



Efficiency in the Research Environment: Publicizing Shared Instrumentation and Open Access Facilities

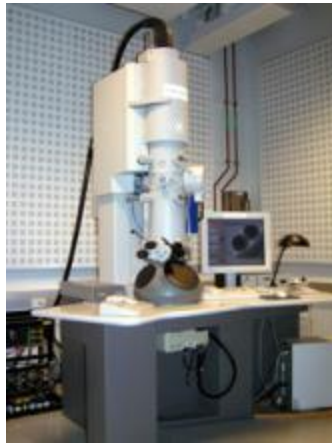
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Research Instrumentation

National Science Foundation – Major Research Instrumentation Grants:

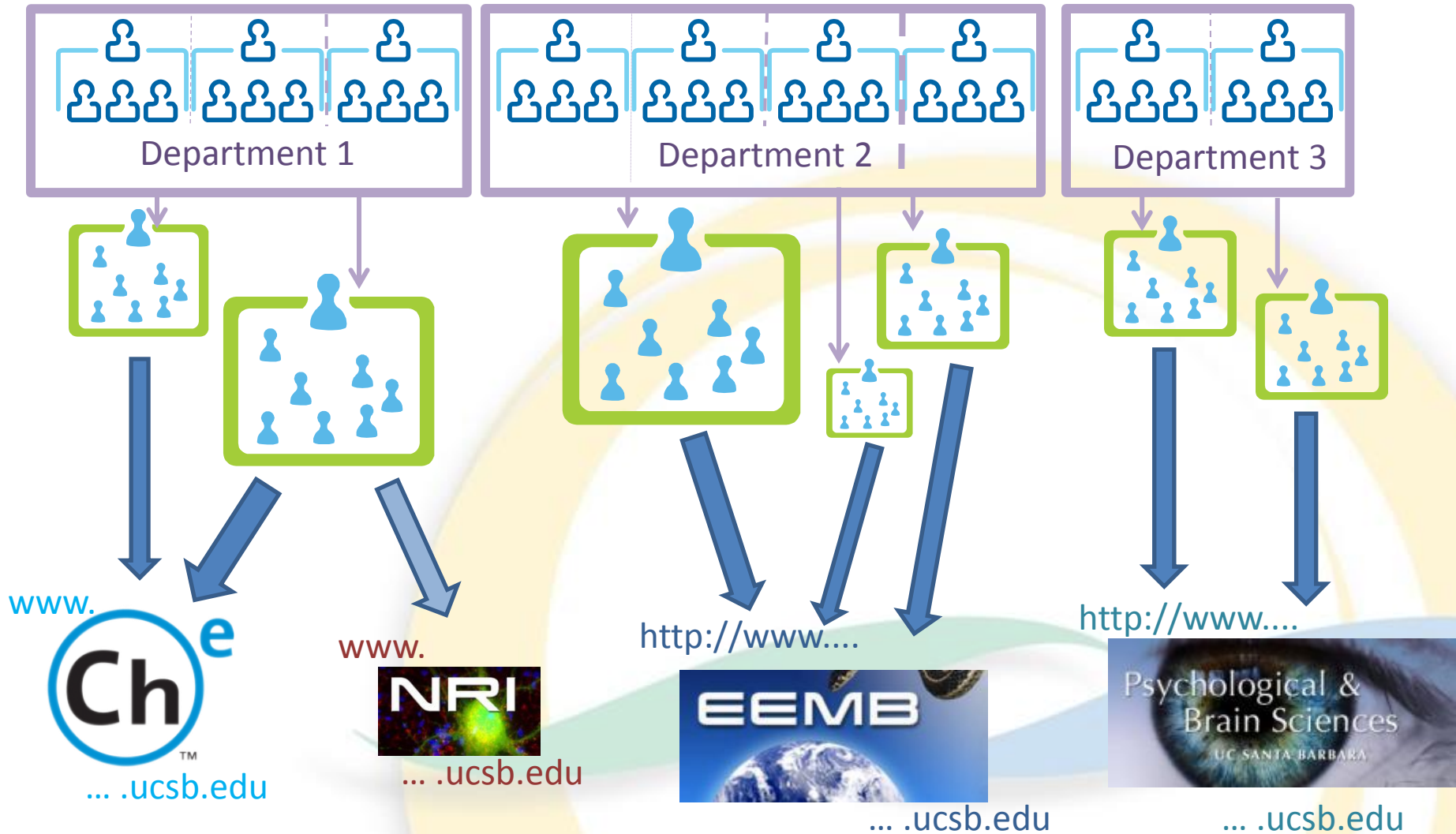
- \$90 Million Total
- 175 awards of \$100k - \$4 million each



Sustainability: Efficient Use of Resources

- Energy (plug load, increased ventilation req't)
- Water (cooling, process)
- Material Waste (sample prep waste; haz mat; house utilities)
- Minimize redundant instruments
- Frequency of use (how many hours/day?)
- Availability and access (# users, types of users)
- Knowledge of existence (who knows about it?)

