

# AIM-UP!

## A Research Coordinating Network to Increase the Use of Museum Collections in Undergraduate Education

E. A. Lacey<sup>1</sup>, C. C. Cicero<sup>1</sup>, J. A. Cook<sup>2</sup>, S. Ickert-Bond<sup>3</sup>, S. V. Edwards<sup>4</sup>

<sup>1</sup> MVZ, University of California, Berkeley; <sup>2</sup> MSB, University of New Mexico, <sup>3</sup> UAM, University of Alaska, Fairbanks; <sup>4</sup> MCZ, Harvard University

### Why collections?

Natural history collections are invaluable resources for undergraduate education. Such collections allow students to explore organismal diversity directly through examination of specimens and associated data. With the increasing availability of online specimen and ancillary data, natural history specimens can also serve as the foundation for instructional exercises at institutions lacking physical collections.

### The challenge

Few people outside of museums are aware of the educational value of collections. This includes students and instructors at our home institutions: a recent survey of ~ 100 beginning undergraduates at UC Berkeley revealed that > 70% were unaware that Berkeley has a natural history museum and that < 10% had visited that museum. Clearly, a significant challenge is to inform students and instructors about the potential role of collections in undergraduate research.



### AIM-UP! mission

We are an NSF-funded research coordinating network (RCN) developed to increase the use of natural history collections in undergraduate research. Specific goals of the network include:

1. Training undergraduates in museum-based research.
2. Developing instructional tools based on freely-accessible online museum data bases.
3. Introducing educators at non-museum institutions to the instructional power of museum collections.
4. Increasing public awareness of the educational importance of natural history collections.

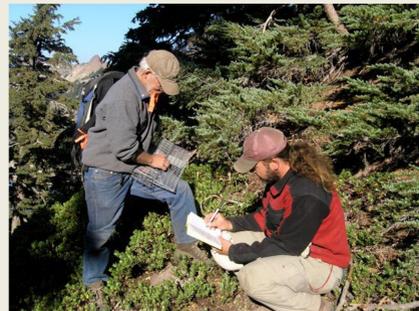
### AIM-UP! activities

The RCN is engaged in multiple activities aimed at increasing the use of natural history collections in undergrad education. These include:

1. Annual interactive online seminar
2. Development of educational modules
3. Annual all-participants workshop
4. Summer student "demo" workshop

### AIM-UP! themes

Each year, the RCN focuses on a specific conceptual theme that can be explored through the use of natural history collections. These themes are (1) integrated inventories, (2) decoding diversity, (3) generating genotypes, (4) fast forward (climate change) and (5) coevolving communities.



1<sup>st</sup> annual RCN workshop, Santa Fe, NM  
15-17 October 2011



"...collections are the foundation for research on some of the fundamental phenomena of biological science: ecology, climate change, biogeography, behavior, agriculture, and culture. Natural history collections together form a huge library of scientific data... provide clues to patterns of the past and present and to predictions of future change...."

*Excerpted from Keith S. Thomson (2005) "Natural History Museum Collections in the 21<sup>st</sup> Century"*

For more information, please visit [www.aim-up.org](http://www.aim-up.org)