

# BioCoRE: User Experience

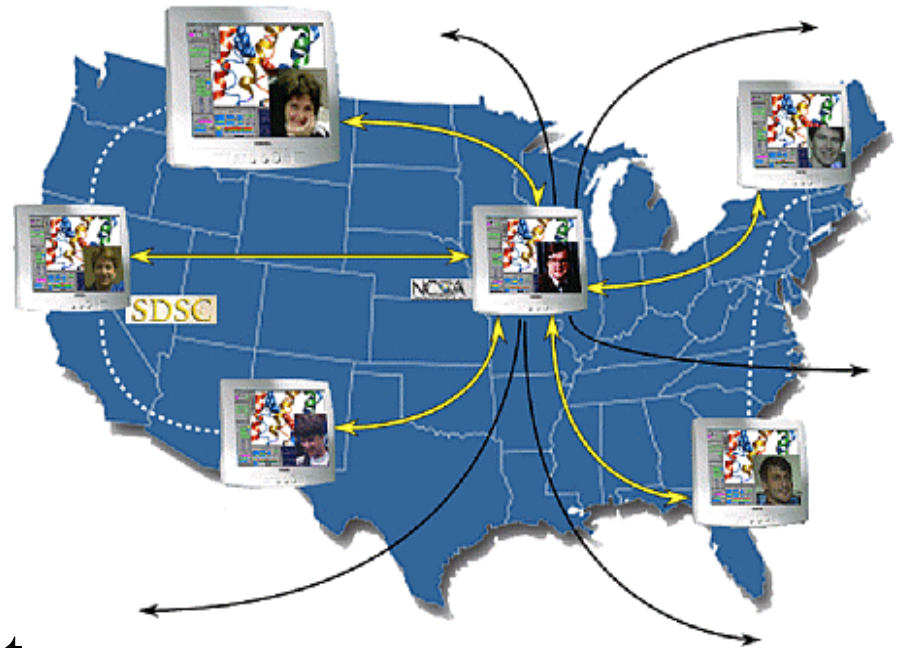
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<http://www.ks.uiuc.edu/Research/BioCoRE/>

# Objective of BioCoRE

**Collaborations involving scientists in geographically remote locations require a comprehensive working environment that enables and facilitates research and communication.**

BioCoRE provides such a collaborative working environment.

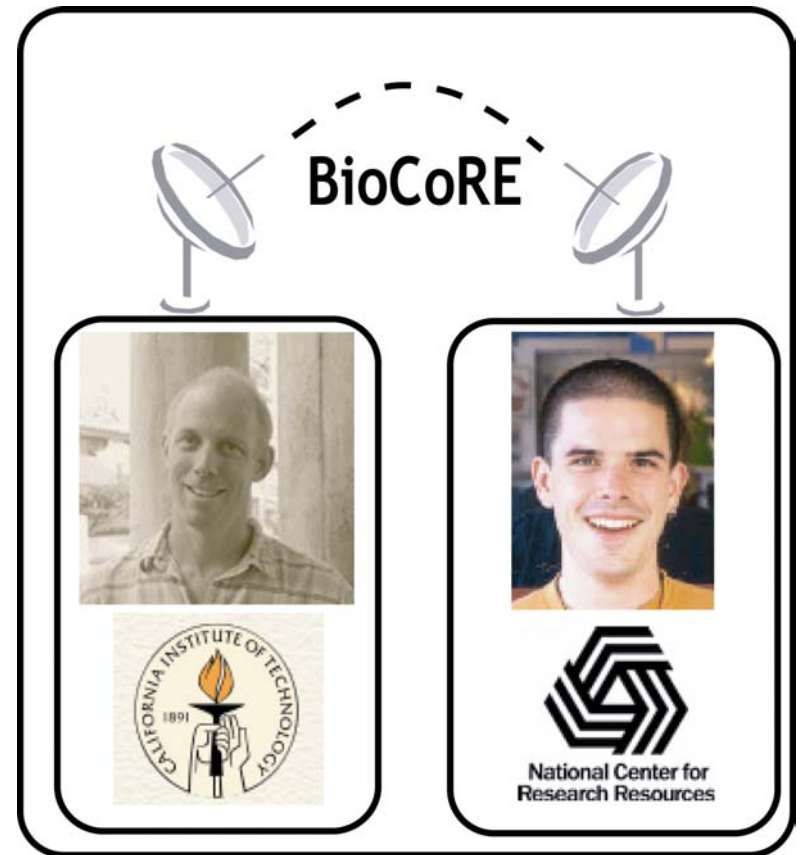


# Research Collaboration using BioCoRE

Maintaining a collaboration with fellow scientists involves:

