

**WAGNER-PEYSER (7b)****BIOTECHNOLOGY AND LIFE SCIENCES RESEARCH WORKFORCE INITIATIVE****Activities and Performance Measure Report****Report for the month of July 20, 2006.****Narrative Summary of Performance:**

The memorandum of understanding (MOU's) have been distributed (by mail and e-mail) across the state of Texas to known industry cluster employers, EDP's, NPO's, and education institutions inviting these entities to join the consortium. This project is on track; the web-portal is active, see Attachment B for additional information. The Research about the industry cluster is progressing well; see Attachment C for update. In addition, progress is being made toward the establishment of meeting short term and long term training and education at the Baccalaureate level; see Attachment D for further information.

**SECTION 4 - Award Specific Requirements**

- 4.1 The Grantee shall be responsible for all performance under this award.
- 4.2 The Grantee shall establish a Memorandum of Understanding (MOU) between consortium partners including, but not limited to biotech/life science employers, Workforce Development Boards, education and training institutions, and local and State agencies with an interest in the biotech/life sciences field.
- 4.3 The Grantee shall complete a needs assessment of biotech/life science industries to:
  - Explore the issues and alternative ways of identifying skills, education and training needs in dynamic spot markets as part of Alliance activities;
  - Develop and test new models and/or proxy methods of assessing skills requirements in highly dynamic labor markets with an piloting initial focus only on the Houston Region;
  - Research and document implications of rapidly changing labor markets for other workforce development processes including career exploration, career planning, educational planning, workforce development, job matching, career management, and continuing education.

**SECTION 5 – Activities and Performance Measures**

<b>Deliverables Description</b>	<b>Deliverable Target</b>	<b>Year to Date Performance</b>	<b>Deliverable Due</b>	<b>Date Deliverable Completed</b>
5.1 Establish a training and resource consortium composed of life science employers, universities, community colleges, the Texas Workforce Commission and other organizations	1	Continued networking with employers, economic development and education institutions. Initial distribution of invitations sent by 02/28/06. (see Attachment A)	2/28/06	02/28/06
5.2 Establish an internet web portal as an information resource and clearinghouse in support of the Project	1	Initial web portal published on March 1, 2006. Platform and Port # being upgraded on 03/15/06. (see Attachment B)	2/28/06	02/28/06
5.3 Submit to the Agency contract manager and consortium partners a report detailing: <ul style="list-style-type: none"> <li>❖ Results of the assessment of biotech/life science industries identifying;</li> <li>❖ Possible approaches to industry skills assessments in highly dynamic labor markets such as biotech;</li> <li>❖ Design and pilot testing of new approaches to identifying industry skills requirements in rapidly changing industries;</li> <li>❖ Results of pilot test in Houston region;</li> <li>❖ Discussion of implications for educational curriculum, workforce and economic development practices;</li> <li>❖ Suggestions for further research;</li> <li>❖ Best practices, and</li> <li>❖ Available educational programs</li> </ul>	1	(See Attachments C & D)	8/31/06	

**Name of Person Completing Report: Christopher L. Baca**

**XC: Fauzia Aziz**

## Attachment A

This project consists of four interwoven components:

The establishment of an industry cluster web portal for the purpose of disseminating information regarding career and internship opportunities, industry trends, a forum for discussion regarding the operational aspects of industry cluster workforce issues, including grant strategies, education program issues such as curriculum, lab manual, and assessment materials, work toward developing.

- **CLiST Consortium**

- Recruitment of members from 4 primary areas: industry cluster employers, EDO & NPO's, service and support providers, education institutions including independent school districts, college and universities to address industry cluster workforce supply and demand issues.
- Deliverables include membership growth of 6 from last reporting on May 20, 2006. Currently there are **58** organizational members in the CLiST C. See web-portal for consortium members: <http://bio.tech.uh.edu/web/guest/consortium>

Category	Number of Member Organizations
Accelerator	3
Biotech	12
College	10
ISD	1
University	8
Research Institute	2
EDO	10
Service	3
Support	8
Pre-Venture	1

Project impact of success of milestone deliverables for the remaining period of the grant:

- Broader collaboration throughout the state to address the development of a continuum of education and training programs for new and incumbent workforce for the biotechnology and life sciences research industry cluster.
- **CLiST Branding is underway, contracting with Minor Design completed through the UH Marketing processes.** This new look will be applied into the web-portal and used for

brochures and presentations, and other consortium materials. New logo for CLiST will be:



- **CLiST participated in the June 29 meeting with Woodlands Texas Biotechnology companies, thanks to the EDP of the Woodlands.** Dr. Jane Barwell and Mr. Chris Baca of CLiST met at the EDP of the Woodlands offices with representatives of the local biotechnology community, and the local Workforce Boards. Results will aid in research being conducted by Dr. Barwell
  
- **CLiST prepared an application** in response to the TWC, “Meeting Industries’ Critical Workforce Needs”, RFP issued in June and due on July 14, 2006. The TWC will review the applications and award grant by August.
  
