

# ***Report of the Cognitive Science Steering Committee for 2006-07***

**August 1, 2007**

The Cognitive Science Program is administered by a Steering Committee of volunteers drawn from various departments in the UConn cognitive science community. For 2006-07, the Steering Committee consisted of Thomas Bontly (PHIL), Roger Chaffin (PSYC), James Dixon (PSYC), Bernard Grela (CDIS, fall only), Letitia Naigles (PSYC), Dan Ryder (PHIL), William Snyder (LING), Whitney Tabor (PSYC), and Jennifer Tufts (CDIS, spring only).

Since July 2006, the Steering Committee has been chaired by Bontly, who was appointed Director of Cognitive Science by Dean Ross MacKinnon of CLAS. At the first meeting (Sept 6), it was agreed that the Steering Committee would create three standing internal positions: a director of undergraduate studies, a colloquium director, and a director of graduate studies and research. For 2006-07, these positions were held by Naigles, Snyder, and Tabor, respectively, who were all unanimously elected. Grela agreed to assist Snyder with the Colloquium Series.

The Steering Committee held 8 meetings during the 2006-07 academic year (generally on the first Wednesday of each month). The Committee's business typically falls into four broad categories: (1) oversight of the undergraduate program, (2) oversight of the Cognitive Science Colloquium Series, (3) oversight of the Cognitive Science Website, and (4) development of the Cognitive Science Program in accord with the Strategic Plan adopted by the Steering Committee in May 2006.

## **Summary**

Here follows a brief summary of the report. For details on these and other items, please see complete text of report below.

- Budget allocation from CLAS increased to \$3000 per year
- Interdisciplinary Colloquium/Seminar grant renewed by Research Foundation
- 5 majors graduated
- 24 declared majors in program
- Minor in Cognitive Science proposed, approved by CLAS C&C
- COGS 201 approved for Gen Ed Area 3, enrollment up to 31
- Undergraduate advising enhanced
- Colloquium Series continued for 7<sup>th</sup> year with 5 visiting speakers
- Old website converted to UConn template
- Construction of new website in progress
- IGERT proposal under development
- Agenda for 2007-08 takes shape:
  - Craft proposal for a graduate certificate and/or degree program
  - Submit proposal to NSF for an IGERT grant
  - Add COGS 29X courses
  - Offer one-credit research course for majors

- Develop new COGS course

## **Budget**

### ***Funding***

The Cognitive Science Program chief source of funding is a yearly allocation from CLAS. In June 2006, Dean MacKinnon agreed to increase the allocation to \$3000 annually. In addition, the Steering Committee applies every year to the Research Foundation's Interdisciplinary Colloquium/Seminar Program for support of the Cognitive Science Colloquium Series. This typically results in a grant of \$1000 per year, though it must be applied for every year and could be discontinued at any time.

Support for the Program comes also from the many academic departments involved with Cognitive Science. These departments provide administrative support; they reward faculty for service on the Steering Committee; and they contribute to the staffing of COGS 201 (a service which is also supported by the Dean of CLAS). These non-monetary sources of support are difficult to quantify and are not included in the Steering Committee's budget. But their importance to the Program should not be underestimated.

For 2006-07, the Program's operating budget totaled \$4376.49:

- \$3000 allocation from the Dean of CLAS (note increase)
- \$1000 grant from the Research Foundation's Interdisciplinary Colloquium/Seminar Series
- \$376.49 held over from 2005-06 (when a colloquium speaker cancelled and could not be rescheduled)

### ***Expenditures***

In Sept 2006, the Steering Committee agreed to increase slightly our expenditures on colloquia (from \$2000 per year to \$2500) and to use the remaining \$1879.49 for program development and outreach. Approximately \$600 was spent during the year on various such activities:

- Poster for use at Open House/Majors Fair
- Talk to cog sci undergrads on careers in cognitive science
- Pizza for undergraduate advising meetings
- Support for graduate students to attend dinners with colloquium speakers

As of May 2007, we were left with approximately \$1200, which money has been used to hire a grad student with professional experience in website design to program a new, more functional website (see below).

## **Undergraduate program**

### ***Major***

Originally, students wishing to study cognitive science could only pursue it as an individualized major. Development of an undergraduate major in cognitive science began in 1999. After winding its way through various College and University approvals, a proposal to create an undergraduate major in cognitive science was submitted to the Department of Higher Education in 2001. Students were first accepted into the program in 2002, and final accreditation of the

program was granted in March 2006. Prior to the 2006-07 academic year, approximately 10 students had earned a UConn degree in Cognitive Science.

