

**WAGNER-PEYSER (7b)****BIOTECHNOLOGY AND LIFE SCIENCES RESEARCH WORKFORCE INITIATIVE****Activities and Performance Measure Report****Report for the month ending December 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; see Attachment C for update. In addition, development 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**

Deliverables Description	Deliverable Target	Year to Date Performance	Deliverable Due	Date Deliverable Completed
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	12/20/06

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 dialogue regarding the operational aspects of industry cluster workforce issues, including grant strategies, education program issues such as curriculum, lab manual, and assessment materials, and work toward developing a continuum of education and training programs for new and the incumbent workforce in support of the biotechnology and life sciences research industry cluster.

- **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.
- Currently there are **70** organizational members in the CLiST C. See web-portal for consortium members: <http://www.texasbiotech.org/web/guest/consortium> . During the past 30 days, we welcomed three new members to the Consortium including: Apollo Endosurgery, and SimplexityMD, and the Dallas County Community College District.

<b>Category</b>	<b>Number of Member Organizations</b>
Accelerator	3
Biotech	15
College	13
ISD	1
University	9
Research Institute	4
EDO/ EDP	11
Service	4
Support	9
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 on behalf of the biotechnology and academic life sciences research industry cluster.

- **CLiST Branding** with the Minor Design Group continues. This new look will be applied into the web-portal and used for brochures and presentations, and other consortium materials.
- The Center has extended its community service outreach by meeting with the HISD, Pearland ISD, Alvin ISD and Bay City ISD. Regular planning meetings are ongoing with the CATE programs of each ISD to prepare for the launch of CATE instructor training to begin in January.
- **The Center for Life Sciences Technology is working through the College of Technology in order to fill vacancies on the Board of Advisors of the Center.** To date five prominent visionaries have agreed to participate on the Center Advisory Board: Mr. Tom Kowalski of the Texas Healthcare and Biotechnology Institute, and Dr. Martin Lindenberg of AlphaDev, Kenneth Williams of Frost Bank, Dennis Peck of PageSoutherlandPage, and Richard Finnell, Executive Director and President of the Texas Institute for Genomic Medicine.
- Consortium recruiting efforts continue each week with mailings, email, and phone follow-up activity. The **new membership certificate** is now developed and the 70 consortium members have received theirs.
- The Center continues to be active in Texas Workforce Commission activities, especially the Biotechnology and Life Science Research Cluster Committee. The Center is partnering with the Texas Business and Education Coalition to affect the integration of discussion and planning which will affect the State's ISD programs as they implement the Achieve Texas program in the areas of Biotechnology and Advanced Technology and Manufacturing.
- The Center is also working with the UH and CoT leadership to expand the applied biotechnology research as a central hub to the new cluster research of the university.
- The Center is working with a variety of organizations to prepare for the design of both a mobile biotech lab and curriculum for high school outreach to compliment the Achieve Texas design and entice more youth into Science, Technology, Engineering, and Math.
- The Center is working with a regional constituency to develop a Nanotechnology Speakers Series for the ISD Teachers. The CATE Instructors requested that CLiST develop such a program to help the general science teacher learn more about Nanotechnology, and to provide the teachers with examples of applied aspects of the field for use in the classroom.

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**Attachment B**

Web-Portal

( [www.Texasbiotech.org](http://www.Texasbiotech.org) )

**1. Web portal content updated**

The portal web content continues to be updated with new content. Orlando is adding the organizations from Jane's report to the list of Texas biotech companies that we might have missed previously. He also updated the list of ISD's to include superintendent names and emails.

**2. New theme rolled out**

We have rolled out the new look and feel for the web site using the new logo and color scheme. In the process we also upgraded from Liferay version 4.00 to version 4.13.

**3. Standards based database schema revision**

Based upon the HR-XML standard ([www.hr-xml.org](http://www.hr-xml.org)) for job submissions, we have created a revised database schema for job data. It is currently in the testing and development stage. Based upon current progress for our page scraping, we will be using a hybrid system for screen scraping using either the Screen-Scraper software ([screen-scraper.com](http://screen-scraper.com)) or Ruby scripts. We will then store the data in these tables for public search and analysis.

**4. Job Portlets nearing completion**

The job portlets from Cathy Burkholder's team have been promised for completion within the next week. They will be deployed on the public site to allow companies to input biotech jobs and for the public to search the jobs.

**5. Moodle Theming**

Cathy Burkholder's group is working on a new theme for our Moodle instance to coordinate with the new logo and color scheme.

**To Do Items**

1. Continue updating web portal content.
2. Install the job portlets and begin collecting employment data.
3. Continue writing screen scraping scripts and collecting and analyzing Texas biotech job data.

## **Attachment C**

### **Research Project**

#### **Current activities**

In partial fulfillment of the deliverables for the 2006 Wagner Peyser grant to the Center for Life Sciences Technology at the University of Houston, please find our final Cluster report and the accompanying diagram in the Web-portal. You can get to it from here:  
[http://bio.tech.uh.edu/e/docs/texas\\_gulfcoast\\_biotechnology\\_cluster.pdf](http://bio.tech.uh.edu/e/docs/texas_gulfcoast_biotechnology_cluster.pdf)

The online version of this report consists of two documents. One document is the main report, and the other is the cluster map that appears on page 51. These documents are integrated in the final print copy.

## Attachment D

### Curriculum Development – Workforce Training

#### **Training Programs:**

- Biotechnology Techniques available for review for online delivery, curriculum development subcommittee and the industry advisory subcommittee will review it before it is made available.
- Discussions with Dr. Petrak to develop GLP course.
- GLP course outline and description reviewed by curriculum subcommittee.
- Communications with Cathy Hanchet to develop GCP course
- Course content for GMP course developed

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

- Presented an overview of the Biotechnology B.S. program to the University Undergraduate Council (UC) subcommittee.
- UC subcommittee was extremely supportive of the program and the program was unanimously approved by the subcommittee.
- Two lab exercises of module 2 developed.
- Course content for GMP (degree) course developed

#### **Sustainability**

- Meeting with Dr. Mike Gibson, chair of Information Logistics and Technology to discuss a new grant submission to NSF

#### **Other**

- Processing vendor contracts for TWC grant.

#### **Outreach**

- Meeting with Dr. Pete Linkins of ASSETT to discuss high school workshops.