

FNSM Annual Report
July 5, 2005
Submitted by David G.L. Van Wylene

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 2004-05 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 three of our tenure-track searches. **Greg Muth**, (biochemist), **Kevin Crisp** (neurobiologist), and **Brian Borovsky** (experimental physicist).

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

- ◆ **Gary Muir**
- ◆ **Urmila Malvadkar**
- ◆ **Olaf Hall-Holt**
- ◆ **Nicole Hoft (in two departments!)**
- ◆ **Katherine Crowley**
- ◆ **Rickard Pettersson**
- ◆ **Alan Ernst (in two departments!)**
- ◆ **Tony Watson**
- ◆ **Ann Pierce**

We had three faculty who were promoted. **Paul Jackson** was promoted to Associate Professor of Chemistry (Paul received tenure as well), **Eric Cole** was promoted to Professor of Biology, and **Bonnie Sherman** was promoted to Professor of Psychology. We also had successful reviews for **Paul Roback** (4th year), **Jean Porterfield** (4th year), **Doug Beussman** (4th year), **Shelly Dickinson** (2nd year), **Greg Muth** (2nd year), **Amelia Taylor** (2nd year), and **Rob Rutherford** (2nd year).

Other accomplishments to be noted include:

- ◆ **Martha Wallace** – named as a Minnesota Council of Teachers of Mathematics (MCTM) “honorary member” (equivalent of a “lifetime achievement” honor)
- ◆ **Paul Humke** gave the Mellby lecture
- ◆ New Hardy (**Ted Johnson**), Larson-Anderson (**Gary Spessard**), and Whittier Chairs (**Bob Jacoble**) named
- ◆ **Jim Cederberg** was the Honor’s Day convocation speaker
- ◆ Several published papers, chapters, and books
- ◆ New courses taught- Neuroscience of Addiction, Animal Behavior, Neurobiology of Learning and Memory, Forensic Science, Bioanalytical Chemistry, Biostatistics in Geneva, three new/novel reading courses: Introduction to Biomolecular Studies, Medical Experience in Peru, Neuroscience of Disease, Computer Graphics, Mathematical Foundations of Computing, Logic Programming

- ◆ New courses approved – Medicinal Chemistry in Jamaica, Limnology, Human Development in East Asia: Perspectives from China and Japan; Medical Experience in Peru
- ◆ Goldwater (3), Fulbright scholar
- ◆ Active across campus on many committees

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), **Paul Zorn** (MSCS), **Bob Jacobel** (physics), and **Chuck Huff** (psychology) – and Program Directors – **Beth Abdella** (molecular biology), **Ted Johnson** (biomedical studies), **Bonnie Sherman** (neuroscience), **Julie Legler** (statistics), and **Dick Brown/Matt Richey** (computer science). With much appreciation, we acknowledge the end of Chuck Huff's and Mary Walczak's terms as chairs, and welcome **Dana Gross** and **Wes Pearson** (a one-year interim position) as the new chairs of psychology and chemistry, respectively. Mary Walczak agreed to serve another term as Chair of Chemistry following her sabbatical year. Anne Walter completed agreed to serve another term as Chair of Biology. Bonnie Sherman completed two important years as leader of the Neuroscience Program; **Shelly Dickinson** will be the new Neuroscience Program Director.

We were approved for two tenure-track searches to be conducted during the 2005-06 academic year:

- ◆ Mathematician (MSCS)
- ◆ Bioinformatics (biology)

We had another excellent Science Symposium during Honor's Day, thanks to the hard work by **Wes Pearson** and the Science Symposium Committee (**Gary Muir, Mike Swift, Jason Engbrecht, Jeff Schweinfus, and Steve McKelvey**). The theme for this year was Emerging Infectious Diseases: The Unseen Threat. The three featured speakers were: Robin M. Bush (University of California, Irvine), James F. Childress (University of Virginia), and Michael Osterholm (Center for Infectious Disease Research and Policy, Department of Homeland Security, and University of Minnesota). 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 51 summer researchers and 28 faculty involved. Thanks to **Charles Umbanhowar**, our Director of Summer Research, and **Mary Walczak**, who organized another fine Communication Series.

This was a important year for work on the Science Complex. Between December and February, the Oversight Team addressed the fiscal reality of the project and proposed a phased approach that was endorsed by the Board of Regents. In the spring, the design-build team was put together and the stage is set for a very active year of design work in 2005-06.

Several facility and equipment upgrades brought new energy to our program, including:

- ◆ Remodeling of SC 371 (intro chemistry lab)
- ◆ **Olaf Hall-Holt's** 3d-visualization is SC186
- ◆ Remodeling of HH201a for the Spatial Cognition and Navigation Lab for **Gary Muir**
- ◆ **Eric Cole's** confocal microscope and creation of microscopy facility
- ◆ Creating a shared research lab for **Charles Umbanhowar** and **John Schade** modifying research space for **Kevin Crisp** (special thanks to John Gianinni, Mary Caroline Henry, Diane Maher, Jason Hill, Diane Angell, Lynn Steen, and Dave Burton for helping make this delicately timed work happen)

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

- ◆ **Eric Cole, Doug Beussman, Rob Rutherford** funded by NSF
- ◆ **Jeff Schweinfus** funded by Research Corporation
- ◆ **Bob Jacobel** and **Brian Welch** Mt Veniaminof volcano study funded by NSF
- ◆ **Paul Humke** and **Bruce Hanson** - NSF Real Analysis in Poland and Czech Republic
- ◆ **Charles Priore** and **John Gianinni** ACM Information Literacy Grant
- ◆ Institutional – Kresge Science Equipment, Merck/AAAS
- ◆ Faculty development grants for **Jason Engbrecht, Paul Roback, Amelia Taylor, Olaf Hall-Holt, Jean Porterfield, Charles Umbanhowar, Chuck Huff, Gary Muir, Donna McMillan** (Magnus the Good)
- ◆ Lilly Vocation grant – **Kathy Shea** and **Donna McMillan**
- ◆ Lilly International Service (**Ted Johnson, Matt Richey & Anne Walter**)
- ◆ **Jeff Schweinfus** and **Greg Muth's** CCLI funded by NSF
- ◆ HHMI, NSF, Keck, Kresge initiatives continued

Sabbaticals were awarded next year for **Mary Walczak, Paul Jackson, Steve McKelvey, Eric Cole, Deb Anderson, Judy Cederberg, and Jim Cederberg**

Departing Faculty

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

- ◆ **Ted Vessey**
- ◆ **Jim Dickson**
- ◆ **Mary Caroline Henry**
- ◆ **Rob Rutherford**
- ◆ **Nicole Hoft**
- ◆ **Katherine Crowley**
- ◆ **Tony Watson**
- ◆ **Matt Feig**
- ◆ **Glen Castore**