

Collaboratory Evaluation: Beyond BioCoRE

<http://www.ks.uiuc.edu/Research/biocore/>

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Data and Collaboratories in the Biomedical Community

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Ballston, Virginia



NIH Resource for Biomolecular Modeling and Bioinformatics
<http://www.ks.uiuc.edu/>

Beckman Institute, UIUC

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Evaluation and Development Efforts

- Evaluation anchors the development process in a relevant context
- Evaluation guides daily decisions and strategic development directions
- Evaluation listens to and engages users in the development process
- Users and technology come together, via evaluation support, in BioCoRE

Evaluation Goals and Emphases

- Select third-party features and functionalities
- Prototype/evaluate features/interfaces under development
- Assess user satisfaction
- Measure impact



Evaluation Built-in Solution

- A built-in evaluation component systematically monitors BioCoRE acceptance and use
- An *event* tracker provides evaluators with data on user actions and interactions
- Each BioCoRE server regularly sends data to a single event logger running at Resource

Overview
Research
Development
Dissemination
Services

Theoretical Biophysics Group

BioCoRE User Feedback

NIH Resource for Macromolecular Modeling and Bioinformatics



BioCoRE User:
We are delighted that you are using our software and hope that it serves you well. As part of our ongoing efforts to improve our software and services, we would like to hear from you. Please take a few minutes to complete this survey. Thank you.
The BioCoRE Development Team
<http://www.ks.uiuc.edu>

1. E-mail address:

2. Affiliation: ☐ Academic ☐ Federal ☐ Industrial ☐ Other (specify)

3. How do you access BioCoRE from:
☐ AIX ☐ HP-UX ☐ IRIX ☐ Linux ☐ Macintosh ☐ Solaris ☐ 95/98/NT ☐ Other

4. Please rate your agreement with the following statements about BioCoRE:

a) BioCoRE is a well designed environment	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	
b) BioCoRE meets my needs	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	
c) BioCoRE developers respond to my requests	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	
d) BioCoRE support meets my expectations	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	
e) BioCoRE web pages are instructive	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	
f) BioCoRE on-line help is clear	Strongly Disagree	☐	☐	☐	☐	☐	Strongly Agree
		1	2	3	4	5	

More Evaluation Tools and Methods

Please note that all fields with * are required. (If you want to save a field do so now.)

Logon and Contact Information

1. First Name*
2. Middle Initial
3. Last Name*
4. Affiliation*
5. Title*
6. Department(s)*
7. Institution(s)*
8. E-Mail Address(must be valid)*
9. Desired Use of the*

Background Information

12. Field of Study*
13. Years of Experience in Field*

- Conducting functional analyses
- Running usability tests
- Assessing satisfaction
- Performing interviews
- Generating user profile
- Examining self-reported data

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BioCoRE User:
We are delighted that you are using our software and hope that it serves you well. As part of our ongoing efforts to ensure that our programs are up-to-date, relevant, and of high quality, we are seeking your feedback. Your input will help us steer BioCoRE in directions which are most responsive to your needs.
Thank you.
The BioCoRE Development Team
biocore@ks.uiuc.edu

1. E-mail address:
2. Affiliation:

☐ Academic ☐ Government ☐ Industrial ☐ Other (specify)
3. I primarily access BioCoRE from:

☐ AIX ☐ HP-UX ☐ IRIX ☐ Linux ☐ Macintosh ☐ Solaris ☐ Windows 95/98/NT ☐ Other
4. Check the box that best reflects your level of agreement with the statements describing BioCoRE:

	1	2	3	4	5
a) BioCoRE is a well designed environment	Strongly Disagree	☐	☐	☐	Strongly Agree
b) BioCoRE meets my needs	Strongly Disagree	☐	☐	☐	Strongly Agree
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2002 User Survey

Response Rate: 37%

Academic users	93%
Use for research	90%
NIH funded	60%
Use local computational resources	86%
Easy to learn	80%
Easy to use	72%
Support team is responsive	86%
Quality of own work satisfaction	57%
Satisfied overall	66%

Evaluation Plans

- Refine definition of target population
- Establish evaluation levels
- Analyze unobtrusive data
- Increase selection of third-party tools

Third-Party Tool Selection Criteria

- Applicability and Content: relevance, scope, functionality, performance, and currency
- Nature: collaborative value, licensing, distribution and availability
- Technical Aspects: stability, ease-of-use, tech support, integration specs, interface to other tools

Expand Impact Studies

- Prototype proposed features/interfaces
- Inquire changing scientists' work habits
- Document case histories
- Conduct periodic user surveys
- Correlate user-data from multiple sources
- Fit a theoretical framework

Challenges

- Identify indicators of emerging work culture
- Study members' code(s) of conduct
- Investigate nature of participants' working arrangements
- Examine impact of users' access to computing resources on work practices
- Collect outcome data



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Evaluating Collaboratories

- These young novel work ‘places’ have not been studied much. The literature provides only a few evaluation tools that can be applied ‘as-is’ to studies of collaboratories’ structure, processes, research experience and outcomes.
- The need to develop theory and methods to evaluate these complex and rapidly growing environments is urgent and vital.

The background of the slide features a light blue map of the United States. Overlaid on the map are several computer monitors. Each monitor displays a colorful 3D molecular model and a small portrait of a person. Curved arrows, some yellow and some grey, connect these monitors across the map, suggesting a network or flow of information. The word 'Outlook' is centered in the upper half of the slide.

Outlook

- BioCoRE will offer a new, effective, and complete working environment
- BioCoRE will continue to deploy emerging affordable technologies
- BioCoRE will benefit a growing number of users with varying levels of expertise and diverse research and training needs