- **CLiST attended the July BIODFW program.** On July 20<sup>th</sup>, Chris Baca attended the BIODFW meeting as Ernst and Young presented their Annual Life Sciences Report.

Planned for next month:

- Outline and solicit member news for newsletter.
- Continue to network and build the Consortium.
- Expand ideas for phase three of the web programming.
- Recruit CLiST Advisory Board.

## Attachment B

### Web-Portal

( <http://bio.tech.uh.edu> )

#### 1. Web portal content updated

The portal content has been extensively updated, in large part due to the help from Orlando Zamora, our new part-time helper. The calendar has been manually updated to reflect biotech or high tech related events from around the state from numerous organizations. Also, the list of biotech companies and consortium members should be fairly complete and up-to-date, and numerous additional resources are available in different areas.

#### 2. Outside Support

After some refinement of the design specifications on our part, the programming group managed by Cathy Burkholder is moving ahead with the development. They are ahead of schedule at this point for building the job portlets. As of July 18 they have finished an initial prototype for the job submission for the employers and are in the process of deploying this portlet to their web server for testing.

#### 3. Page Scraping

In order to automate the process of updating the content of our site to reflect information from other sites, we have initiated an approach based on “page-scraping”. The initial implementation has been implemented using the Ruby programming language and is targeted towards automatic retrieval of job posting information. The first successful implementation has been the job listings for Tanox, Inc. at [www.tanox.com](http://www.tanox.com) and is available on our web site at [bio.tech.uh.edu/web/guest/career/texas/tanox](http://bio.tech.uh.edu/web/guest/career/texas/tanox).

### To Do Items

1. Provide any guidance needed for Cathy Burkholder’s group in the creation of the job search engine portlets.
2. Oversee Orlando in updating the content of the web portal.
3. Integrate the new branding from Minor Design into the look-and-feel of our web portal when they are ready.
4. Begin investigating further portlets or capabilities of the web portal that can be out-sourced to Cathy Burkholder’s group.
5. Continue with the page-scraping of other job listings from around Texas and then approach the calendars for using page-scraping as well.

## Attachment C

### Research Project

#### Goals from May 15, 2006 report

- ✓ Conducted employer group interview June 29, 2006.
- ✓ Preliminary employer analysis and cluster model completed
- ✓ Preliminary occupations analysis and model completed
- ✓ Final report drafting

#### Current activities

- ✓ Drafting final report
- ✓ Continue refining final versions of data analysis

#### Goals for next period

- ✓ Final edits to occupational and cluster models
- ✓ Submit early draft for internal review and comments
- ✓ Document formatting

## **Attachment D**

### **Curriculum Development – Workforce Training**

**Sustainability:** Responded to all questions and concerns addressed by the TWC evaluation team for TWC RFP # 06-04 submission for the Best and Final Offer Process.

#### **B.S. Biotechnology Program**

- Prerequisites for the new biotechnology courses were identified and incorporated into the degree plan.
- Changes/suggestions incorporated into the new degree plan.
- Working with Texas Higher Education Coordinating Board to identify CIP codes for the new biotechnology courses.
- Discussions with Mike Fino, Mira Costa College, on the new bioprocessing curriculum and laboratory design.
- Communication with Dr. Susan Hoyne, Dean of Math and Science, Shoreline Community College, Washington State on sharing skill standards project on curriculum development, assessment and articulation.
- Meeting with the CoT Dean on program update. The Dean recently visited Universities at North Carolina that offer biotechnology programs and discussed some successful strategies that can be implemented into our program.
- Enrolled in a web based GMP course.
- Preparing for the first Industry Advisory Committee meeting. Communications with Introgen, Encysive, Identigene, Tanox, UTMB, Agennix, VisiGen, Reactive Surfaces, Lexicon, MithraGen, and WorkSource to present the overview of the Biotechnology program.

#### **Activities for Next Period**

- Continue to collaborate with Mr. Darrell DeMartino on developing the on line Biotech tech. course
- Continue working with THECB to identify CIP codes
- Prepare presentation for Industry Advisory Meeting.
- Complete web based GMP course.
- Continue developing course outline, course description, learning objectives for Biotech Regulatory Environment.