- Interaction with colleagues
- Sharing and accessing common data

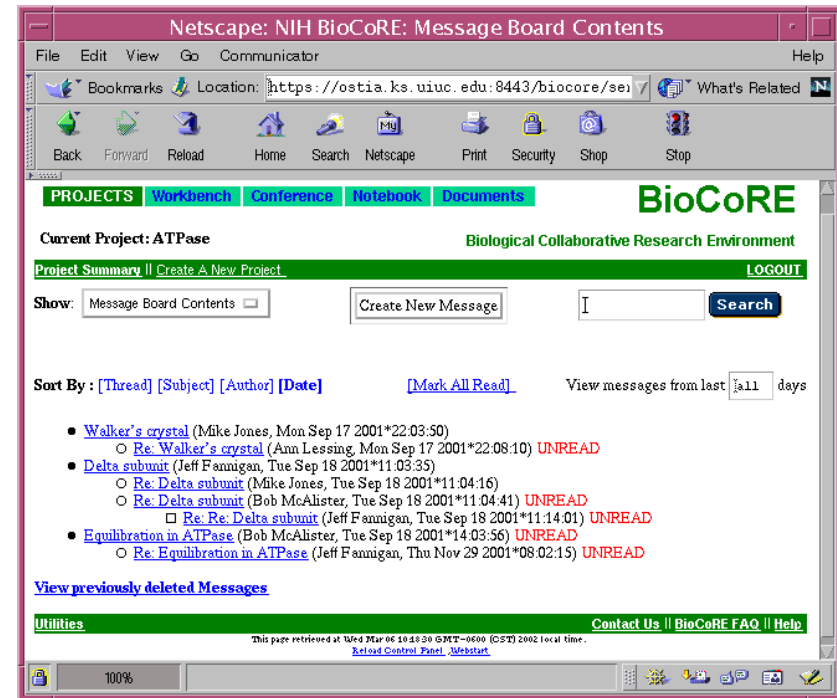
Scientists also need a platform which serves as a research assistant.



# Communicating Textual Information using BioCoRE

**Successful research collaboration  
relies on effective communication  
among project members.**

Using BioCoRE scientists can  
converse and post messages for easy  
exchange of textual information.



# Communicating Visual Information using BioCoRE

Researchers can use BioCoRE to store visual information (e.g. molecular graphics images), such that they can discuss their projects more easily.

The image shows a screenshot of the NIH BioCoRE Control Panel in a Netscape browser window. The panel has a menu bar with 'File', 'Project', and 'Help'. Below the menu bar are tabs for 'Summary', 'All User...', 'ATPase', 'Titin', and 'Glycerol'. The 'Summary' tab is active, displaying a chat log with the following messages:

```
13:41:mike has logged in.
13:42:ann has logged in.
13:46:bcb has logged in.
15:02:ann (VMD State)>Glycerol channel with
water.
15:03:ann>I've done some more testing with the
Glycerol channel. The state I published is a
new view with waters.
15:05:bcb>It looks good. How are you doing
with the paper?
```

To the right of the chat log is a 'Users' list containing 'bob', 'mike', and 'ann'. Below the chat log is a 'Message' input field. Below the browser window is a 'VMD Sessions' window. It has a table with two columns: 'Saved sessions' and 'Description'. The table contains the following entries:

| Saved sessions   | Description                                |
|------------------|--|
| Markus 1         | Published by: Paul Grayson                 |
| Markus 2         | Published on: Mon Mar 04 17:34:48 CST 2002 |
| 1FX8             |  |
| 1FX8 channel top |  |
| 1FX8 monomer     | The channel G1pF, filled with water.       |

Below the table are buttons for 'Load session from BioCoRE', 'Save session to BioCoRE', 'Refresh session list', and 'Load file from BioFS'. To the right of the VMD Sessions window is a 'VMD 1.7.1 OpenGL Display' window showing a 3D molecular model of a protein structure with a red and white ball-and-stick representation of a channel and a green and blue ribbon representation of the protein backbone.