Research Networking Status Quo





www.sharedinstrumentation.ucsb.edu



shared INSTRUMENTATION

Search this site...

Home About Instruments Instrument types Core Facilities External Users Add/update your instruments

STATISTICS

45 FACILITIES

291 INSTRUMENTS

RECENTLY ADDED INSTRUMENTS

- Desktop Sequencing System
- Siemens MAGNETOM MRI

UCSB FACILITIES NETWORK

UNIVERSITY OF CALIFORNIA
SANTA BARBARA
INTERACTIVE CAMPUS MAP

Reset Map

Legend

Layers

Search Map

Search Text:

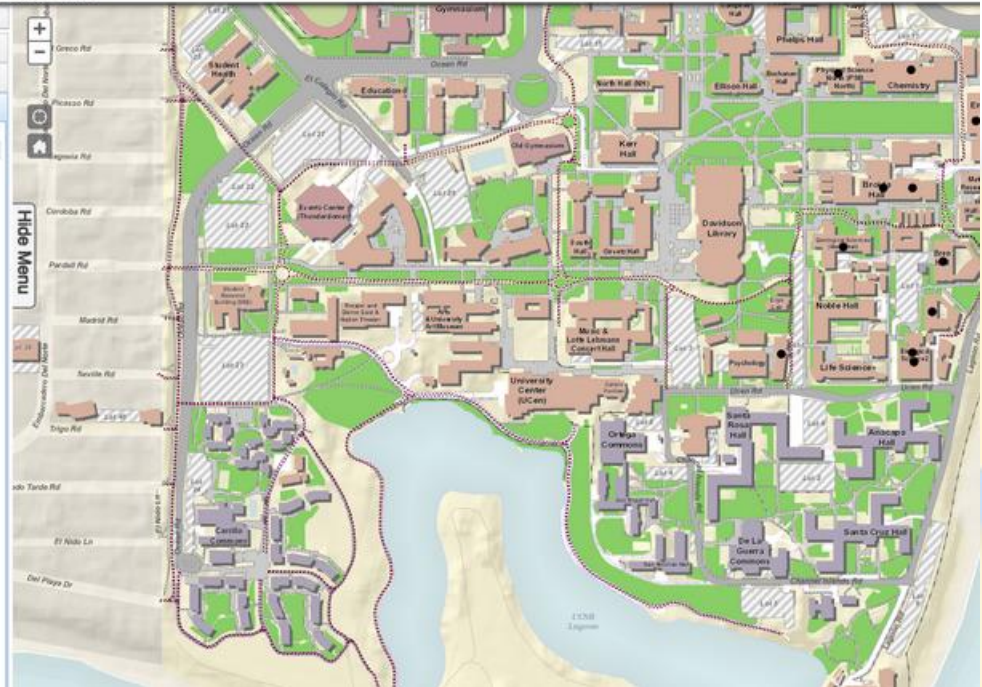
Search

Examples:

Buildings:
Ellison Hall
building 563
563
ELLSN

Books:
ELLSN 1710
Ellison Hall 1710
1710 Ellison Hall
1710 ELLSN

Classes / Current Quarter:
** Section courses not listed **
GEOG 128
53116 (Enroll Code/Session)
Clarke (Professor last name)
Faculty / Staff (Last Name)



Collaborative Effort

- UCSB's Office of Research
 - Motive: Advertise instruments purchased on Shared Instrumentation Grants
 - Provide Funding for WebDev and Intern labor
 - Responsible for ongoing maintenance.
- MRL's MRFN Office
 - Provided base website code based on MRFN.org
- UCSB Sustainability Intern Office
 - Project management and database population
 - Publicity to other universities and national groups
 - Promote to labs as a big-picture sustainability measure

Single-Discipline Solutions

- www.MRFN.org



- “Shared Experimental Facilities” a core requirement for NSF Materials Science and Engineering Centers (MRSECs)
- 27 of 30 MRSECs are members of the Materials Research Facilities Network to share information about their facilities and experts

Visions of the Future

- More Instruments:

- All PIs on campus with Shared Instrumentation grants
- Sustainability Certification - Additional Points awarded to labs listing instruments.
- Highlight in grant funding requests



- Growth Beyond UCSB

- Multiple UC Campuses?
- Form interlinked Shared Research Facilities Networks with compatible protocols.





Thank you! Questions?



sharedinstrumentation.ucsb.edu

sustainability.ucsb.edu/labrats

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