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# Adult Community Science Outreach

## **OVERVIEW**

## **Problem**

Community outreach and inclusion is a valuable component of scientific research. Effective and inclusive scientific communication is necessary for applying for research funding, educating the public, and sharing your work as a graduate student. However, outreach efforts are generally geared towards children and adolescents rather than adults. This restricts the level and topic of information disseminated, and discourages adults not associated with the K-12 education system. It is equally important to engage adults in general as they are voters and consumers who are impacted by scientific research and their support is ultimately needed to ensure high levels of scientific research funding.

#### **Solution**

The main goal is the establishment of a graduate student organization focused on increasing the number of community outreach events geared towards engaging an adult audience. After assessing general interest in this program, these events could be in the form of citizen science workshops, research talks with Q&A panels, science-themed movie night discussions, or weekend research tours for community groups. Collaborations with other Nashville research institutions (public and private) and community organizations will bolster popularity, visibility of the research fields, and overall reach of the program. Support from the Vanderbilt administration in terms of funding, promotion, and expertise will broaden the impact by drawing out audiences who may otherwise be skeptical of student run events. In addition, Endowment funding will make it more feasible to hold events at off-campus locations due to the higher costs of securing event spaces.

# **IMPACT**

The primary goal of this proposal is to increase the community's awareness of research taking place in Nashville, and how research in this city is impacted on a national level. Outreach geared towards an adult audience allows students to present more advanced information and address more controversial topics than is otherwise available at this time. This is an opportunity not only for graduate students to work on science communication but also to make a real impact about the value of scientific research and funding. In light of the current political environment and misinformation, educating the public can translate to increased support for research and development. Students wishing to pursue a science career outside of research may also use this chance to network with companies and science advocacy groups. Networking will improve student abilities in describing their research with non-scientists. Creating this dialogue between the general population and the scientific research community has beneficial effects for everyone involved.

# **GOALS**

- 1. Form committee of graduate students and post-docs for promoting general public outreach, with the main focus on higher level discourse and interaction with the adult population
- 2. Establish collaborations with other research institutions in Nashville (ex: Fisk-Meharry, Sarah Cannon), regional chapters of science advocacy groups (ex: ACS, APSA, AAAS), and science-oriented organizations (ex: Adventure Science Center, Nashville Public Libraries)
- 3. Create monthly events based on general interest (ex: talks, tours, tutorials, open discussions) at venues across Nashville
- 4. Organize a larger scale "science fair" type annual event geared towards all ages to promote research activities in general

## **IMPLEMENTATION**

A dedicated organizing committee, comprised of graduate students and post-docs along with key faculty advisors, will be necessary to organize events. Existing graduate student groups may be interested in joining this effort. In particular, Vanderbilt Women in Science & Engineering (VU-WiSE) volunteers already teach general science classes at Room in the Inn, and Science Club Nashville hosts monthly talks with faculty speakers. One goal of the current proposal is to bring together existing groups and events in a more coordinated effort.

The organizing group can conduct an initial survey to gauge general community interest. Reaching out to local groups through social media platforms and advertising via local libraries can generate initial interest. The committee can then reach out to student groups from other universities and community organizations for additional volunteers. Volunteers will have the opportunity to network with local research companies as well. Initial organization and proposed events can be completed in one to two months and with minimal cost.

Organizing regular events will become the main duties of the joint Vanderbilt-community group. This will require planning time, meeting space, speakers, advertising, and materials for each event. Ideally these events would occur both on and off campus to encourage scientific discussions within community atmospheres and neighborhood circles. Depending on gauged interest and volunteer availability, different subgroups can organize specific types of events and meet as often as needed. A long term goal would be for independent groups of community members and Vanderbilt students who organize events on a regular basis. The overarching outreach committee duties will be passed on with democratic elections.

The larger scale annual event would require the most planning and funding. This goal will likely not be approached until there is significant involvement in both volunteer groups and monthly events. Once there is well-established community engagement, there are a number of cities and counties with science-fair type events that can be modelled. A local example is the annual Vanderbilt Brain Institute Brain Blast. This event would be gauged towards a family audience but with specific events to encourage adults in general to participate. This end goal will benefit the most from the available of endowment funds to supplement limited funding from student activity fees.

# **ESTIMATED COST**

Primary costs would be involved in organizing accommodations for smaller monthly and larger annual events. Depending on availability of collaborations with corporate or community partners, cost to organize events can vary significantly. Event scales can be changed appropriately with the availability of funding. Maximum estimated costs may be similar to existing outreach events such as the aforementioned Brain Blast. Student activity fee funding is generally limited and hence will be primarily useful for initial organization and smaller scale, on-campus events.