department Chair or Office Directors and then move up the administrative ranks once each level approves the program.

2. Gather Resources

ND LIGHTS is a sustainable initiative that relies on donations from campus labs. Undergraduate students develop high school-level experiments for the donated equipment in a College of Science Community-Based Learning (CBL) course designated to support the program.
If your program home has science or engineering interns who can develop experiments, that development structure is an option, as well. Feel free to use our experiments listed under "Experiment Portfolio" for basic high school lab equipment. Otherwise, you will need to have a faculty program representative willing to propose and teach the lab course in which students adapt experiments to utilize the donated equipment from that donation cycle.

For more information on a potential lab course structure, please contact Michelle Joyce at mjoyce@nd.edu.

For ND LIGHTS, materials and reagents needed for an entire high school class to perform the lab are donated by our campus scientific supplier, VWR.
Ask your preferred campus scientific supplier if their company would like to partner with you in supplying materials. The partnership provides essential items to the recipient school and gives the company visibility by placing their products in the schools.

3. Determine the Paperwork Process to Approve Instrumentation for Donation

Contact your campus Surplus office to determine what paperwork is necessary to show that the instrumentation is surplus. The next step is to take the instrument's donor contact information and serial number to the appropriate Accounting and Research offices to (1) determine how to process items as charitable donations and (2) determine if there is any guideline for or against donation from the granting agency if the instrumentation was purchased through external funds.
Once the paperwork flow for approval is determined, designate a Program point of contact who will initiate and track the approval paperwork for each donated item. We have an ND LIGHTS donation form that gets forwarded to each approving office and then sent back to us.

4. **Get the Word Out and Acquire Equipment**

Once the program has been approved on your campus, let the faculty, lab managers, and lab instructors know that you are looking to repurpose their surplus equipment. ***Present the program at faculty meetings, send emails to lab PIs and managers, and talk with colleagues to acquire donations.*** There is an incentive to the PI: once they donate, they are sent a letter on the program/university letterhead describing their donation and how they are contributing to this broader impacts initiative. We tell our instrumentation donors that they are welcome to attach the electronic letter to a grant proposal.

5. **Develop Experiments for the High School-Level Equipment**

Some donated items are advanced lab instruments, such as gas chromatographs and sequencers, and are better suited for colleges. Other donated items are basic, such as flasks, balances, and pH meters. Such items are good teaching tools for high schools. ND LIGHTS often groups multiple basic items together in a package with a corresponding experiment for the high school.

6. **Post Donations, Accept Statements of Need, and Announce Recipients**

The donations items and packages are posted online and sent to schools via email, and statements of need from resource-limited schools are accepted and reviewed to determine recipients.

7. **Gift the College-Level Equipment and the High School-Level Equipment**

The transportation of instrumentation and materials is the responsibility of the recipient. ND LIGHTS requires that the high school teacher recipients come to campus to receive training on the instrumentation and experiment to enable them to integrate it into their science curriculum with ease. ND LIGHTS incorporates undergraduate students with the "Instrumentation and Science Education" course in which they develop experiments for the equipment. There are two opportunities for the course students to present their work: first, they describe their experiments to VWR scientific supplier representatives and second, they perform the experiments with the recipient teachers in the training session.

It is helpful to start the program with a community-engaged cohort of faculty and staff who believe in the mission of such a donation program and who can connect with the necessary groups on campus to facilitate donations.

Are you ready to begin? Do you want to help "illuminate young minds" by repurposing surplus laboratory instrumentation and gifting it to science programs at the high school and college levels?