2009 Board of Directors Meeting

Spring Teleconference
April 7, 2009

**Notes for the meeting are recorded by the CUAHSI secretary (Kevin Dressler) as representation of the discussion topics and point and are not the opinion of the secretary

Minutes and Briefing Book

Current Meeting Minutes, April 7, 2009.................................................................2
Attachments (Management Review, E&O Charge, Pathfinder Fellows).......................9
Minutes

Preliminaries
Call to Order (Famiglietti) – 3:05 pm

Roll Call/Certification of Quorum (Dressler)

Present

Term expires 12/31/2009
Efi Foufoula, University of Minnesota X
Larry Murdoch, Clemson University (Synthesis Liaison) X
Fred Ogden, University of Wyoming X
John Selker, Oregon State University X
Juan Valdes, University of Arizona (HIS Liaison) X

Term expires 12/31/2010
David L. Freyberg, Stanford University X
Patricia Maurice, University of Notre Dame
Jim McNamara, Boise State University X
Kenneth Potter, University of Wisconsin X
Claire Welty, University Maryland - Baltimore County X

Term expires 12/31/2011
Larry Band - University of North Carolina - Chapel Hill X
Jay Famiglietti, University of California – Irvine X
Tissa Illangasekare - Colorado School of Mines X
Jennifer Jacobs - University of New Hampshire X
Scott Tyler - University of Nevada - Reno X

Officers:
President: Rick Hooper, CUAHSI
Secretary: Kevin Dressler, Pennsylvania State University
Treasurer: Brian Waldron, University of Memphis

Others: CUAHSI – David Kirschetl; NCAR – Eric Barron

Approval of Minutes from January Board meeting (see attached)

Motion to Approve the January 2009 Board Minutes: McNamara

Second: Band

Discussion: No

Approval: Yes

NCAR Post Doc – Opportunity
Eric Barron suggests stronger partnering between Atmospheric Sciences, Modeling efforts and Hydrology
Has worked with the health sciences for a nationally advertised postdoc program (1yr at NCAR and 1 yr at CDC) – Will be funded from sources on both sides

Believes that expanding the program at NCAR for hydrology may not be the best approach but that postdoctoral opportunities may be a good first cut – Could CUAHSI join with NCAR/UCAR to have a postdoc that shares time with NCAR and a CUAHSI institution

- The consensus of the board is to support this activity
- Try this for a couple of cycles to see if this is working (2 postdocs per cycle) and then how to expand it
- Barron to send NCAR contact info (Maura Hagan) to Famiglietti and Hooper to spin up details
- Need to explore what funds NSF may want to commit for postdocs instead of CUAHSI institutions – Draft a 2-3 page proposal to NSF regarding this opportunity
  - Foufoula to send a draft to Hooper and the ExCom
- Need to Brainstorm with NCAR regarding the selection and advertising process

**Reports**

**CHyMP Meeting Memphis (Famiglietti, Murdoch, Waldron)**

a. Outcomes

i. Desire for documentation (metadata) standards, quality assurance and standard diagnostics to “raise the bar” for hydrologic modeling; begin development of “best modeling practices” and/or “community of practice”. Request by Federal Agencies for CUAHSI to lead this effort

ii. Development of data transmission and exchange standards (like WaterML. And OpenMI)

iii. Need to develop “use cases” to test existing platforms/modeling environments to deduce whether anything else is needed

iv. Interest in developing a “national water model” as analog to existing climate community modeling efforts at both regional and continental scale

v. There was a lot of agency participation

b. Action Items

i. Community survey and prioritization of use cases
ii. EOS workshop report, Journal of Hydrology publication

iii. Development of CUAHSI HydroHub modeling environment to develop publication standards – (potential proposal; Larry Murdoch to lead; proposal call due date is July 2009)

  ▪ Idea based on the NanoHub effort which was developed over the last 10 years in the Nano Community (their website, for example, gives a variety of capabilities that CUAHSI would be interested in – modeling, education, collaboration, etc)

    • You load your model on the server and run it off of the server and if it needs an interface that is developed
    
    • The software for this process is fairly mature and could be used in a future proposal
    