In 2006-07, another 5 seniors graduated with degrees in Cognitive Science. They are (along with their post-graduate plans):

- **Jonathan Benichov** (undecided)
- **Laura Fox** (graduated in Dec '06, unable to contact since graduation)
- **Devin Gaines** (recently deceased; was to enter into MS program in computer technology and education at NYU)
- **Salmun Kazerounian** (University of Washington School of Law, full fellowship)
- **David Rothlein** (Johns Hopkins University, PhD program in Cognitive Science, full fellowship)

Not including the recent graduates, there are presently 24 declared Cognitive Science majors. It is therefore anticipated that the number of graduates per year in Cog Sci will continue to grow for the foreseeable future.

### ***Minor***

Following upon the Strategic Plan of May 2006, the Steering Committee set out to introduce a Cognitive Science minor. The resulting proposal was approved by the CLAS C&C in April 2007. Because certain of the minor's requirements can be satisfied by courses in CSE, however, the approval of the School of Engineering is also required. And since the Vice Provost for Undergraduate Education reviews such proposals to evaluate their impact on resources, VP Makowsky's approval is required as well. We anticipate that these approvals will be forthcoming in time to get the new minor into the 2008-09 undergraduate catalog (although students will be able to earn a minor as soon as all necessary approvals are granted).

### ***COGS 201***

In 2003-04, the Steering Committee undertook to create a core course for the undergraduate minor. The course, Foundations of Cognitive Science, was approved by the CLAS C&C on February 8, 2005 and offered for the first time in Spring 2006 (team-taught by Ryder and Tabor) with an enrollment of approximately 18. In Spring 2006, Ryder and Tabor also applied for and received a GEOC grant to turn COGS 201 into a general education course.

In Sept 2006, Ryder and Tabor submitted the proposal to convert COGS 201 into a course satisfying General Education Content Area 3. The proposal was approved by the CLAS C&C in October 2006 and subsequently by GEOC. (Note: Content Area 3, *Science and Technology*, consists almost entirely of courses in biology, chemistry, and physics. It joins PSYC 132 and LING 110Q as the only courses in that content area that are taught by faculty from "human" or "social" science departments.)

COGS 201 was taught by Ryder and Tabor again in Spring 2007, this time with an enrollment of 31. With the continued growth of the major, the addition of the minor, and the conversion of COGS 201 to a gen ed course, it is anticipated that its enrollment will continue to grow.

### ***Advising***

The Committee also acted to upgrade our undergraduate advising capacity, putting into place a number of proposals advanced in the Strategic Plan. Naigles was appointed Director of Undergraduate Studies and took over many routine advising duties. During fall semester, she met with every returning major at least once, discussed classes/coursework, assigned advisors, and notified each advisor of his/her new/returning advisee. Naigles continued to meet with newly declared majors through Spring 07. Naigles and Bontly also met with staff in Psychology and the CLAS Academic Services Center to coordinate the processing of paperwork for cognitive science majors.

In addition, the following new steps were taken in 06-07:

- Naigles met with the majors as a group on 2 occasions, Sept. 06 and Jan. 07, to discuss cogsci courses present and future, research possibilities present and future and the minor.
- In March 07, Stephen Springer from Nuance Communications gave a talk to the majors on careers in cognitive science.
- Naigles also designed and produced a poster for use at student advising events such as the CLAS Open House and the annual Majors Fair.

As usual, the Cog Sci Program was represented at the annual Majors Fair in September (by Naigles) and at both the Fall Open House (by Bontly) and Spring Open House (by Naigles and Snyder).

Several further enhancements are planned for 2007-2008, including a 1-credit course in Spring 2008 for all majors who have taken COGS 201. The focus will be on research that students are doing, reading papers by colloquium speakers, and prepping for grad school.

The Steering Committee is also looking into the idea of an annual award for the best research paper in cognitive science by a UConn undergraduate. Bontly will explore the feasibility of such an award over the summer and report back to the Committee in the Fall.

## Colloquium Series

2006-07 was the 7<sup>th</sup> year for the Cognitive Science Colloquium Series, when it was chaired by William Snyder (LING), assisted by Bernard Grela (CDIS). Total expenditures on colloquia were approximately \$2500. The Series was funded in part by a \$1000 grant from the Research Foundation's Interdisciplinary Colloquium/Seminar Series Program. The remainder came out of the Program's general operating budget.

