Mission
After a number of years of discussion and planning, the Interdisciplinary Graduate Program in Informatics (IGPI) was formally approved in September 2006 with the first admitted student cohort in fall 2007. “Informatics” denotes an emerging discipline at the intersection of the computational disciplines and the humanities, art, natural, biological, health and social sciences. Rather than foster the potential proliferation of new programs under the “X”-informatics approach, the model of an interdisciplinary umbrella with several tracks leverages the UI’s existing strengths and provides maximum flexibility to support the rapid emergence of new informatics related initiatives. The program builds on existing curricular offerings and faculty research interests to confer graduate academic credentials (certificate, master’s and PhD degrees) in one of three approved subtracks----Information Science (IS), Health Informatics (HI), and Bioinformatics (Biol). Currently the Bioinformatics subtrack only offers a certificate. There is a proposal to establish a Geoinformatics subtrack currently in the approval process and a group of faculty is drafting a Cultural Informatics subtrack proposal as well.

The IGPI structure exhibits a number of attractive features:
1). Computational courses are taught by faculty with appropriate expertise; 2). The core curriculum supports continued development and oversight; 3). Encourages the development of subtracks in rapidly evolving informatics sub-disciplines; 4). Allows existing programs to leverage the core curriculum, and to adopt elements of IGPI for their own programs; while permitting cross-disciplinary groups of faculty from different departments to work together on similar scholarly interests; and 5). Provides a structure for discussing and coordinating university-wide informatics initiatives.

Admission Processes and Criteria
Following the formalization of IGPI, there has been a small but steady student demand for the program. Students can enter the program through direct admission to IGPI or transfer from other related programs. Prior to the formalization of the program, several students undertook an individual interdisciplinary doctoral program with an emphasis in informatics.

IGPI is promoted via the web, and is listed on the American Medical Informatics Association site and GradSchools.com. IGPI holds an annual Open House in the early spring semester to attract current UI students as well as students from local colleges. IGPI is also fully promoted during Graduate College recruitment visits and events. Earlier this year the IGPI program was prominently promoted on the academic features of the Big Ten Network. Interested students must meet the current selection criteria that includes the standard Graduate College application materials and information. A key consideration is the research experience of the student and the match of student research interests to faculty expertise. For the two years of interest (2007, 2008), a total of 15 applications were received; 7 students were admitted (5 master’s, 2 doctoral)

As of fall 2009, there are a total of 16 students in the IGPI program; IS has 8 enrollees (3 PhD, 4 MS, 1 Certificate) while HI has 8 enrollees (5 PhD, 3 MS). Two enrollees have completed the Biol certificate program, although a recently awarded NIH T32 training grant is expected to draw attention to that certificate in the very near future. Of the 16 students, 8 students are from under-represented groups.
Financial support has been a significant issue in regards to expanding the recruitment and admission of graduate students. IGPI does not support MS or certificate students. Four first-year fellowships have been available annually for incoming PhD students (2 from the Graduate College and 2 from the Provost’s office provided as a start-up package to IGPI). Funding beyond the first year is currently supported by faculty members through research grants or through departmental/programmatic teaching assistantships.

**Program Outcomes**

There has been one doctoral student who has completed the IGPI program (transfer from Management Sciences; TTD=6.0 yrs). Thus, TTD and percent completion data are insufficient for complete analysis. Student awards and honors are few at this point. Graduate fellowships are awarded to first-year doctoral students, and one student received a Presidential Graduate Fellowship. The program has yet to submit a training grant, but Prof. Casavant has recently received an NIH T32 training grant in Bioinformatics, which will support students pursuing the BioI certificate along with their “home” graduate degree.

Although we only have one graduate at this time, we anticipate that graduates will be employed in industry, the healthcare system and perhaps academics. One graduate of the individual interdisciplinary doctoral program in Informatics is employed as an adjunct faculty member in the College of Public Health and the Iowa Health System.

**Program Characteristics**

It is difficult to assess the appropriate size of the IGPI graduate program. While over 75 faculty members endorsed the proposal, at this point there are only a relative few (with available financial resources) who are active Mentors of Record for our students. At the beginning of its third year, IGPI is re-assessing the commitment of each faculty member to the program. We seek to identify the “core” faculty members and those who only wish to be “affiliated” with the program. Active leadership in the subtracks has been the driving force of the program thus far and faculty participation, usually on an overload basis, will need to continue as new resources are identified to support IGPI. Active faculty are derived from several computational and technically-oriented departments (e.g. Computer Science, Library Science, Management Sciences)

Strengths of the program reside in the quality of the students enrolled in the program. These individuals are conducting high-quality research with interested faculty members, and they have begun to form student groups to promote community amongst the students through brown-bag lunches, social events and other activities. The students are working with the program leadership to initiate a seminar series, which will draw recognition and attention to informatics activities on campus. A narrow group of highly-engaged faculty members are the core of the program at the moment. At its early stages, IGPI has a strong physical presence in the Library through the work of its program administrator.

Weaknesses center on the small number of truly engaged faculty members. To remedy this, the program leadership seeks to recognize dedicated individuals via a formal “faculty appointment” to IGPI. These appointments would be for three years, and renewal would be based upon active participation in and service to the program. Infrastructural resources are at a premium to support graduate student stipends, and programming. The Graduate College re-allocated funds to start the program, and along with start-up funds from the Provost office, approximately four first-year doctoral students are
supported. In order to allow steady growth of the program, additional funds will need to be identified to support students and programming, as well as to provide faculty incentives (e.g. administrative supplements for a director). IGPI will soon need to recruit and appoint a director who is dedicated to advancing this interdisciplinary program. Visibility of the program, both internally and externally, will need to be improved as IGPI matures beyond its current infancy. Physical space for IGPI is also at a premium. IGPI has a program office in shared space with the School of Library Science in Main Library, but office/lab space for 1st-2nd year students is lacking. This challenges the development of community amongst the graduate students before they matriculate into individual faculty programs in the advanced years (> yr3) of their program.

As a graduate program only, IGPI does not have a direct role in the undergraduate teaching mission of the UI. Upon occasion, individual students may serve as TAs in specific departments or programs.

Conclusions
IGPI is a very new interdisciplinary graduate program built on an “umbrella” program model, and which spans a breadth of disciplines on campus. Despite being a program in its infancy, IGPI has drawn a small but dedicated group of faculty members to offer a quality program in several thematic areas. There is growing student interest in the program, and one student has graduated thus far. As IGPI continues to evolve, it will be critical to recruit new faculty members (including an energetic and committed director) and to identify additional infrastructural resources to support students and programming.