    • There are a lot of platforms already out there – this proposal could focus on the use cases to test the coupling of models in certain regions, etc

Old Business
1. Cooperative Agreement with NSF (effective date of February 1st 2009)

   a. Standing Committees

      i. Funding for HIS, E&O, Board of Directors

      ii. No funding for Synthesis, Science, Research Applications, Observatories, or the Senior Advisory Council

   b. Management Review

      i. Review Plan and Questions attached

      ii. Review Scheduled for June 16; initial response to questions due May 1

   c. Establishment of overhead rate

      i. Some progress (letter from CAAR stating we can bill unrecovered o/h costs)

         ▪ Paul Thrasher’s (CUAHSI’s accountant for this activity) time is billable to NSF

      ii. No formal determination letter

      iii. Procedural uncertainties remain and are being worked through

2. CUAHSI Biennial Meeting (Welty)
a. Dates/Location secured (July 2010 at NCAR)

b. Propose that program committee be in place by Summer Board meeting (8/31/09)
   o Planning committee: Mark Hamilton, James McNamara, David Chandler, Brian Waldron, Tissa Ilangasekare
   o Next decision is overarching theme
   o Review the opportunity for short courses at the event

3. Review E&O Committee Charge (Kirschtel)
   a. Revised charge (attached)
      o Board members should send comments on the draft
   b. Need to develop a broader vision in which to fit proposed activities with focus on education, i.e., the need to entrain additional students into a career in hydrologic science (ref: recent NYT article on careers in hydrology)
   c. Repopulate the committee and look for engagement from some undergraduate schools and colleges

4. Review Pathfinder Fellowship procedures (Kirschtel) (attached)
   - Funded – primarily to enable travel grants for students to do field or lab work
   - Put together a packet format for the students to work with in submittal
   - Need a board member to lead the review committee (5 $5000 grants)
     o David Freyberg agrees to help with committee establishment
     o September due date for applications is a goal

5. Corporate Membership (Hooper)
   - Need a subcommittee to deal with corporate membership and report back on the following issues at the summer board meeting in WDC
     o Brian Waldron (possible lead), Larry band, Scott Tyler
   a. Inquiry received from Northrup-Grumman
   b. Subcommittee of Board has the following tasks:
      i. Review of By-laws to determine rights of corporate members
ii. Benefits for corporate members
   1. Research Applications Board
   2. Advertising Space on newsletter/web site
   3. Job postings

iii. Cost for corporate membership
   1. Propose a small ($1000-$2000) annual fee
   2. Opportunities for sponsoring receptions, etc. in addition

iv. Guidelines for accepting Corporate Members

v. Distinguish “for profit” and “not for profit”

6. Aug 31-Sep 1 Board Meeting (Hooper)
   a. Physical meeting in Washington, DC
   b. Similar format to January 2009 (agencies on Day 2)
   c. Senior Advisory Council role for Day 1 (not currently funded)
      o Need to bring up the issue of a need for SAC at the management review.
   d. Proposed focus on determining path forward for Education, Instrumentation and Observatories

New Business
1. Approval of Carnegie Mellon U as a new member (letter attached)
   ■ Jeanne Van Briesen as representative

   Motion to Approve: Welty

   Second: Illangasekare

   Discussion: No

   Approval: Yes

2. MRI Opportunity (Selker, Jacobs)

   New solicitation expected during April with $300M stimulus money. Any CUAHSI action?
Recent survey results from HMF and past experience regarding the node model would help fuel a letter to go out to the membership to stimulate proposals to respond to the call. That is, it would be a good synthesis to show how teams could work with CUAHSI

Previous HMF submissions involved a lot of people time in the proposal. Keep this in mind when reading the solicitation.

