

## CCSIP Collaborative Event: Harnessing Canada-California Expertise in Biodiversity to Better Understand and Manage our Ecosystem

The earth is home to tens of millions of species that play a critical role in our ecosystem—from agricultural lands to the rainforests, deserts, oceans and mountain ranges. They work together to create a habitat for plants and animals, sustain us with food and drinking water, and provide us with many natural medicines and therapies.

As the world aims to address sustainability issues such as global warming, it is essential to understand how these organisms function and respond to changes in our environment. The challenge: to date, only about 20 percent of global biodiversity is identified.

With support from CCSIP, scientists from the University of California Berkeley and Canadensys (a biodiversity consortium that is led by the Université de Montréal, and composed of 11 Canadian universities and five botanical gardens) will create novel ways to gather, share and manage biodiversity data—and put this information to work to improve environmental stewardship.

The bilateral team will pool their expertise, and host two workshops to explore the publication of biodiversity data that can readily be used by scientists. They will also investigate how to better leverage biodiversity informatics (the application of computers to biodiversity data); deliver related training in database management and data analysis tools; and develop a roadmap to stimulate broader global collaboration.

Longer-term, this Canada-California collaboration could create a highly accessible collection of biodiversity data that supports science, sustainability assessments and improved decision-making on issues such as climate change, environmental management and related policy. It could also help to develop the biodiversity informatics expertise required by companies in Canada and California.