# Sharing Common Data using BioCoRE

**Researchers have to be able to share and access their project information as needed.**

Researchers can deposit and access all project related data using a shared file space provided by BioCoRE.

Project members can also store important links in a website library and share this information with their colleagues.

Netscape: NIH BioCoRE: BioFS Folder: ATPase

File Edit View Go Communicator Help

Bookmarks Location: <https://ostia.ks.uiuc.edu:8443/biocore/ser> What's Related

Back Forward Reload Home Search Netscape Print Security Shop Stop

**PROJECTS** Workbench Conference Notebook Documents **BioCoRE**

Biological Collaborative Research Environment

Project Summary | [Create A New Project](#) [LOGOUT](#)

BioFS Folder: / [ATPase/](#)

| FileName                      | Owner  | Permission    | Size   | Date            | Properties                 |
|-------------------------------|--------|---------------|--------|-----------------|----------------------------|
| <a href="#">▲ Up A Folder</a> | System | d.rwx r-x r-x |        |                 |                            |
| <a href="#">System</a>        | System | d.rwx r-x --- |        | Wed Sep 12 2001 | <a href="#">Properties</a> |
| <a href="#">pdbs</a>          | ann    | d.rwx rwx --- |        | Tue Sep 18 2001 | <a href="#">Properties</a> |
| <a href="#">1QO1.pdb</a>      | mike   | -rw-rw-r--    | 370575 | Tue Sep 18 2001 | <a href="#">Properties</a> |
| <a href="#">1ABV.pdb</a>      | mike   | -rw-rw-r--    | 139563 | Tue Sep 18 2001 | <a href="#">Properties</a> |

[Properties For This Folder](#)

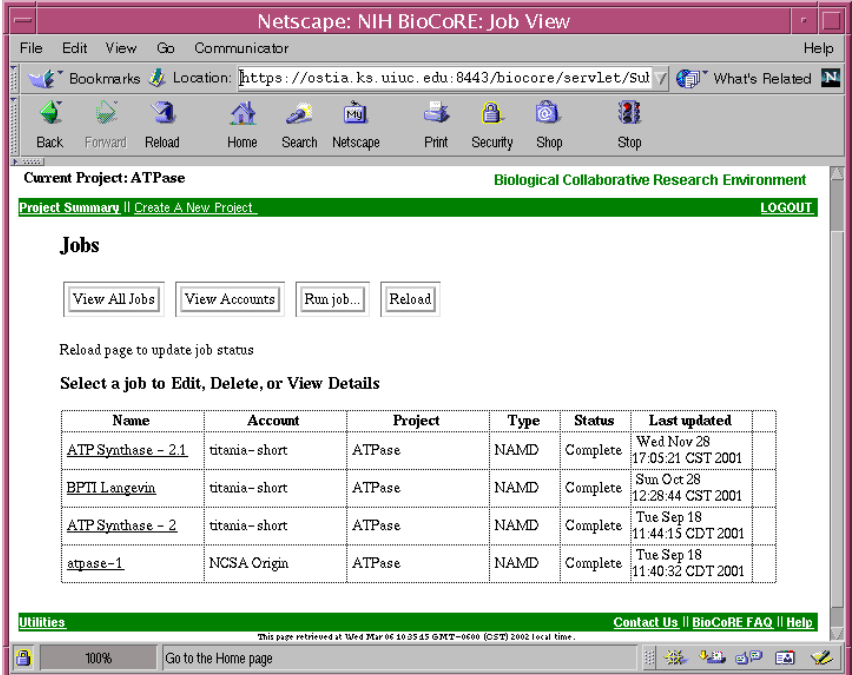
100%

# BioCoRE as a Research Assistant

Researchers need a diverse environment, which offers expert assistance tools to perform solo tasks alongside collaborative work.

