

**Big Island Education Meeting**  
Center for Adaptive Optics (CfAO) Partnerships  
March 17, 2004  
Room 131, Institute for Astronomy, Hilo

**Attendees:**

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Note: A similar meeting was held at CFH Observatory earlier in the day. Attended by: Lisa Hunter, David Le Mignant, Christian Veillet, Kanoa Withington, Jim Thomas, and several others.

1. Presentation by Lisa Hunter, "CfAO Educational Partnerships in Hawaii: Summer Internships with Long-Term Impact." Presentation available at: <http://cfao.ucolick.org/EO/meetings/past.php>.
2. Presentation by David Le Mignant, "Keck CfAO 2003 Summer Internship" and "Akamai Observatory Short Course." Presentation available at: <http://cfao.ucolick.org/EO/meetings/past.php>.
3. Open discussion
  - A. Solutions to the barriers perceived in placing undergraduates at observatories for summer internships:
    - Funding. CfAO will provide matching funds (CfAO will pay for one, if an observatory pays for one). However, even with matching funds, there may not be funds available from observatories.
    - Space. For some observatories, there is not desk space available.
    - Designing student projects. Without many examples it can be difficult to design a summer project (7 weeks for CfAO, up to 10 for others). Sample project descriptions (hand out) were helpful – more should be generated and distributed. The CfAO posts student presentations and abstracts at: <http://cfao.ucolick.org/EO/internshipsnew/presentations.php>. Keck has a student web page with projects posted: <http://www2.keck.hawaii.edu/realpublic/haumana/students/pages/projects.html>. Student symposia would also be a useful mechanism for providing examples of student projects.

- Do you design the project, then find the student? Or do you find the student, then design the project? There were different perspectives on this, with advantages and disadvantages to each way. A third alternative is to generate a rough outline of several projects first, then after a student has been identified, a project is selected and refined.
- B. Perspectives on an ongoing internship program (not just the 2004 pilot effort, but 2005 and beyond)
- Are there enough students to support 12 undergraduate students each summer at Big Island observatories? Between UHH and HCC, the group thought that there probably is.
  - Priority for supporting students: 1) Big Island students; 2) students from other Hawaiian islands; 3) Mainland students
  - Island residents studying on mainland are also a top priority. How do we tap into this pool of students?
  - Student symposium – should definitely be included
- C. Current mechanisms for matching UHH students to observatory internship positions
- There is an observatory internship course at UHH. Students who are doing internships can enroll in this course to get credit.
  - Richard Crowe accepts applications from UHH students and then passes the information onto observatory directors.
- D. 2004 Internships
- Internship positions available for local undergraduates in 2003:
    - Keck: 4 positions for 2004; 2 filled; 2 open
    - Subaru: possibly, but not confirmed
  - How students apply for CfAO funding: Submit application found at: <http://cfao.ucolick.org/EO/internshipsnew/bigislandintern.php>
  - Student applicants for these positions:
    - The CfAO currently has 3 applications (not yet realized at this meeting – arrived that day!)
    - Several other students have been informally identified
  - Other prospective students:
    - Richard Crowe gave Lisa a list of prospective students from UHH to contact
    - Roger Kuntemeyer may know of several students from the HCC electronics program. He will send Lisa the list.
- E. Akamai Observatory Short Course
- Course will run June 1-5, 2004
  - Primary students are local undergraduates who will be doing a summer internship at an observatory
  - Target course size: 10-15 students
  - If we are unable to fill the course with our primary target students, we will seek out students who might be 2005 interns (from Big Island, and other islands)
- F. Next steps

- We need more internship positions at observatories
- We need help identifying students. Lisa will distribute a list of student applicants to keep this group up to date on who is applying
- Is there interest in a long-term internship program following this model?