Cog Sci sponsored 5 speakers in 06-07:

- **Fred Dretske** (Duke University, Philosophy) 'What Change Blindness Teaches about Consciousness' (Sept 8, 2006)
- **Karen DeValois** (UC-Berkeley, Psychology & Vision Science) 'The Appearance of Images' (Oct 20, 2006)
- **Richard Ashley** (Northwestern University School of Music) 'Music, Language and Communication: A Pragmatics of Musical Communication' (Feb 9, 2007)
- **Randy Beer** (Indiana University, Computer Science & Cognitive Science) 'Frictionless Brains: Evolution and Analysis of Brain-Body-Environment Systems' (March 30, 2007)

- **John Locke** (CUNY Graduate Center, Speech and Hearing Sciences) ‘Evolutionary Developmental Linguistics: Naturalization of the Faculty of Language’ (April 20, 2007)

Talks were well attended, with an audience of 60-75 being about the norm. All talks were held in the Liberman Room in the Psychology Dept (BOUS 160).

Looking ahead to 2007-08, the Steering Committee again applied to the Research Foundation for support for the Colloquium Series, and the CLAS allocation for Cognitive Science is expected to remain the same. Assuming that the Research Foundation renews the grant, therefore, it is anticipated that Program will once again be able to spend \$2500 on colloquia in 07-08, sufficient for 5-6 speakers. Three talks have been scheduled thus far:

- **Larry Leonard** (Purdue University, Speech, Language, and Hearing Sciences) – Sept 21
- **Susan Goldin-Meadow** (University of Chicago, Psychology) – ~~Oct 5~~ April 11
- **Mark Changizi** (Rensselaer Polytechnic Institute, Cognitive Science) – Nov 30

Further talks will be scheduled once funding has been secured. There is also the possibility of holding another Cog Sci mini-conference, featuring talks by UConn faculty. (The last such was held in 2002-03, featuring talks by new affiliates of the Program.)

## Website

The Cognitive Science Program has for several years had a homegrown, minimalist website housed on the SP server. Since the SP server is now being phased out, the site was in November moved to the newer UCONN Web server (though it can still be accessed through the alias [www.cogsci.uconn.edu](http://www.cogsci.uconn.edu)). At the same time, the old site was converted to the new UConn template, though the content remained the same (and, it must be said, largely out of date).

In Spring 2007, the Steering Committee decided that the Director should spend the bulk of our remaining funds for 06-07 to have the website redesigned and its functionality increased. In June 2007, Bontly hired a grad student with a background in website development (Doug Owings, PHIL) to program a new and improved site which will be more informative, easier to use, less time-consuming to maintain, and simpler to expand. It is hoped that the new site can be unveiled in September 2007, although this promises to be an on-going project for some time.

## Graduate training

While Cognitive Science does not currently have a graduate program, the Cog Sci faculty have long recognized the importance of interdisciplinary graduate training. Graduate students in the various affiliated departments attend the Colloquium Series, they often take graduate courses in other departments, and many are involved in collaborative research projects in cognitive science with faculty from other departments.

In the Strategic Plan of May 2006, the Steering Committee endorsed several proposals to increase support for interdisciplinary graduate training. Tabor was appointed Director of Graduate Studies and Research and is heading up such initiatives, including:

- Development of a graduate degree and/or certificate program
- Proposal for an NSF IGERT grant

**Graduate program:** The development of a graduate program promises to be a complicated project requiring several years to implement. It requires the Program to secure new sources of funding, develop at least one and probably several graduate courses in Cog Sci, and engage in extensive negotiations with the academic departments, the College, and the Graduate School. The Steering Committee will draft one or more proposals during the fall semester and solicit feedback from the cognitive science community. Once we have agreement on the proposal, it will have to be approved by (1) all affected academic departments, (2) the Graduate Faculty Council, and (3) the Provost. (If the proposal is for a graduate degree instead of or in addition to a graduate certificate program, approval from the Board of Trustees and the Department of Higher Education is also required.)

**IGERT:** The National Science Foundation's Integrative Graduate Education and Research Traineeship (IGERT) program supports "integrative, research-based, graduate education and training activities in emerging areas of science and engineering". Proposals are organized around an interdisciplinary theme that integrates research with education and promotes collaboration across traditional academic disciplines. The Steering Committee is presently working to identify one or more such interdisciplinary themes that highlight the strengths of the UCONN cognitive science community. We will then put together a core group of faculty to craft the proposal during fall semester. (NSF awards approximately 20 IGERTs per year, and each IGERT provides up to \$3,000,000 over 5 years. Because there is a limit to the number of applications that can come from any one institution, internal screening is required.)

## **Agenda for 2007-08**

In addition to overseeing the undergrad program and colloquium series, the Steering Committee expects to pursue the following agenda in 07-08:

- Draft proposals for a graduate program (certificate and/or degree)
- Submit IGERT proposal for internal screening
- Complete work on website
- Introduce COGS 29X courses
- Offer one-credit COGS 29X research course in Spring 08
- Develop one or more new undergraduate courses (computational modeling, cognitive neuropsych)
- Propose annual awards for best work in cognitive science by undergrad, grad student