

Windows on Research: A University Museum Practitioner's Approach to Public Understanding of Science

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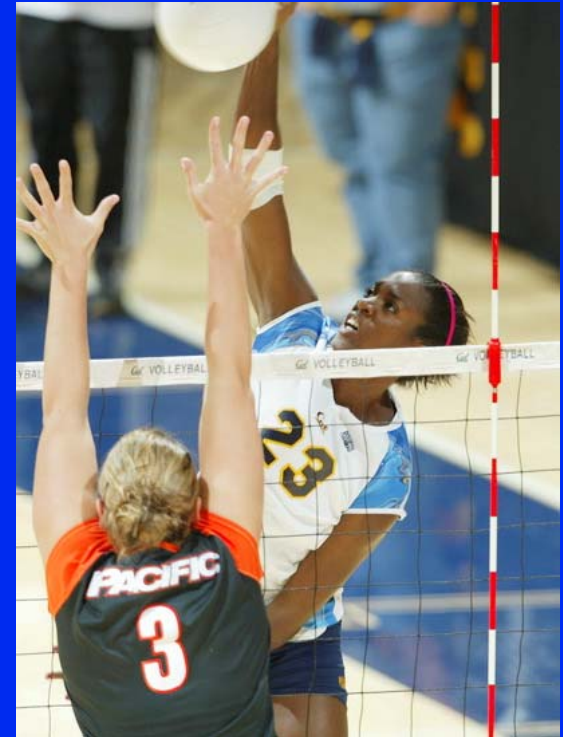
Presented to the National Taiwan University
Conference on University Museums
November 2008

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University of California, Berkeley

University Public Service

- Community Outreach
- Public Affairs
- Recruitment



- Athletics
- Arts

University Museums--Windows to Research

兒童版 English

| 首頁 | 博物館群 | 戶外導覽 | 特展館 | 影音館 | 遊戲廳 | 博物藝廊 | 下載區 | 網站地圖 | 預約導覽 | 典藏庫 | 校史Blog |

最新消息

響應愛護地球-節能減碳活動-贈送樹苗及花苗及杯墊葉拓免費傳授

歡迎參加臺大博物館群定時導覽

『檔案vs.博物館』研習講座活動已額滿

more

紀念品展售

本日精品



臺大校園飛機



辛亥路二段

辛亥路三段

新體育館

醉月湖

體育館

運動場

農藝陳列館

人類學系標本陳列室

校史館

活動中心

圖書館

校門

植物標本館

物理文物廳

傅鐘

舟山路

生態池

生命科學院

動物博物館

地質標本館

地質系

第三活動中心

檔案展示室

基隆路四段

昆蟲標本室

昆蟲系

臺大之美 開放時間



昆蟲標本室



歡迎光臨 臺灣大學博物館群



臺大博物館群合作發展計畫者計有九處，分別為臺大校史館、人類學系標本陳列室、地質標本館、物理文物廳、昆蟲標本室、臺大農藝陳列館、植物標本館、動物博物館，以及檔案展示室等館室，分散於校園各處。

University Museum Governance

- Science Departments
- Provosts for Research
- Schools of Education
- Miscellaneous reporting lines--
Lawrence Hall of Science reports to the
Student Affairs Vice Chancellor

The Berkeley Natural History Museums

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Jepson
Herbarium

Botanical Garden

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Phoebe Hearst Museum of Anthropology

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Why a Science Museum

- Public trust in science centers and museums
- Increase public understanding of basic science
- Enhance public competence on societal issues where science understanding is critical

Science Centers Need to Change, From Being Nice to Necessary

“Proactively address critical societal issues
locally and globally—where science
explanations and public understanding are
essential.”

--Association of Science
Technology Centers,
Key Strategic Priority, October 2008

Why Do People Go to Museums?

- They want to! 290 million visitors worldwide go to science centers and museums
- Museums are a social activity--people like to learn together
- Museums offer authentic, memorable experiences

Scientists and Museum Professionals

- Exhibition and program development
- Lectures
- Special events
- Science cafés
- Volunteers
- Expert science reviewers

Informal Science Education, Museums 101

- NOT the formal classroom
- Voluntary and often socially driven
- Must be engaging
- Field of research of learning in informal settings is growing--National Science Foundation's *Center for Advancement of Informal Science Education* at www.insci.org

Effective Collaborations

- Goals for projects aligned
- Audience-centered
- Investment of resources from scientist and museum--time and money
- Funding
- Measuring results--evaluation

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Innovation gallery
showcases student
work, e.g. the
CityCar

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An existing
culture of
faculty
engagement,
e.g. science
cafés

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<http://mit.edu/museum>

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Paleontology curator Jack Horner
envisioned the hidden collections
as “jewels for display.”

www.museumoftherockies.org

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“...to inspire and foster
learning of science and
mathematics for all.”

