NYBG-led Scientists Foresee a “Profound Impact” from the COVID-19 Pandemic on Research about Relationships between Local Communities and Their Environment

In a New *Nature Plants* Article, Researchers from 17 Countries Analyze Likely Impacts on Local Populations, Their Future Interactions with Scientists, and Shifts in Research Priorities

This chart shows the three themes that emerged in the analyses of 29 ethnobiologists regarding the impact of COVID-19 on their field (center circle) and the opportunities (left column) and barriers (right column) that may arise for each theme.

**Bronx, NY**—In an article published online today by the journal *Nature Plants*, researchers from 17 countries led by a New York Botanical Garden scientist conclude that the COVID-19 pandemic is likely to “have a profound impact” on the field of ethnobiology, the study of the relationships between people and their environment, especially their knowledge and traditional uses of plants and animals.

Representing a wide spectrum of their field, the 29 ethnobiologists who contributed to the article considered the likely impact of the pandemic on local communities and their traditional knowledge, livelihoods, use, or management of natural resources; on future interactions between researchers and local communities; and on ethnobiology’s research priorities.
Regarding the latter, lead author Ina Vandebroek, Ph.D., the Matthew Calbraith Perry Associate Curator of Economic Botany at the Botanical Garden, writes that a “revolution is needed in how we communicate and collaborate.”

Dr. Vandebroek, who studies the use of plants in traditional healing practices in several Caribbean countries and in Caribbean immigrant communities in New York City, calls for scientific facts and lessons learned from ethnobiological research to be integrated into public discourse to counter the spread of misinformation. “Ethnobiologists are doing a great job of communicating to their peers,” she writes in the article, titled “Reshaping the future of ethnobiology research after the COVID-19 pandemic.” “Now they will also have to sharpen their audiovisual communication skills to reach those outside the scientific community more effectively and more often.”

Ethnobiologists, whose research is typically multidisciplinary and involves collaborations with local communities, should also strive to break down barriers in funding between the natural and social sciences and across geopolitical boundaries, which “significantly hamper joint ethnobiology research in today’s globalized world,” Dr. Vandebroek writes. Making collaborations with communities more visible would make it possible for community voices to be heard “instead of being interpreted by scientists,” she adds.

“Breaking down these walls will require coordinated action,” she concludes. “If the COVID-19 crisis is showing us that we are all connected, we should use this as an opportunity to communicate and collaborate more intensely than ever.”

The authors note that much of the research in ethnobiology is relevant to the conservation of biological and cultural diversity and directly relates to sustainability. In the wake of the COVID-19 pandemic, they write that it will be critical to call wider public attention to the various perspectives presented in the article because of the discipline’s stake in the conservation and sustainable and ethical use of biological and cultural diversity.

In addition to Dr. Vandebroek, contributors to the article included ethnobiologists at Yale and Emory universities and the University of Florida in the United States as well as researchers in Argentina, Belgium, Brazil, Canada, Italy, Jamaica, Japan, the Netherlands, South Africa, and Turkey, among other countries.

“Reshaping the future of ethnobiology research after the COVID-19 pandemic” is available at the following link: https://www.nature.com/articles/s41477-020-0691-6

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