Solicitation may be released in April

3. Proposal to move CUAHSI Headquarters to Boston

   a. Rationale

      i. Move location near or on university campus to improve recruitment and retention

      ii. Better access to student labor

      iii. Improve quality of life of Executive Director

   b. Status

      Getting bids from Tufts University and Univ. of Mass. Boston to compare with existing contract with AGU

   c. Questions

      i. UMB space would be on campus in departmental building; Tufts space would be in commercial building adjacent to campus. Does board have preference?

      ii. The least disruptive approach would be to split staff keeping admin staff (Jessica and Lisa) in Washington in reduced space at AGU building. This maintains Washington ‘presence’. Rick’s duty station would be Boston but would travel to DC (every week or other week) at own expense for staff meetings. Alternately, the entire headquarters could move to Boston and a new controller and admin assistant hired. Does the board have a preference?

   o General Discussion

      ▪ Staff will be separated – how will this work

         • Staff is working well independently as is

         • Travel seems to be about the same?

         o Hooper comments that it is not the same as he would be able to drop the WDC apartment and have more time in Boston
- Any disadvantages of going out of WDC?
  - The number of times that NSF and other agencies have directly interacted at their WDC locations is on the order of once a month

- Affiliating with a university could be risky – particularly financially
  - Need to separate the business aspect from the intellectual aspect
  - At Tufts the commercial space is adjacent and keeps the business separate
    - What other organizations are in this building?
      - Lab spaces (overflow from Tufts), a training center, commercial clients, institutes associated with Tufts

- Should CUAHSI be diminishing its time in WDC considering the need to expand to other agencies, etc?
  - Need to balance this need with this proposed move. Maximize time in Washington by planning properly

- What does this say long term about where CUAHSI is to be located?
  - UCOWR headquarters is wherever the director is, for example

- Any strong opposers to the move?
  - No volunteers

*Adjourned: 4:50 pm*
The objectives of the review, and the charge to the review panel, will be to:

1. Assess the quality, effectiveness and efficiency of CUAHSI management and leadership in meeting the organization’s goals and responsibilities, and in addressing the NSF Strategic Goals of ensuring a world-class science and engineering workforce (People), fostering new knowledge across the frontiers of science and engineering (Ideas), and providing the tools to get the job done efficiently and effectively (Tools);

2. Address the question: Is CUAHSI properly positioned to fulfill its mission? (Mission Statement: To foster advancements in the hydrologic sciences by: 1) Developing, prioritizing and disseminating a broad-based research and education agenda for the hydrologic sciences derived from a continuous process that engages both research and applications professionals; 2) Identifying the resources needed to advance this agenda and facilitating the acquisition of these resources for use by the hydrologic sciences community; and 3) Enhancing the visibility, appreciation, understanding, and utility of hydrologic science through programs of education, outreach, and technology transfer.)

At the conclusion of the management review, the SEP and CUAHSI will know if the present structure of the organization is appropriate to best serve the hydrologic science community. In addition, the results of the management review will be used as input in future budget request under cooperative agreement 0753521.

Recommended Management Review Process:

Based on the objectives and questions indicated in this document, EAR will request that CUAHSI prepare a management summary document. Thereafter, the EAR will convene a special emphasis panel to review the document and provide input to NSF on how management of CUAHSI can be improved.

Suggested members for the CUAHSI management special emphasis review panel will include representatives from the U.S. academic research and education community, government agencies, and a foreign research institution with expertise facility management. An attempt will be made to identify a diverse panel while avoiding any conflicts of interest.


<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31</td>
<td>Management review guidelines finalized; panelist selection;</td>
</tr>
<tr>
<td>April 2</td>
<td>Management review questions made available to CUAHSI and to the Panel;</td>
</tr>
<tr>
<td>May 1</td>
<td>CUAHSI management document and response to questions sent to NSF;</td>
</tr>
<tr>
<td>May 3</td>
<td>NSF sends to panel;</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>May 30</td>
<td>Additional questions, responses needing clarification provided to NSF from panel; NSF edits, adds as necessary, and provides new questions to CUAHSI</td>
</tr>
<tr>
<td>June 16</td>
<td>CUAHSI Management Review - Panel at NSF (Hooper and Executive Committee will be invited to represent CUAHSI)</td>
</tr>
<tr>
<td>June 17</td>
<td>Panel Summary submitted</td>
</tr>
<tr>
<td>Jun 22</td>
<td>NSF sends panel summary to CUAHSI along with further questions</td>
</tr>
<tr>
<td>July 22</td>
<td>CUAHSI response submitted to NSF</td>
</tr>
<tr>
<td>August</td>
<td>Summary analysis submitted to SEP section head and EAR DD. CUAHSI is informed of review outcome.</td>
</tr>
</tbody>
</table>

The requested document from CUAHSI should help panelists address the following questions related to NSF strategic goals:

Has CUAHSI management been effective in its primary mission of fostering advancement of hydrologic sciences?

