

## **Resolution 2014-15.C**

### **Resolution to Approve New Degree in Bachelor of Science in Systems Biology**

Recommended by the Commission on Undergraduate Studies and Policies

First Reading: September 8, 2014

Second Reading: September 22, 2014

Approved by University Council:

Approved by the President:

First Effective Date to Declare Degree: Fall 2015

First Effective Date to Graduate: Spring 2016

**WHEREAS**, systems biology is a rapidly emerging field that draws on ideas and methods from biological sciences, chemistry, physics, mathematics and statistics, these disciplines lying at the core of Science Technology Engineering and Mathematics (STEM) education; and

**WHEREAS**, systems biology is foundational to our current understanding of the molecular machines and regulatory networks that make life possible at the cellular level, knowledge that is basic to modern industrial developments in biomedicine, biotechnology, pharmaceuticals and agricultural production; and

**WHEREAS**, Virginia Tech is in an excellent position to initiate a bachelor of science in systems biology, due to its strong base of senior faculty in the College of Science who are actively engaged in research in systems biology, and who are joined in this endeavor by senior faculty in the Department of Computer Science and senior research scientists in the Virginia Bioinformatics Institute, as well as new faculty members across the University who are being hired into this new and rapidly expanding field; and

**WHEREAS**, the bachelor of science in systems biology will provide students with a knowledge base of theoretical principles and experimental tools and techniques in systems biology; and

**WHEREAS**, the bachelor of science in systems biology will prepare graduates for interdisciplinary research and education, with employment in the private sector, employment in state and federal government agencies, and for post-baccalaureate training; and

**WHEREAS**, the undergraduate degree in systems biology is unique in the Commonwealth of Virginia and will establish Virginia Tech and the Commonwealth as key leaders in education for one of the most critical technologies of the future;

**THEREFORE BE IT RESOLVED**, that the Bachelor of Science in Systems Biology be approved effective Fall 2015 and the proposal forwarded to the President, the Board of Visitors, and the State Council of Higher Education for Virginia (SCHEV) for approval, and to the Southern Association of Colleges and Schools (SACS) for notification.

