

Minutes

Advisory Board Meeting Biotechnology Program, Oklahoma City Community College

Friday, May 7, 2010

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

Fabiola Janiak-Spens OCCC, Director of Biotechnology Program

Board members absent:

Robert Gonzales	Noble Foundation, Ardmore
Paul Cook	Professor of Biochemistry, OU
Brad Johnson	Cytovance, Manager, Purification Development
Matt Gonzalez	OCCC Biotech Program graduate

1. *Introduction:*

Dr. Janiak-Spens welcomed Dr. Tim Mather as the new board member. He is replacing Dr. Craig Shimasaki on the advisory board.

2. *Director's Report:*

Dr. Janiak-Spens stated that no curriculum changes have taking place in the past year and no major equipment has been purchased. This is due to the fact that the biotechnology laboratory at OCCC is very well equipped and that new trends in biotechnology could be implemented using existing equipment which is up-to-date.

During last year's advisory board meeting Dr. Centola suggested incorporating ELISAs into the skills training, since these were used throughout the scientific community in OKC. Dr. Janiak-Spens reported to the Board that ELISAs are now being performed by the students in the latter part of BIOT 2942-Biomanufacturing which is one of the last courses the students take before going on to their internships. Currently an ELISA kit from Bio-Rad is being used because it was available/did not have to be purchased. However, Dr. Spens will be contacting Immunomycologics in

Norman and Dr. Hildebrand's lab to obtain plates/antigens/antibodies for use in the future.

Dr. Janiak-Spens reported that there are currently 4 students in the program that will do their internship this summer and then be graduated with an AAS (3) or a Certificate of Mastery (1) and also gave the statistics of the program graduates and their employment:

To-date:

- 44 AAS degrees, of which 15 went on to obtain a BS and 7 of those continued to a MS or PhD degree
 - 16 Certificate of Mastery, all post BS or concurrent AS (most in Biology)
 - Total program graduates including this year's group: 60
- Employed in the field (incl continuing their education in the field): 36 (>50%)
 - Other graduates:
 - Worked in the field as techs, then changed to out of field: 10
 - No contact information: 7
 - Medical reason to stop working: 2
 - Teaching (science): 1
 - Not done yet: 4
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Dr. Janiak-Spens informed the Board that Dr. Charlotte Mulvihill has retired and moved to Pennsylvania. The K12 biotechnology outreach program will continue with available K12 budget from INBRE and will be supervised/administered by Dr. Janiak-Spens who will continue to hold workshops for high-school teachers and supply them with consumables. Dr. Janiak-Spens also informed the Board that due to the recognition of the availability of the well-equipped biotechnology lab at OCCC, the GPiBS program at the OUHSC will be sending their incoming graduate students for a one-week workshop to OCCC to be trained in general laboratory techniques prior to the students starting their first laboratory rotation at the OUHSC. Dr. Janiak-Spens will teach that workshop.

Furthermore, Dr. Janiak-Spens reported to the Board that she was successful in obtaining another two-year OCAST internship-partnership grant. The grant provides stipends to the internship students. Eight industry partners have signed up to be an internship site, providing mentors and a \$1000 match toward the intern stipend.

3. *Industry/Research Trends, Curriculum Recommendations:*

Dr. Centola reported that his company has moved to California with the exception of some contract research and IT. Dr. Kupiec suggested checking out Allergy Labs as an intern as well as job site.

Board members, especially Dr. Centola, reported that more and more biologics are in the pipeline for clinical trials versus small molecules. A lot of them are monoclonal antibodies. FDA sees a lot more companion diagnostics, indicating the trend to personalized medicine.

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. Dr. Janiak-Spens reported she noted that the minimum degree requirement listed in job openings for laboratory technicians at both OMRF and OUHSC is a BS. This requirement would place AAS degree graduates out of the applicant pool. Dr. Mather stated that he checked with OMRF and that he found that this requirement is set by the individual PIs. Thus, a more wide-spread knowledge about the OCCC biotech program and the skills of its students would let them be viable applicants for entry level research assistant positions.

5. *Marketing:*

Dr. Kupiec was wondering how many students the K12 biotechnology outreach program has funneled into the OCCC biotech program and why the numbers were so low. Dr. Janiak-Spens told the Board that to the best of her knowledge there have only been a couple of students who have done biotechnology activities in high school and subsequently chosen OCCC to obtain a degree in biotech. However, she stated that these students are hard to track and most students may have simply gone directly to the regional universities or OU/OSU and may have still chosen a degree in life sciences. Furthermore, if they had intentions to obtain a degree at OCCC they still may have stumbled in the general education and/or support courses, since students have to pass algebra and general chemistry to enroll in the biotechnology classes.

Nonetheless, Dr. Janiak-Spens said that the most effective marketing/recruitment into the program comes from within OCCC, students enrolled in microbiology or other classes who are interested in science. Thus an increase in visibility at the college with its enrollment of more than 13,000 student can provide an increase in enrollment in the biotech program.

Dr. Kupiec suggested placing 'ads' for the biotech program in the student newspapers at the local colleges. He also stated that there will be an increased demand of program graduates due to a foreseeable increase in biotech related industry.

Dr. Janiak-Spens asked Dr. Mather to see if she can present or have a presence at the annual OMRF retreat to introduce the biotech program and the skills of her program graduates to the researchers/Pis at OMRF.

6. *Other:*

Dr. Akins inquired if there is an evaluation that the students receive from their internship site and Dr. Janiak-Spens informed the Board that each site supervisor/mentor fills out an intern evaluation form at the end of the internship. The intern also submits a self-evaluation and a narrative. The evaluations are used to provide feedback to the OCCC biotech program with regard to skills.

Adjourned: 9:10 am

Respectfully submitted: Fabiola Janiak-Spens