Researchers can use BioCoRE to set up, submit and monitor their computer simulations.

Since everything is archived within BioCoRE, researchers can easily retrieve data.



The screenshot shows a Netscape browser window titled "Netscape: NIH BioCoRE: Job View". The address bar shows the URL "https://ostia.ks.uiuc.edu:8443/biocore/servlet/Sul". The browser interface includes a menu bar (File, Edit, View, Go, Communicator, Help), a bookmarks bar, and a toolbar with buttons for Back, Forward, Reload, Home, Search, Netscape, Print, Security, Shop, and Stop. The main content area displays the "Current Project: ATPase" and "Biological Collaborative Research Environment". Below this, there are navigation links for "Project Summary", "Create A New Project", and "LOGOUT". A "Jobs" section contains buttons for "View All Jobs", "View Accounts", "Run job...", and "Reload". A message states "Reload page to update job status". Below this, a prompt says "Select a job to Edit, Delete, or View Details". A table lists the following jobs:

| Name                               | Account       | Project | Type | Status   | Last updated                 |
|------------------------------------|---------------|---------|------|----------|------------------------------|
| <a href="#">ATP Synthase - 2.1</a> | titania-short | ATPase  | NAMD | Complete | Wed Nov 28 17:05:21 CST 2001 |
| <a href="#">BPTI Langevin</a>      | titania-short | ATPase  | NAMD | Complete | Sun Oct 28 12:28:44 CST 2001 |
| <a href="#">ATP Synthase - 2</a>   | titania-short | ATPase  | NAMD | Complete | Tue Sep 18 11:44:15 CDT 2001 |
| <a href="#">atpase-1</a>           | NCSA Origin   | ATPase  | NAMD | Complete | Tue Sep 18 11:40:32 CDT 2001 |

At the bottom, there is a "Utilities" section with links for "Contact Us", "BioCoRE FAQ", and "Help". The status bar shows "100%" zoom and "Go to the Home page".

# BioCoRE as a Teaching Assistant

**Training and teaching efforts require a versatile working environment, which allows instructors to enhance their efforts.**

Instructors use BioCoRE's job management capabilities to streamline and simplify the training process (EMBL, PSC).

BioCoRE will benefit teachers in moderating their course and in distributing class material.



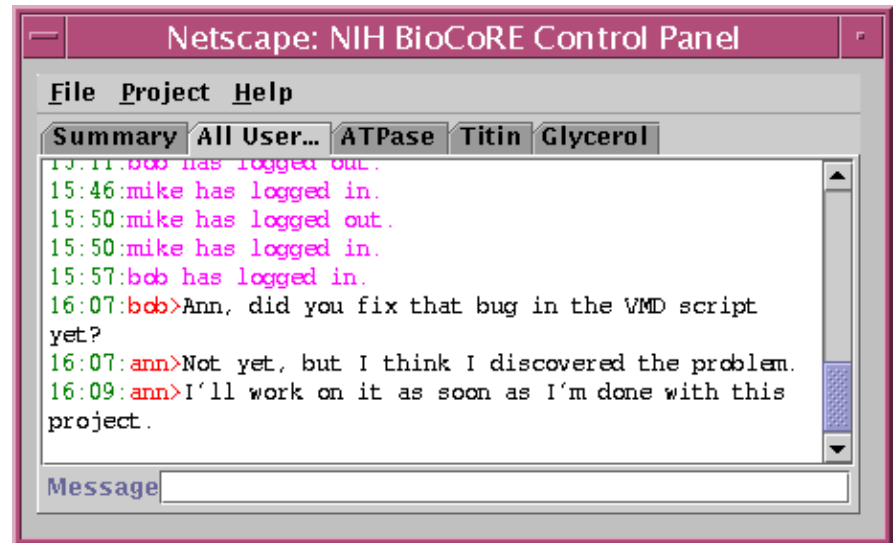


# Software Development using BioCoRE

**Software development and other collaborative efforts also need a platform that facilitates and enhances the working process.**

For example the Resource's software development team regularly uses BioCoRE to:

- Archive data
- Chat for immediate problem solution



Planned features like a calendar, white board and audio/video conferencing will make BioCoRE more beneficial for general administration purposes.