An organized research
unit of UC Berkeley

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More than a Museum:

**Teacher Professional
Development**

**Curriculum Development
and Implementation**

Technology Innovation

**Mathematics Excellence and
Equity**

**Research, Evaluation, and
Assessment**



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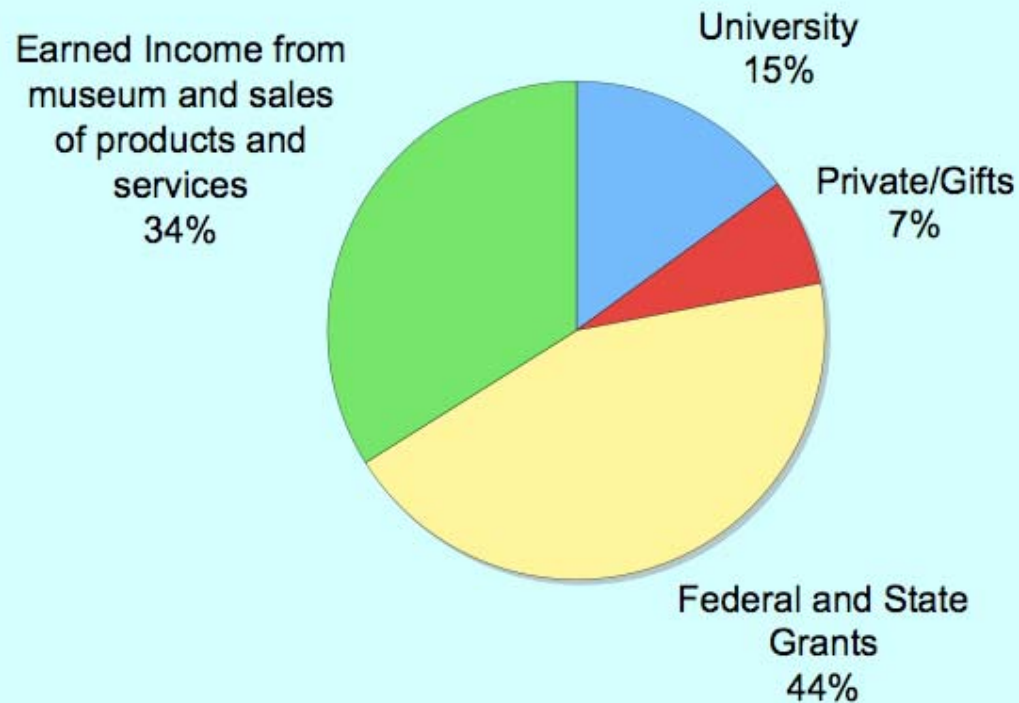
Exemplary LHS Curriculum Products
Used by more than 20% of US K-12 students



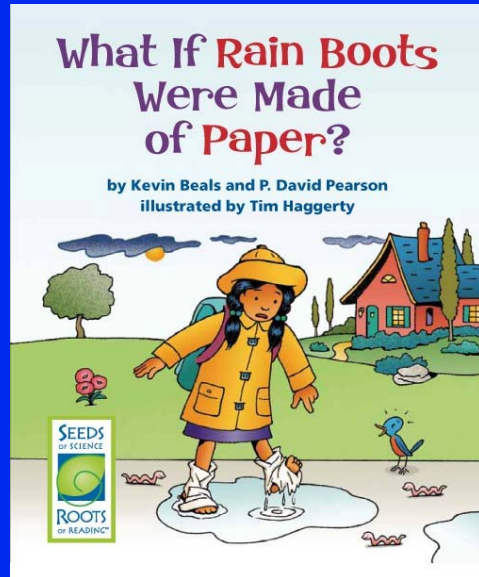
20,000 teachers
acquire new
knowledge and skills
through LHS
programs each year



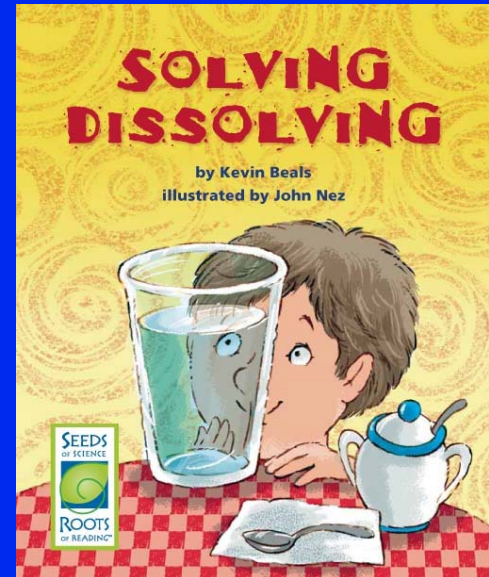
Funding Sources, Lawrence Hall of Science



