

Biotechnology Advisory Board Meeting
Feb 21, 2002 - G226

Notes: 6:00 pm

Bridgette Kirkpatrick (BK) - Chaired the meeting

- No copies of old minutes
- Old business:
 - Good business!
 - None
 - Animal science – RNA

BK gave brief biography of her experience and her career

BK – Molecular Biotechnology

- Cell culture lab – molecular biology experiment at UCSD in San Diego, CA
- Headed up Biotech program here
 - Concerned about image of Biotech at two year programs
 - Trying to fully train students to be able to overcome stigma

Rombel – HR – Problem with Tech without degrees

- Job openings for BS not AS, but BS doesn't have as much experience with techniques as the AS students do
- How do we overcome the stigma of Tech with two-year degrees?
- Making program into a transfer program to a four year college
 - Sheryl Kappus pushing for this to be a transfer program as VSAS

Bryan – No problems taking a Tech at Two year AS

- He finds our students have experience

Rombel – How can we convince Universities to hire two-year grads, who are just as qualified as BS degreed Techs?

BK – Is a transfer program the way to go or stay with a certificate and AS?

Rosanne Ciccio (RC) – Can we have a program that a student can get a degree to work or go on to a four-year college?

- BK is trying to get program to do both
- Problems recruiting because Biotech is small in this area
- City of Dallas is trying to get Biotech in the area. We could market that we could provide Tech people to fill the positions at the companies
- Also push to bring Biotech to Collin County but there was been no mention of our program – Bridgette Kirkpatrick contacting two others in Collin County but has had no response

Bryan – How many in program?

- BK responses: Difficult to determine – if students declare Biotech as major, it doesn't show up, shows up as general studies
- BK said fifteen people enrolled to get certificate or degree. Greg 1st grad from here, last May. Since than four Certificate grads – they continued on to four year institutions, one certificate graduate to business. All successful so far
- There are five or six nearing graduation (next Fall some time)
- Program seems to be growing, in the one year she has been here

Bryan – Many companies looking for AS/Cert people

BK – Asked for places that might give students internships. A few are ready this summer. CBI will accept students for internship

BK – How to recruit? Office of development should be doing something to contact newspapers about programs here at CCCC

Rombel – Need to recruit in high schools – start telling students at an early age

- Bridgette will be doing something at Bowman Middle School Day of Science
- Also sending flyers to people interested in Biology
- Buzz Words – cloning, forensics, DNA ID, stem cell research, vaccine development against bioterrorism – used to describe a job in Biotech. Need to include these words when advertising Biotech course

McFatrigh – Start with high school kids – academic clubs with parallel interest in Biotechnology and meet with club and show what you have to offer

- Bioscience vs. Biotech
- FFA (Biology)
- People go into Biology to help others – might market as a way to help others

Butler – Yes need to recruit in high schools for our two-year program

Laseter – Military – if they realize we are training people to do Biotech (that may lead to tech background in bioterrorism), they may try to recruit our grads for jobs after school

BK – Any specialized topics/classes we need?

- BK wants to teach a Bioethics aspects of special topics class
- Suggestions to question:
 1. Presentations
 2. Literary searches – writing of resources and cover letters – CO-OP person can help with this aspect. BK has had this done already. A thirty minute talk (power point presentation) and write a paper with search (not internet courses)

Instrumentation class – in Fall – wants to include field trip to labs to see different equipment in use. Asked for companies that have instrumentation and would let students in

Laseter – One company is CPN labs in Carrollton, in Richardson – forensics lab maybe if setup is in advance, Mary Kay Cosmetics

Extensive talk about need for good cover letters with resources

McFatrigh – Experimental design – paper to write. Critical component, need for students to have an application of statistics and appreciation to Biology and Biometry

BK – Stress using controls, STD deviation, means, controls, everyday remenclature

- Good record keep is a must!!

BK – asked if anyone can come to class and speak about record keeping, lab notebooks and documentation

BK – Focus in class?

- 1311 class – give intro to DNA, RNA, transcription, translation, application in Biotechnology and Theory of Techniques
- Interpretation of Gels? What level to do this at? BK does it in 2401 – Molecular Biotechnology, 1401 run gels here, 2401 wants feedback here.
- Is Southern Blots on the way out? If Southern Blots are still used then use PCR instead of Northern Blots is a better way to go

BK – Book – Unraveling DNA felt too advanced for students but liked the layout

- Picking out specifics techniques out of order of book but possibly will do a regular lab protocol.
- Do cloning and ligation? What else? SDS-PAGE, PCR (do in 1401) (possibly combine with cloning)
- DNA sequencing is all automated now – see DEMO and not do it in class but put it in Instrumentation

Rombel – Be sure students know how to handle protein enzymes

Are there pieces of equipment not listed they should see?

1. Gas chromatography
2. Mass spectrometry

Students should be able to run acrylamide gel, run Western Blot and run ELISA – a very practical thing

Cell Culture Techniques – try to do transfer GFP, plant cell culture kit uses FFA protocols

Is there anything else that needs to be covered? Need to add animal handling, we could offer animal handling (small mice) with Bio. Exp. Safety films for radiation safety and need TX safety regulations for Biohazards materials

Problem: Chemistry 1411 and 1412 has to be taken (these are transferable). 1405 not transferable and need to know the nonenclature

Anything else we need to talk about? Streaking plates and Cell stock.

Meeting adjourned. Dinner served. Looks like program has moved along greatly. All they previously discussed are in course? People previously on committee said program has progressed greatly. Has done very well. She should be pleased.

To stress standards: documentation/lab notebook, literature searches, resumes/cover letters, statistics, animal handling, mass spec, handling protein, FACS analysis.