Has CUAHSI management been successful in carrying out its mission?

Has CUAHSI management been effective and efficient in providing support for the hydrologic science community?

Has CUAHSI management established policies and procedures to ensure a representative and responsive governance process on behalf of the hydrologic science U.S. academic research community?

Has CUAHSI management been effective in expanding scientific communications among researchers at academic institutions, government agencies, and international organizations through its sponsorship and organization of community meetings, workshops and scientific working groups?

Has CUAHSI management demonstrated leadership in identifying opportunities and tools for the hydrologic science community?

Has CUAHSI management been effective in engaging scientists at different stages of their professional career? If so, has it instituted a viable assessment program, evaluated its impacts, and are those impacts responsive to the NSF Strategic Goals?

Has CUAHSI management encouraged and facilitated the participation of underrepresented groups?

Has CUAHSI management been effective and compliant in monitoring the fiscal performance of all CUAHSI activities, ensuring all NSF requirements have been observed?
Has CUAHSI management been effective in developing appropriate programs and methods of informing the hydrologic science community in particular, and the Earth science community in general, about its programs and accomplishments?

Some examples of questions to be considered during the review process related to the second objective include:

Has CUAHSI management developed a clear vision for the evolution of the organization and responsibilities?

Is CUAHSI management well positioned to provide community leadership in identifying partnerships that will benefit the hydrologic science community?

How has and how will CUAHSI balance the management pressures of the large projects (e.g. WATERS) while maintaining excellent service to the scientific community not directly involved in those projects?
BACKGROUND
A key component of the CUAHSI mission is to foster advancements in the hydrologic sciences, in the broadest sense of that term, by enhancing the visibility, appreciation, understanding, and utility of hydrologic science through programs of education, outreach, and technology transfer. As CUAHSI has evolved and matured as a research consortium, the need for a coordinated education and outreach effort has crystallized. As a significant first step, in 2007, the Committee developed a white paper on CUAHSI Education and Outreach Effort for the period 2008-2013. That report identified a number of key areas of focus and specific activities to achieve CUAHSI's Education and Outreach mission. Several of those activities were included in CUAHSI's renewal proposal to NSF, namely the development of new online systems for the use of case studies and a digital multi-media resource "bank" to be used in teaching. While the NSF reviewers felt that the goals of these programs were admirable, they concluded that there were sufficient systems currently in existence and that efforts should be directed towards populating those systems with high quality resources for hydrology education rather than creating new, additional systems.

As CUAHSI decides how to move this agenda forward, there is the need for a more comprehensive education plan. Although this plan need not be lengthy it should articulate a broad vision for entraining students into hydrologic science. Therefore, consideration should be given to education at all levels (K-12, undergraduate and graduate). The implementation strategy may choose to pursue one level in preference to others, but any such prioritization should be justified.

CHARGE
The Standing Committee for Education and Outreach shall:

a) develop an education plan that articulates a vision for increasing enrollment in hydrologic sciences

b) review existing resources, such as Digital Library for Earth System Education (DLESE; www.dlese.org); Multimedia Educational Resource for Learning and Online Teaching (MERLOT; www.merlot.org); the National Science Digital Library (NSDL; nsdl.org); Science Education Resource Center (SERC; serc.carleton.edu) and the newer MOdular Curriculum for Hydrologic Advancement (MOCHA; mocha.psu.edu/), to see how these resources contribute to this vision and how they should be augmented or modified to better support the vision

c) develop an implementation plan for addressing the vision with a suggested approach and schedule, given available funding opportunities. The actions suggested may be a simple as making the community aware of existing resources or may suggest proposals to be developed.

d) Develop a strategy for assessing progress on the education plan

This education plan shall be submitted to the CUAHSI Board of Directors, for their review, by October 1, 2009.

COMPOSITION/MEMBERSHIP
The E&O Standing Committee will consist of no fewer than five members in the fields of hydrologic science and science education. The committee will have a Chair, Vice-Chair and Rapporteur. Committee members will be appointed by the Board of Directors or the Executive Committee of the Board acting in its place.