Seeds of Science, Roots of Reading



Readers for
grades 2-5



Increase both science competency and reading literacy,
Co-Investigators from LHS and School of Education



Forces That Shape
the Bay

NSF and Private
Funds

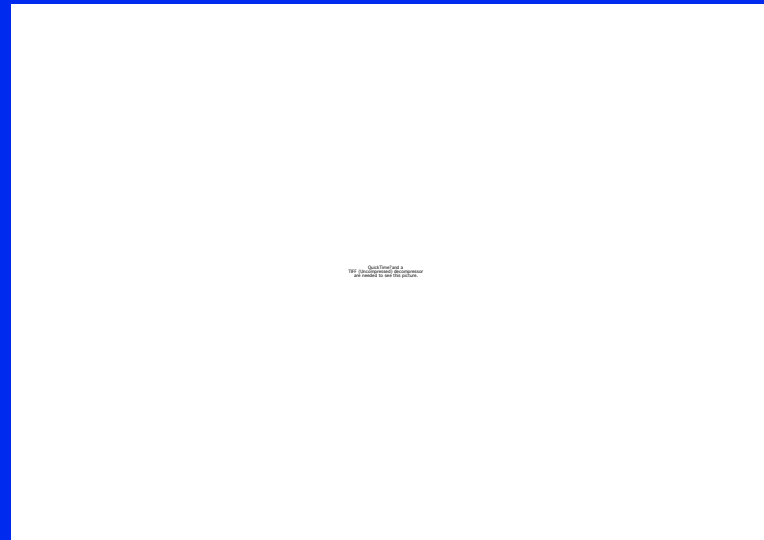


www.nanozone.org

The *nano-zone*:
Physical and
web
exhibits


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Natural Nanotechnology




A gecko climbing wall based on
the research of Prof. Bob Full

Ernest Lawrence Exhibit



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Before

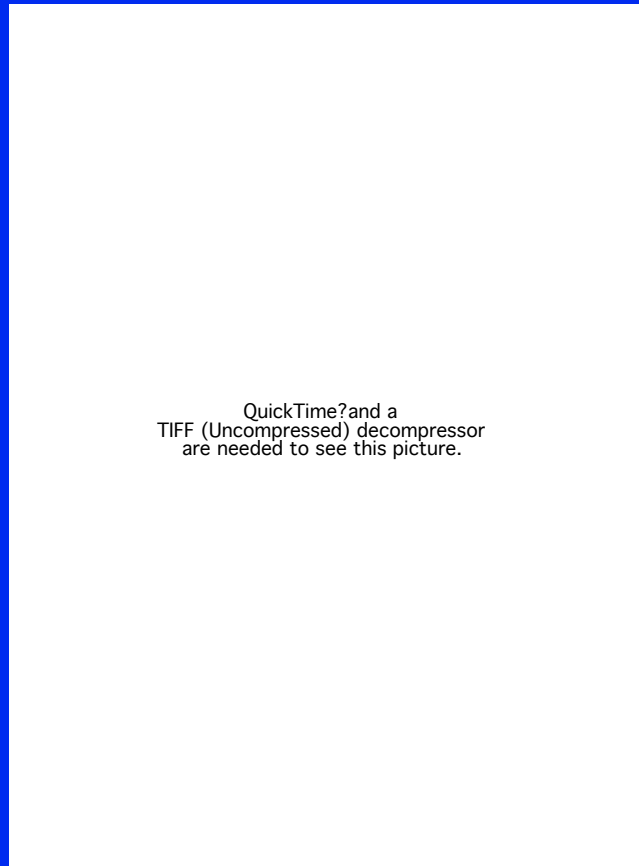


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During

...and After will include multimedia and multiple
hands-on exhibits on Lawrence's work

Science on a Sphere



- A six-foot diameter spherical projection system using data sets from NASA, NOAA, and other researchers
- Community of researchers and museum practitioners developing collaborative exhibits for broad use

Engineering Students as Teachers on the Museum Floor

Mechanical Engineering students explain biomechanics to seniors and young students

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Content knowledge
and college role models

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www.lawrencehallofscience.org