

Curation of Terrestrial Scientific Cores, Samples and Collections

Workshop hosted by University of Texas
Houston Research Center

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A Geochronology Perspective

- Current pathways for dating samples
 - Geochronologist collects samples and dates them
 - Geochronologist receives samples from a collaborator who collected them
 - Geochronologist or collaborator obtains samples from a third party, who may become a collaborator
 - Etc- it can get complicated

Do existing mechanisms work?

- Sample material not always available for (highly desirable) replication or application of new methods due to
 - Insufficient material available, e.g. P/T fullerenes
 - Proprietary attitude (*my* samples)- how serious is this?
 - Inadequate curation practices, i.e. samples get lost upon retirements, etc.

Do existing mechanisms work?

- Often dependent on collaborative relationships which may limit
 - accessibility
 - dissemination of results

Do existing mechanisms work?

- There is room for improvement
- In fact, *huge* scientific benefits would be realized if all researchers had access to all samples that were ever collected
- Is a partial approach to this ideal feasible and cost-effective?

Two-pronged issue

- Move existing collections into public domain
- Stimulate future collections with such goals in mind
 - Incentives for PI's
 - Comprehensive attribution requirements

Incentives to PI's

- Funding support for marginal costs of additional sampling, transportation and documentation
- Provision for peer/panel review to reward community service, *but must reflect intrinsic value of the samples*

For example

CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW

<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.A)	<input type="checkbox"/> HUMAN SUBJECTS (GPG II.C.11) Exemption Subsection _____ or IRB App. Date _____
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C)	<input type="checkbox"/> INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.9)
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.B, II.C.6)	_____
<input type="checkbox"/> HISTORIC PLACES (GPG II.C.9)	<input type="checkbox"/> HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.E.1)
<input type="checkbox"/> SMALL GRANT FOR EXPLOR. RESEARCH (SGER) (GPG II.C.11)	
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.C.11) IACUC App. Date _____	
<input checked="" type="checkbox"/> SAMPLING FOR ARCHIVAL PURPOSES	

Which would then require submission of a standardized form specifying the sampling protocol, etc.

Could help but not hinder fundworthiness based on science

Issues

- When would samples be archived-grace period per ODP?
- Ensuring that attribution captures as much relevant information as possible, e.g. for cosmogenic, paleomagnetic studies
- Who would police?
- Process for distribution? Proposals?
- Funding