



AGENDA/MEETING MINUTES
Palm Beach State College
Business Partnership Council Meeting Minutes
Biotechnology
December 14, 2010
9:00am
Bioscience Conference Room SC 201

Attendance: Dr. Silvio Arango-Jaramillo Dr. Tod Fairbanks Dr. Alexandra Gorgevska
Mr. Ray Johnson Mr. Ken Kirby, Chair Dr. Rina Dukor
Mr. Richard Jundzil Mr. Joe Collard Dr. Libby Handel
Deborah Leach-Scampavia Dr. Claudia Zylberberg Robert Van Der Velde, J.D.

ITEM 1: Introductions

Dr. Libby Handel welcomed all committee members and introduced new committee members including: Dr. Rina Dukor, Deborah Leach-Scampavia and Dr. Claudia Zylberberg.

ITEM 2: Purpose and Objective of the Business Partnership Council

Discussion: Dr. Handel discussed the purpose and objectives of the Business Partnership Council Meeting. She indicated that there are two main discussion points that business partners should address:

1. Is the program meeting the workforce needs of the bioscience industry?
2. How does the Program rate in providing a skilled workforce for the bioscience industry?

Dr. Handel requested discussion on the status of the program, determining its focus and identifying critical aspects to be incorporated going forward. Ray Johnson suggested the possibility of developing a high school outreach program, similar to the DECA Program model, a high school program that prepares emerging leaders and entrepreneurs in marketing, finance, hospitality and management in high schools and colleges around the globe, be explored.

Dr. Handel reported the Articulation Agreement with the School District of Palm Beach County for the Biotechnology Academies has been established enabling Biotechnology

Academy students to obtain college credit for the Biotechnology AS course (BSC 1404C) and articulation into the Biotechnology AS Program.

ITEM 3: Program Overview and Update

Discussion: Dr. Handel discussed the revamp of the Biotech II course curriculum and web component. Dr. Gorgevska reported that the Biotech department is participating in a pilot study survey for the National Science Foundation. Dr. Handel reported that the summer Math Science Institute (MSI), for high achieving high school students, was awarded the 2010 Florida State Chancellor's Best Practices Award for Learning Outcomes from the Florida Department of Education. The upcoming summer 2011 MSI students will tour NASA's Life Science and Advanced Technological Education center. Dr. Handel reported on the Biotechnology Poster Symposium, held December 6th, 2010, was well attended. Students from the Palm Beach Lakes High School Biotechnology Academy were in attendance along with representatives from the School District of Palm Beach County Science Education department. Dr. Leach-Scampavia extended an invitation to Palm Beach State biotechnology students to attend the Scripps Post Doc student poster symposium to be held in April of 2011. Dr. Handel reported the National Science Foundation – Advanced Technology Education grant proposal has a provision to develop a joint partnership outreach program for diversified students with Palm Beach State College, Scripps Florida and Max Planck as partners. The proposal also includes a provision to develop a "Biotech Boot Camp" for teachers and under served student populations. Dr. Fairbanks suggested contacting a biotech research lab or bio-manufacturing/bio-marker firm to possibly develop internships in those areas. Dr. Handel discussed the Banner Center for Life Sciences. A brief introduction of the role and design of Banner Centers was given. Banner Centers are a part of the WFI's strategic plan to modernize Florida's workforce. Palm Beach State College was awarded the Banner Center for Life Sciences and will create curriculum products and training for biotechnology, pharmaceutical and medical device sectors. The products will be based on industry needs. A brief overview of the project and its deliverables was given by Dr. Handel.

ITEM 4: Pending Action Items

Dr. Handel reported on the following Action Items:

- **Assessment** - The internship course is currently being revamped. Demonstration and career videos are being developed.
- **Articulation Agreement Implementation** – The Articulation Agreement between Palm Beach State College and the School District of Palm Beach County Biotechnology Academies was established.

ITEM 5: Industry Feedback

Associate Dean Van Der Velde expressed the need for additional adjunct Chemistry faculty.

Dr. Handel stated that search committees for two positions , laboratory specialist and Banner Center Director are being established.

Dr. Strosberg's written comments included:

1. Students need additional communication skills; ie., develop their own oral and written communication skills, additional literature/web search both scientific and commercial skills
2. Students need a working knowledge of grants: how to read/write them and also a working knowledge of the financial issues of the biotechnology industry.
3. Dr. Strosberg suggested internships be longer. More hours in the week would be most beneficial.

Dr. Jeremy Chambers written comments regarding student skills and concerns included:

1. Skills of the students arriving in the academic sector from the various biotechnology programs in the surrounding area - proficiencies are clearly demonstrated.
2. A concern with regard to laboratory mathematics for the purpose of solution/buffer formulation or dilutions. He suggested the implementing of a laboratory mathematics section.
3. A concern with students' abilities to comprehend and use protocols in the scientific literature or from an agency website, ie; EPA.
4. A concern with students' inability to ask questions. Useful to add an interpersonal relationship component to student instruction.
5. Suggestions for new areas of instruction include:
 - Data organization and presentation
 - Protocol implementation
 - Experimental design (identification of controls, etc.)
 - Experimental troubleshooting
 - Solution chemistry
 - Kinetics (enzyme-based would be easiest to implement)

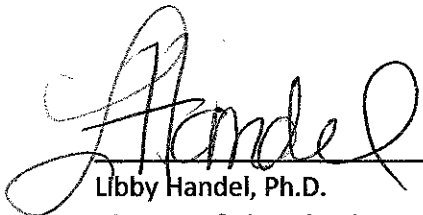
ITEM 6: Next Scheduled Meeting

Next Meeting: Friday, May 20th, 2010 (Tentatively 10am)

ITEM 7: Adjournment

The meeting adjourned at 10:50am

Submitted by:



Libby Handel, Ph.D.
Director of Biotechnology Programs

P. Castro, Scribe

c: Minutes Distribution List