

1. Objectives/aims

The 2022 NAPPN annual conference leverages the successes of the previous Phenome conference series (2016-2020) and the virtual 2021 NAPPN annual conference. The conference will assemble a range of sciences and technologies in engineering, agronomy, ecology, and plant systems biology from among academic, federal and commercial entities to address the plant-environment interface.

A key goal of the conference is to invite and support a new generation of scientists from diverse scientific and cultural backgrounds into this field in hopes that participating in these types of exchanges early in their careers will accelerate the rate of advance by populating the field with innovative thinkers.

As part of our effort to diversify the phenomics research community, we request funding from AG2PI to cover the costs of participation for minority participants from minority serving institutions (MSIs) with a particular focus on participants from Historically Black Colleges and Universities (HBCUs). This funding will cover registration and travel support.

We have announced the conference and intent to provide support through emails and direct contact with HBCU faculty and administrators. Three faculty and three graduate students have applied for funding, five of whom have submitted abstracts or conference proceedings. Most applicant also provided the names of at least one student or advisor who would be interested in attending.

2. Furthering the aims of the AG2PI

The proposed participant support directly furthers the AG2PI aim of building the agricultural phenotyping community. Specifically, it will address the Community Activities / Working Groups call for proposals by increasing representation of participants from HBCUs at the NAPPN conference, which is closely aligned with AG2PI's mission. At the requested funding level, AG2PI will be eligible for the benefits of diamond level sponsorship described on the conference website <https://www.plantphenotyping.org/conference-sponsors>.

3. Expected outcomes & deliverables The requested travel support will be preferentially allocated to encourage participation by faculty / student pairs. We expect to support up to eight participants. Each participant will also be paired with one or more hosts. Hosts will be selected from the conference program committee and NAPPN board. Our hope is to extend the network of plant phenomics researchers to include more participants from HBCUs, and to identify barriers to participation that can be addressed by future meetings. The conference will provide an opportunity for these participants to learn about the field, attend workshops and community meetings, and find new colleagues for future collaborations. During and after the conference, participants and hosts will collaborate on a white paper describing how scientific conferences relevant to AG2PI can be more inclusive of diverse audiences, specifically identifying opportunities to expand participation in the future. We will publish this paper and present our findings to the conference organizers, and work with AG2PI to share our conclusions more broadly.

4. Qualifications of the project team

Jennifer Clarke is the Chair of NAPPN, Alexander Bucksch is the NAPPN 2022 Conference Chair; David LeBauer is on the Conference Scientific Program Committee. All three have attended and helped organize past NAPPN (and Phenome) conferences and actively conduct research and contribute to building the community.

5. Proposal timeline

The conference will be held from February 22-25 in Athens Georgia. As soon as funding is available, applicants will be contacted to confirm their interest and arrange travel.

6. Engaging AG2P scientific communities & underrepresented groups

Each new participant will be partnered with a current active member in the NAPPN community who shares domain expertise. These new participants will gain exposure to AG2PI research and the AG2PI seed grant opportunity.