DATE: November 14, 2016

TO: Randall Hannum, Chair

College Council Curriculum Committee

FROM: Curriculum Subcommittee

Lukasz Sztaberek (Chair), Xiaohai Li, and Peter Parides

RE: Final Report for Proposal 16-10 Biomedical Informatics Program Change

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**Proposal:**

The proposal contains several curricular changes:

* Introduction of two concentrations within program (Bioinformatics and Medical Informatics)
* Introduction to Biomedical Informatics – new course proposal
* Programming for Biologists – new course proposal
* Evolution – new course proposal
* Genetics – new course proposal
* Biomedical Informatics Colloquium – new course proposal

**Rationale:**

Biomedical Informatics covers very broad and diverse field and encompasses several specific areas of interest with the most diversity lying between Bioinformatics and Medical Informatics. Despite the fact that several skills are shared between the two, in order for students to be competitive either for the workforce or in graduate school it is believed that they should have opportunity to choose particular concentration (Bioinformatics or Medical Informatics) within this degree.

**Strengths:**

Solid proposal; the creation of two concentrations will allow students to focus on their area of interest. It will also give them enough time to develop the expertise in their field of choice.

**Weaknesses:**

None

**Issues and Concerns Discussed and Resolved:**

1. Better description of how the two concentrations differ.
2. Several minor revisions regarding edits to the structure of the various course outlines, especially regarding course descriptions, formatting of the learning objectives and assessment tables, and addition of learning outcomes.
3. Minor corrections to the academic integrity statements for new courses proposed.
4. Addition of Medicinal Chemistry (CHEM 4822) to the list of electives.
5. Addition of a year by year suggested course work.
6. Changing the program electives from being a required list to a recommended list.
7. Concern was expressed regarding proposed course entitled Programming for Biologists (BIO 2110). Programming Fundamentals (CST 1204) has been added as one of the electives for the Bioinformatics concentration in order to accommodate those concerns.
8. Modification of footnote for the statistics course to indicate that students without specific section of MAT 1372 (modified to include use of R software) would need to take some alternate training (either a workshop or a self-guided learning).
9. Modification of the Biomedical Informatics Colloquium to be a writing intensive course.

Concerns and suggestions were well received by the proposers and incorporated into the final version of this proposal.

**Subcommittee Activities:** The subcommittee met with proposers on November 3rd 2016. Several modifications have been suggested. On November 9th, 2016, subcommittee and proposers met with Provost Bonne August, Associate Provost Pamela Brown, Dean Justin Vazquez-Poritz, and Kimberly Cardascia. Further modifications were suggested and were also incorporated in the final version of the proposal.