Minutes

Advisory Board Meeting Biotechnology Program, Oklahoma City Community College

Thursday, May 12, 2011 8:00 a.m. Conference Room ARL 840 Research Pkwy OKC

Board members present:

Tom Kupiec CEO, Analytical Research Laboratories (ARL), DNA Solutions

Eric Howard OUHSC

Darrin Akins
OUHSC; Co-Director Oklahoma INBRE
Mike Centola
Crescendo (formerly Riley-Genomics), OMRF
Tim Mather
OMRF, Director of Research Administration

Paul Cook Professor of Biochemistry, OU Robert Gonzales Noble Foundation, Ardmore

Fabiola Janiak-Spens OCCC, Director of Biotechnology Program

Board members absent:

Brad Johnson Cytovance, Manager, Purification Development

Matt Gonzalez OCCC Biotech Program graduate

1. Introduction:

Dr. Janiak-Spens welcomed the board members present.

2. *Director's Report:* (see also attached powerpoint hand-out)

Dr. Janiak-Spens stated that no curriculum changes have taking place in the past year and no major equipment has been purchased. Since the last meeting in May 2010, ELISAs have been incorporated as a laboratory skill. IMMY kindly donated ELISA kits for Blastomyces antibody detection. Students have to make appropriated solutions and present diagnosis.

Dr. Janiak-Spens reported that there are currently 9 students in the program who will do their internship this summer and then be graduated with an AAS (4) or a Certificate of Mastery (5). Three of the nine students had applied for and received INBRE summer research internships since they plan on pursuing their BS degrees rather than working in industry. She also presented the statistics of the program graduates (since 1998 as well as since 2007, when Dr. Janiak-Spens took over as director of the program) and their employment status.

To-date:

- 46 AAS degrees, of which 15 went on to obtain a BS and 7 of those continued to a MS or PhD degree
- 21 Certificate of Mastery, all post BS or concurrent AS (most in Biology)

- Total program graduates including this year's group: 67
- Since 2007: 27 program graduates (15 AAS, 12 Certificate)
 Of which 9 employed in field, 15 continued education, 3 other

No new major equipment was purchased last year. However, if the Perkins grant is available, the following items will be requested in the near future: replacement for laminar flow-hood and CO₂ incubator (as the existing pieces are ageing and need repairs that are no longer supported by the companies), also semi-dry Western blotter and automated cell counter. Dr. Centola stated that he likes the automated cell counter from Bio-Rad.

Dr. Janiak-Spens continues as the coordinator for INBRE at OCCC and supervises/administers the K12 outreach in that capacity, providing supplies to trained High School teachers as well as holding periodic workshop for trained teachers and pre-service teachers.

The first workshop for the 20 incoming graduate students accepted to the GPiBS program at the OUHSC was held the second week of August 2010. Based on the feedback from the students it was a great success and will thus be continued this summer.

Dr. Janiak-Spens reported that she has received requests for facilitating searches for qualified laboratory technicians from the pediatrics program at OUHSC (Gene Hallford), but unfortunately did not have a student ready yet. She will continue to maintain that relationship for placement of her program graduates.

Furthermore, Dr. Janiak-Spens told the Board that she is currently in her second year of the recent two-year OCAST internship-partnership grant. The grant provides stipends to the internship students. She will again apply for a two-year grant this summer.

Dr. Janiak-Spens told the Board that Dr. Brad Johnson has moved to out of state and that she is looking for a replacement for him on the Advisory Board. Several persons were mention by various board members: Sean Bauman (Immy), Scott Rollins (Selexys), Jerry Malayer, Mike Carolina (OCAST).

3. Industry/Research Trends, Curriculum Recommendations:

Dr. Kupiec stated that the Battelle report is out and has been posted at OKBio's website, detailing the biotechnology industry economic impact for Greater Oklahoma City (http://www.okbio.org/general.asp?id=69). He also told that OKBio has made some changes and now, in its 4th year of sponsorship, has been making great strides for the biotechnology industry which is good news for OCCC Biotech program.

Several Board members suggested holding a Roundtable discussion (about 2 hours long) for the biotechnology students as well as STEM students at OCCC to present students with future plans/ideas about linking science with marketing, technology transfer, licensing, patent law, graduate school. Several people were mentioned as panelists, among them: Melissa Alcorn (with Kennedy Tech Transfer), Elaine Hamm (OUHSC Tech Transfer), Sean Bauman (CEO of Immy), Maria Engel (Biotech program grad).

Mike Centola was inquiring if the students are learning about SOPs and GMP. Dr. Janiak-Spens reported that in Biomanufacturing (BIOT 2942), one of the last classes

the students take, the students are required to write a total of 3 SOPs for equipment in the biotech lab. Furthermore, most instruments in the student lab have SOPs attached to them, students are writing a batch record and prepare reports about GMP and ISO. In addition, a site visit to Cytovance is always part of the class and directly shows students procedures in biomanufacturing. Dr. Centola also suggested R&D Systems' duo set for coating own ELISA plates

(<u>http://www.rndsystems.com/product_detail_objectname_duoset.aspx</u>). His lab had great success using them and they are very inexpensive.

4. *Job market for program graduates:*

Dr. Janiak-Spens reported that OCCC biotech program graduates continue to obtain jobs immediately after graduation, most of them at their internship site. Nine of the 27 students she has graduated are employed in the field, whereas 16 others are continuing their education, proceeding to BS as well as PhDs. Dr. Askin was inquiring about where the employed program graduates are working and was told by Dr. Janiak-Spens that most of them are at ARL and DNA Solutions, with one at Cytovance. ARL and DNA Solutions have always had 2 program interns per year, thus the high employment numbers at these locations. Dr. Akins asked about changing some of the curriculum to facilitate program graduates working in hospital laboratory settings (med techs). The other Board members stated that though, as reported by Dr. Janiak-Spens, the occasional biotech program grad transfers to UCO to obtain a med tech degree, this does not require changing the current curriculum. Most students, when they transfer, work on a degree in microbiology or biochemistry.

Dr. Janiak-Spens asked the board if anyone was familiar with Allergy Labs of Oklahoma, located downtown. Dr. Kupiec knows the CEO and suggested contacting them as partners for the next OCAST grant as well as placing interns and program graduates with them.

5. *Marketing*:

Dr. Janiak-Spens reported to the Board that she will be graduating the largest class so far, 9 students, and that currently eleven students were taking the cell tissue culture class (BIOT 2921). Board members agreed that marketing of the program to OCCC students appears to be no problem.

Eric Howard requested information on the Certificate of Mastery degree, so that he can distribute it to 4-year undergraduate students that are in need of laboratory skills and are not entering into a graduate program.

Tom Kupiec suggested to hold another presentation about OCCC Biotech program at an OKBio meeting. Dr. Janiak-Spens reported that such a presentation was held 2 years ago at "Where is the talent?" a symposium by OKBio and that she will contact Sherri Stickley at OKBio to coordinate another presentation.

6. *Other:* No item to report under this category.

Adjourned: 9:30 am Respectfully submitted: Fabiola Janiak-Spens