

FNSM Annual Report
June 15, 2004
Submitted by David G.L. Van Wylen

It is a pleasure to serve as the Associate Dean for a very active and productive Faculty of Natural Sciences and Mathematics. This annual report summarizes some of the many meaningful FNSM activities that occurred during the 2003-04 academic year.

Faculty Successes

The heart and soul of the FNSM remains our faculty, and I am pleased to share several faculty successes.

We were successful in all four of our tenure-track searches. **John Schade**, a biogeoscientist, will have a leave during the 04/05 academic year to continue his postdoctoral work and will join us Fall 2005. **Gary Muir** (cognitive neuroscientist), **Urmilla Malvadkar** (mathematical biologist), and **Olaf Hall-Holt** (computer science) will join us this fall.

We had several faculty/staff who completed their first year at St. Olaf:

- ◆ **Amelia Taylor**
- ◆ **Paul Roback**
- ◆ **Shelly Dickinson**
- ◆ **Doug Beussman**
- ◆ **Sujeev Wickramasekara**
- ◆ **Steve Cronin**
- ◆ **Bill Journey**
- ◆ **Rob Rutherford**
- ◆ **Muir Eaton**
- ◆ **Young Yoo**
- ◆ **Randy Baily**

We had four professors who were promoted. **Dick Brown** was promoted to Associate Professor in the Mathematics, Statistics, and Computer Science (MSCS) Department, **Charles Umbanhowar** was promoted to Professor in the Biology Department, **Dan Gross** was promoted to Professor in the Psychology Department,

and **Matt Richey** was promoted to Professor in the MSCS Department. We also had successful reviews for **Kim Kandl** (4th year) **Jeff Schweinfus** (2nd year), and **Jason Engbrecht** (2nd year).

Other accomplishments to be noted include:

- ◆ Faculty activity across campus - Lilly, EIN, CILA, Mellon, Committees
- ◆ Several published papers, chapters, and books (20 papers, handful of chapters/books)
- ◆ Involvement with *The Man Who* production in the fall
- ◆ Many excellent seminar and colloquia, many of which were joint presentations
- ◆ Hosted conferences - ACM Information Literacy in Psychology (**Bonnie Sherman**), PEW Statistics (**Julie Legler & Matt Richey**), Bioinformatics with Jacques Cohen (**Rich Allen**)
- ◆ Program Identity - Biomolecular Science (new name, updated concentration, exciting curricular initiatives), Statistics (new courses, updated concentration, name added to department), Computer Science (new courses, new major), Neuroscience (**Shelly Dickinson** joining group, successful search, spring meeting), Environmental Studies (first search, departmental status)
- ◆ New courses taught- Dolphin Communication, Bioinformatics, Island Biology in Pacific, Zoo Biology, Biophysical Chemistry, QWAC
- ◆ Several new courses approved - e.g. Biostatistics in Geneva
- ◆ **Jean Porterfield** gave "first lecture"
- ◆ **Amy Kolan** gave Mellby lecture
- ◆ **Paul Humke** and **Henry Kermott** featured in Provost Sabbatical Series

- ◆ **Bob Jacobel** had a glacier named in his honor
- ◆ Goldwater, Rhodes, Fulbright scholars were science/math students

Program Successes

This has been a year full of many successes for FNSM programs. The paragraphs below describe some of the events and decisions that affected current and future FNSM programs.

We had an excellent group of Chairs - **Anne Walter** (biology), **Mary Walczak** (chemistry), **Matt Richey** (MSCS), **Dave Nitz** (physics), and **Chuck Huff** (psychology) - and Program Directors - **Beth Abdella** (molecular biology), **Ted Johnson** (biomedical studies), **Bonnie Sherman** (neuroscience), **Julie Legler** (statistics), **Dick Brown** (computer science), and **Charles Umbanhowar** (environmental studies). With much appreciation, we acknowledge the end of **Dave Nitz's** and **Matt Richey's** terms as chairs, and welcome **Bob Jacobel** and **Paul Zorn** as the new chairs of physics and MSCS, respectively.

We were approved for three tenure-track searches to be conducted during the 2004-05 academic year:

- ◆ Biochemist (chemistry)
- ◆ Experimental Physicist (physics)
- ◆ Organismal Neuroscientist (biology)

We had another excellent Science Symposium during Honor's Day, thanks to the hard work by **Wes Pearson** and the Science Symposium Committee (**Uta Wolfe**, **Charles Umbanhowar**, **Jason Engbrecht**, **Jeff Schweinfus**, and **Steve McKelvey**). The theme for this year was *The Strage Attraction of Choas: Advances in Understanding Complex Systems* and featured three distinguished speakers: Larry Liebovitch (Florida Atlantic University), Walter Freeman (UC - Berkeley), and Jim Hansen (MIT). Associated with the symposium was our annual student research poster session, which again attracted more than 50 student presenters.

Our summer research program was again very successful, with 43 students and 21 faculty involved. Thanks to **Charles Umbanhowar**, our Director of Summer

Research, and **Mary Walczak**, who organized another fine Communication Series for students.

This was a quiet year for design work on the Science Complex, as we intentionally put design work on hold while we got started with fund raising. In December, the Board of Regents formally approved a \$77.2 million capital campaign, \$56 million for total project costs for the Science Complex, \$20 million for endowment to operate the Science Complex, and \$1.2 million for interim financing. We continued to do some work with the The Weidt Group and submitted a grant to support this work to the Kresge Foundation as part of their Green Building Initiative.

Several facility and equipment upgrades brought new energy to our program. **Shelly Dickinson's** "lavender lab" renovation was completed, as were renovations to the AMCL, a biology teaching lab, and several research spaces. The shared biomolecular science lab is now fully equipped and functioning well, and in January we installed the new mass spectrometer. The new NMR, complete with *OleNMR*, is now on line.

FNSM faculty were active writing and receiving grants during the 2002-03 academic year. The highlights were:

- ◆ **Jason Engebrecht, Gene Bakko, Greg Muth, Charles Umbanhowar, Bob Jacobel, and Eric Cole** were funded.
- ◆ **Jeff Schweinfus, Kim Kandl, Doug Beussman, and Uta Wolfe** have grants pending.
- ◆ **Howard Thorsheim, Dick Brown** are resubmitting.
- ◆ Pre-tenure faculty development grants (**Kim Kandl** completed; **Jason Engbrecht** and **Jean Porterfield** awarded)
- ◆ Faculty development grants - **Rich Allen** and **Dick Brown**
- ◆ Institutional - HHMI, NSF, LI-COR funded; Keck, Kresge Green Building, Kresge Science Equipment pending
- ◆ Total in \$3 million range successful, \$1 million pending

Sabbaticals were awarded next year for **Charles Umbanhowar, Gary Miessler, Amy Kolan, and Howard Thorsheim.**

Departing Faculty

Several faculty will be leaving St. Olaf. We appreciate the contributions of the following faculty members and wish them well:

- ◆ **Muir Eaton**
- ◆ **Young Yoo**
- ◆ **Bill Journey**
- ◆ **Steve Cronin**
- ◆ **Uta Wolfe**
- ◆ **Sujeev Wickramasekara**
- ◆ **David Molnar**
- ◆ **Matt Bloss**
- ◆ **Randy Bailey**