TERM
Members of the E&O Standing Committee will serve for a term not to exceed three years. The committee membership terms will be staggered with a target of no less than two continuing members each year.

MEETINGS
This Committee will commence meeting in ______ and meet as necessary to complete its charge.

RESIGNATION
Any member may resign at any time by giving written notice to the Chair, the Vice Chair, the President or Secretary of the Corporation. Such resignation shall take effect at the time of receipt of the notice, or at any later time specified therein.

VACANCIES
Any vacancy in the E&O Standing Committee may be filled for the duration of the remaining term by the Board of Directors or the Executive Committee acting on its behalf.

REMOVAL
Any member of the E&O Standing Committee may be removed at any time either with or without cause by vote of the Board of Directors or the Executive Committee acting on its behalf.
Pathfinder Fellowships

DRAFT: Guidelines

Procedures:

Application
1. Applicant info
   contact – cv (nsf short form) – budget – research statement describing current research and necessity of second site activities to research program (“how different the proposed location or group is to the home site/institution”, why this difference is critical to the underlying research question, “the approach for integrating this experience into the [applicants] graduate research”; description and time-line of activities at the second site). (5 pages max)

2. Letter of endorsement/recommendation from mentor at home institution

3. Letter of endorsement/commitment from mentor/sponsor/advisor at visited location – this should include a statement describing prior interactions with this student; and how they will involve the student with their ongoing research activities during the visitation period

Review Criteria

1. Are the proposed activities at the second site required to address the underlying research question? Can this be accomplished at another location “closer to home”
2. Are the proposed activities at the second site sufficient to address the underlying research question?
   a) Does the student have the necessary background knowledge/training/experience to take full advantage of this activity
   b) Is the level of effort appropriate for the proposed timeline? Is it overly optimistic --- too “laid back”? c) Will additional resources be required to fully integrate this experience? Is there evidence that the student is aware of and has planned for this?
3. Does the relationship with the mentor at the second site appear to be sufficiently robust to provide the opportunity for a meaningful and successful interaction?

Submissions

1. Applicant materials should be sent as a single PDF file to pathfinder@cuahsi.org
2. Letters of recommendation should be sent directly to same address, with applicant last name in the subject line
Timeline:

<table>
<thead>
<tr>
<th>Date</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organize Committee to review Policies, Procedure and Timeline</td>
</tr>
<tr>
<td>2</td>
<td>Finalize Policies, Procedure and Timeline</td>
</tr>
<tr>
<td>3</td>
<td>Web page with info and applications documents</td>
</tr>
<tr>
<td>4</td>
<td>Publicize Pathfinder Fellowships = eos, cuahsi list, cuahsi newsletter, hydrosi-l, ecolog</td>
</tr>
<tr>
<td>5</td>
<td>Deadline for submissions</td>
</tr>
<tr>
<td>6</td>
<td>Complete review and ranking of applications</td>
</tr>
<tr>
<td>7</td>
<td>Notify awardees</td>
</tr>
<tr>
<td>8</td>
<td>Distribute checks to recipients</td>
</tr>
<tr>
<td>9</td>
<td>Distribute 1099 forms to grant recipients</td>
</tr>
<tr>
<td>10</td>
<td>[report from grant recipients ??? ]</td>
</tr>
</tbody>
</table>

Advertising Copy:

Pathfinder Fellowships to Support Multi Site Research in Hydrology

CUAHSI will provide five grants to graduate students, of up to $5000, to cover travel costs associated with conducting field research at an additional field site or to collaborate with a research group using alternate modeling approaches. Graduate training in hydrologic science typically focuses on a single field site or modeling approach. To assist graduate students in enriching their research program by moving beyond this “one site, one view”, CUAHSI is providing travel support for graduate students to make extended visit (ca. 1-3 months) to conduct field research at an additional site or to collaborate with a research group using alternate modeling methods.

More information and application materials are available at: www.cuahsi.org/pathfinder

Inquiries should be sent to pathfinder@cuahsi.org

Deadline for submission of applications is: ________, _________ 2009