Joint Meeting of the USG STEM Initiative & Biology Academic Advisory Committee March 13, 2009

Participant List: Judy Awong-Taylor, Ray Barber, Bill Birkhead, Lyndasu Crowe, Donna Daugherty, Melinda Davis, Bob Gregerson, Richard Griner, Al Harmon, Bob Herrington, JoAnn McCrary, Ron Matson, Mary Mayhew, John Pasto, Elissa Purnell, Sheryl Shanholtzer, Mark Sugalski, Eric Sun, Candace Timpte, Bill Wall, Steve Vives, Henry Zot

The meeting was called to order by Chair Donna Daugherty. Introductions followed and committee by-laws were distributed. Eric Sun was extended thanks for hosting the meeting.

A motion to pass the minutes was offered by Ron Matson and seconded by John Pasco. The minutes were approved unanimously.

Phil Gibson, Gwinnett Technical College was invited by Judy Awong-Taylor to give a presentation on "Transitioning Students Through Georgia's Educational System." A powerpoint presentation was given and hard copies of the powerpoint distributed. Characteristics of a U.S. Department of Labor Community Based Job Training Grant awarded December 11, 2006 were summarized with the primary goal of building a bioscience workforce pipeline. The two technical colleges involved were Gwinnett Technical College and Athens Technical College. Both institutions are SACS accredited and all teachers meet SACS accreditation requirements. Both colleges offer associate degrees in Bioscience or Biotechnology. The curriculum was detailed and student internship opportunities outlined. A goal of the presentation was to start a dialog on mechanisms for students to transition to higher education. Several questions were raised by Phil Gibson for future consideration. Could there be advanced placement? What are the course equivalencies? Could block credit be considered?

Discussion ensued with some representatives expressing that transition could be easy while others expressed concern. One representative asked if the goal to consider transition school by school or system wide? Another question raised was if the two technical colleges represented today were equivalent to other state technical colleges? Phil Gibson answered that three technical colleges have Bioscience or Biotechnology associate degree programs. Judy Awong-Taylor stated that an Associate degree from a Technical College is not equivalent to an Associate degree in the University System of Georgia as the core curriculum is not equivalent. Further discussion considered actual contact hours in university versus technical college lab experiences. When asked if the goal was to have technical college students transfer into Biotechnology degree programs, Phil Gibson mentioned that Kennesaw, Southern Poly, and UGA had biotechnology degrees. Judy Awong-Taylor mentioned that if a student was accepted, they would have the option of transferring within the institution to other degree programs. Phil Gibson recommended handling these students on an individual basis, but yes, they might choose another program. In response to a question of whether or not other technical colleges were considering adding Bioscience associate degrees, Phil Gibson said that Augusta and Valdosta were in the planning stages. A short discussion followed on chemistry courses, differentiation between science major's chemistry courses and nursing chemistry courses. What chemistry experiences do the technical colleges offer? This question is relation to transfer issues and probabilities of student success if entering into a Bachelor's degree program. The representatives recommended that

Phil Gibson present to the Chemistry Academic Advisory Committee. Chris Mader, ICAPP, was also present to help field questions. Bob Herrington pointed out that higher ed institutions already have agreement with technical college partner institutions. Representatives expressed reservation about course by course and school by school agreements to equivalencies and transfer credit.

Chair Dougherty asked that for an ad hoc committee to form to look into these issues in more detail; Ron Matson volunteered, as did Melinda Davis.

After a short break, the meeting proceeded with the next agenda item: Merger of 2-yr USG Colleges with Technical Colleges. Bill Wall asked about the history of this proposal. Judy Awong-Taylor indicated that this was an initiative out of the governor's office. The goal was a community college alternative with a mix of technical college and 2-yr college curriculum. The following discussion addressed differences in mission, course quality, and laboratory support. Judy Awong-Taylor in response to a question on university-system level mandates on equivalencies responded that only courses in Area A need to be transferred at the present time. Concern was expressed that the public would not understand the difference between community colleges and 2-yr colleges.

The group broke for lunch and agreed to reconvene at 12:55 pm.

After reconvening, Judy Awong-Taylor asked the group how planning for, and implementing ISCI 2001, 2002 courses was going. John Pasto reported that enrollment was not a problem, however those without adequate pre-requisites were performing poorly. This triggered a comparison of pre-requisites and these varied by university. Frustration was expressed that the courses were an unfunded mandate at many institutions. In response to a statement that it was difficult to treat Life, Earth and Physical Science in two courses, Lyndasu Crowe, who served on the original planning committee, reported that they had asked for three and not two courses. Some institutions are team-teaching, others have one instructor. Some institutions are offering or are planning to offer the courses on-line. Space in crowded institutions and departments an issue for offering the courses.

Moving to the next agenda item, Eric Sun asked the group about laboratory safety consent forms. Some institutions complete as part of the syllabus presentation. Sheryl Shanholtzer said that Georgia Perimeter had a college wide safety manual. Melinda Davis asked that those with such forms to please send out examples.

Next, Ron Matson gave an update on SOTAB. SOTAB dates back to 1978. A decision needs to be made regarding 2010 SOTAB, because delay would result in paying a penalty to the host instutiton, UGA. John Pasto expressed that SOTAB was a great experience, particularly for the smaller schools. SOTAB is a high quality, low cost option for a local meeting experience for students and faculty. A question was raised about meeting locations other than UGA, perhaps in Macon. Judy Awong-Taylor said that she will work with Ron. Other representatives expressed the hope they would contribute financially to the effort. The conclusion was that Ron should continue planning for the meeting, if he was willing, and take a day at a time as more information on the upcoming budget is revealed.

A handout from the USG Core Curriculum Evaluation Committee was distributed. Judy Awong-Taylor also pointed out the website and list-serv and asked that representatives check for the latest input. Judy expressed that she believed science would stay the same or remain very similar. A brief discussion on equivalencies of new core and technical college articulation agreements ensued.

Judy Awong-Taylor distributed folders with information on the USG STEM Initiative and gave a powerpoint presentation on the initiative. The "call to action" was to increase the number of K-12 students interested in STEM fields, increase the number of STEM college students, and increase the number of K-12 STEM teachers. Data on STEM degrees awarded in the state was provided, including on data by STEM discipline. Henry Zot asked if data existed that showed how interest rate drives the cycle of low STEM productivity. Bill Wall and others commented on the attraction of teaching as a profession and low retention rate of teachers. Short discussions of current PRISM efforts and Project MESA followed. The 12 PRISM strategies were reviewed. The Chancellor made discretionary funds available to support STEM Initiative proposals (11 of 27 funded). Lyndasu Crowe described one effort that uses WIMBA to support webCT so that students were able to view lectures repeatedly and that retention and grades had increased in classes utilizing this technology.

Announcements: Eric Sun announced the SE Human Anatomy & Physiology Conference at Macon State 3/28/09. There would be two plenary talks and 5 workshops—Professional Science Building, 8-4 pm. John Pasto announced his Galapagos course, late May, a poster would be sent to all the division chairs. He had some flyers for distribution. Representatives were urged to make sure they signed the attendance list.

The meeting was adjourned at 3:30 pm.

Minutes recorded by S. Vives Minutes Approved 4/1/2010