# **Be Connected** to the World Around You.

Discover the Connections at UC Berkeley's College of Natural Resources.

### Biology, Ecology

There are more than 25,000 known species of bees in the world. Bees are considered "bio-indicators," meaning the health of their populations directly effects the planet's biodiversity.

#### **Environmental Economics**

California agriculture reaps up to \$2.4 billion per year in economic value from wild bee species that serve the critical function of pollinating crops.

Honeybees host more than 50 types of microbes. Researchers are using next-generation sequencing technologies to identify and mitigate microbes that carry disease.

**Big Data** 

### **Human Health**

Nutrition,

You can thank pollinators, including bees, flies, beetles, and hummingbirds for one out of three bites of food, and critical micronutrients like vitamins A, C, and E.

#### Sustainable Agriculture

European honeybees, imported to help pollinate U.S. crops, are suffering from colony collapse disorder, spurring research into farming practices that attract native pollinators.

### Toxicology, **Public Health**

Understanding the impacts of pesticides on bee and human health can influence farming ecosystems, farmworkers, and their communities.

## Politics,

Restrictions on pesticides and allocation of land for restoration work are some of the policy changes being investigated to address colony collapse

disorder.

### **Public Policy**

### Water, Food, **Climate Change**

Finding more sustainable irrigation and other farming practices can make the nation's food supply more resilient to the increased droughts expected with climate change.

See the bigger picture. Make a better world.

Sources include UC Berkeley's Kremen Lab publications; "Entomology: The bee-all and end-all, Nature, 21 May 2015; ibra.org.uk; Bees and Biodiversity Project; and Breakthroughs Magazine.

### Microbial Biology, Virology

Understanding the key threats to bee populations—including disease-carrying microbes and parasites—is critical to preserving bee populations.

### Social Sciences, **Development**

Introducing modern frame beehives in Africa has aided the economic development of women, who'd previously been excluded from the traditional practice of tree-climbing honey collection.

# What are the **biggest issues** facing humankind today?

Find solutions with a major at UC Berkeley's College of Natural Resources.

Conservation & Resource Studies • Environmental Economics & Policy • Environmental Sciences • Forestry & Natural Resources Genetics & Plant Biology • Microbial Biology • Molecular Environmental Biology • Nutritional Sciences & Toxicology • Society & Environment

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