Proposal for revival of the Phytochemistry section at BSA

Phytochemistry is a broad field encompassing the molecular biology, genetics, physiology, ecology, evolution, and applications of plant-associated compounds and their biosynthetic pathways. This area has become an integral part of organismal studies in plant science, as plant chemical diversity plays a central role in ecology and evolution. Moreover, advances in metabolomics and genomics have allowed plant biochemistry to expand into many non-model species. Many of these advances have come in the last decade, during which time the Phytochemistry section of BSA has been inactive. We propose to reinstate the Phytochemistry section to recognize and support the growth in biochemical research across the diversity of plant lineages. The various existing sections of BSA house many areas of expertise that can synergistically function with a new, rejuvenated phytochemistry section. We are especially excited about the cross-pollination of ideas that would be made possible when a greater number of phytochemists attend the BSA meetings, interact with students and faculty from existing sections, and help generate innovative research projects and grant proposal ideas. We thus strongly believe that a revived Phytochemistry section would be timely and very useful for the botanical community moving forward.

We imagine the new Phytochemistry section as a home for a broad array of researchers interested in plant physiology, biochemistry, biochemical genomics, metabolic evolution, biotic interactions, chemical ecology and medical ethnobotany. Having this section at BSA would not only provide a home to many existing society members and entice more phytochemists to join BSA, but also provide networking and recognition opportunities for students working in this field. Events with sponsors and invited speakers can be held to increase awareness about future career opportunities for phytochemists, enhancing student career development. Phytochemistry is a popular area of research in many developing countries with long-standing traditional medicinal systems, thus, this section can serve as a vehicle to improve representation across the Americas at the Botany meeting. The ability to endorse symposia/colloquia and organize workshops of sectional interest will help increase the visibility of phytochemistry research, improve training, as well as demonstrate integration with existing sections at BSA.

The field of phytochemistry is recognized by other societies such as the Phytochemical Society of North America, American Society of Pharmacognosy, Ecological Society of America, and the American Society of Plant Biologists. However, we believe that the diverse sectional ecosystem at BSA provides some unique advantages that do not exist elsewhere, especially at the interface of genetics, ecology, taxonomy and evolution. A rejuvenation of the BSA Phytochemistry section will thus help to advance the field by connecting biochemists with the broader botanical community.

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