

CONVERGENCE

Northern California's only ongoing forum that showcases the issues that intersect between education, workforce development and the economy

02.19.2010

CONVERGENCE I: HEALTHCARE & BIOSCIENCE

Presented By:



In Partnership With:



CONVERGENCE I ADDRESSES HUMAN CAPITAL NEEDS OF REGION'S HEALTHCARE AND BIOSCIENCE CLUSTER

"Let's keep on focusing and working together to keep this workforce moving forward and making good things happen."

--Scott Seamons, Regional Vice President, Hospital Council of Northern and Central California, at the February 19, 2010 Convergence

Representing 20% of the Sacramento Region's current and future workforce, the Healthcare/Bioscience cluster is critical to the economic future of our region and presents immense opportunity for high wage jobs.

On February 19, LEED-Linking Education and Economic Development, Los Rios Community College District, and the Sacramento Metro Chamber of Commerce teamed up to present valuable information that will enable educators and training providers to effectively meet the human capital needs in this critical industry sector of our economy.

Rick Heron (Director, Community Relations, Western Health Advantage, member, Metro Chamber of Commerce's Healthcare Committee) shared the highlights of the Metro Chamber's industry cluster report (download [here](#)) that defines the breadth and the scope of the healthcare and associated bioscience industry segments in the Greater Sacramento Region:

- Health care careers pay 40% higher wages than other careers in the region
- Allied health, registered nurses, and physical/occupational therapy are the fastest growing occupations in healthcare
- Bioscience represents the best opportunity to leverage university research.



(L-R, back row) LEED Board of Directors members Leroy Tripette (Intel Corp.), Carl "Tobey" Oxholm III (Dean and Senior Vice President, Drexel University-Sacramento Center for Graduate Studies), Jose Chavez (Professor, Drexel University), Kyle Glankler (Roebbelen and current Drexel University MBA student), and current Drexel University Public Health graduate students (front row) were among the over 200 participants at CONVERGENCE I.

HEALTHCARE LEADERS UNDERSCORE NEED FOR REGIONAL PARTNERSHIPS, EDUCATIONAL PROGRAMS

Scott Seamons, Regional Vice President, Hospital Council of Northern and Central California stated that the Sacramento Region has over 4,000 healthcare facilities, comprised of hospitals with 3% and ambulatory care with 47% of the healthcare services provided in the region, and that by 2015 California will have a shortage of 17,000 doctors and 116,000 nurses. Shortages are also forecast for other health-related fields. Seamons shared the following challenges and barriers to increasing the supply of the Capital Region's health professionals:

- Insufficient capacity within programs to train adequate number of students
- Faculty shortages
- Limited clinical training sites
- Significant changes in new healthcare workforce needs
- Soon-to-be-expanded prison health care facility in Stockton
- Counties in financial trouble
- Healthcare coverage/access shifts

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KEY ELEMENTS, STRATEGIES TO REINFORCE THE CAPITAL REGION'S HEALTHCARE & BIOSCIENCE PIPELINE

Identified by CONVERGENCE speakers, participants*

- Support community colleges & state universities
- Create more healthcare and bioscience high school and middle school programs of study
- Keep community college Community Health Occupations Resource centers as strategic partners
- Increase opportunities to utilize technology to provide educational access to training and education
- Medical/bioscience job shadowing opportunities for high school students
- Partnerships and mentorships between the hospitals, bioscience laboratories and the high schools
- Promote pipelines across high schools, community colleges, and universities
- Public /private partnerships and collaboration with emerging industries and technologies
- Develop technological solutions to provide lower healthcare cost options for seniors
- Prepare college/university faculty to keep up with industry technology
- Find solutions to impacted college programs
- Increase public knowledge on careers and career pathways in medicine and allied health
- Address the needs and challenges related to the delivery of healthcare services in rural communities
- Increase local faculty to lead and do research, while keeping pace with competitive faculty salaries

*Includes a summary of the table discussion responses

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Seamons also noted that hospitals are funding more educational and clinical programs, spending more on recruiting and paying higher salaries, noting that grants and partnerships will help make funding available for new and needed programs.

To meet some of these needs, Seamons recommended that the region should develop the capacity to take in newer graduates to these fields. "We need to bring education and tech programs up to par with what is needed for these positions," he stated.

"We need to preserve and expand public educational institutions—the work you are doing in the high schools, elementary schools is outstanding.

Introducing health themes, field trips to hospitals to provide applied learning, experiences to help get them excited about health care," said Seamons.

"Let's keep on focusing and working together to keep this workforce moving forward and making good things happen," he continued.

Gerhard Bauer, Laboratory Director Good Manufacturing Practice Facility, Stem Cell Program UC Davis School of Medicine, provided an overview of the unique and innovative ways in which biotechnical and pharmaceutical companies work in partnership with universities. Specifically, he explained that the growth of "biologics," medical products derived from living sources used to make vaccines, blood and blood derivatives, allergenic patch tests and extracts—is bringing together universities and pharmaceutical companies to facilitate the sharing of research in the development of pharmaceuticals.

Dr. Kathryn Jeffries, President of Sacramento City College, closed the program by calling attention to the work that all of the Los Rios Colleges have done over the last several years to prepare students for jobs in critical industries like healthcare. She noted its partnership with Sutter Health, which created the Sutter Center for Health Professions, which has effectively addressed the region's nursing shortage, and has become a state and national model.

PANEL DISCUSSION

Steve Beitler (Government and Public Affairs, Agilent Technologies), Katie Hagen (Deputy Director, Workforce Development, Human Resources for California Prison Healthcare Services), Paul Phinney, MD (Chair, CA Medical Association), and Evelyn Milani (President and CEO of InfoSYS and chair of the Telemedicine Task Force, a subcommittee of the Sacramento Area Regional Technology Alliance's MedStart Initiative) served on a panel that discussed the implications and solutions for healthcare professional shortages in the Capital Region.

Panelist Katie Hagen described the changes to the CA Prison Healthcare facilities plan, which has resulted in the development of a large

prison healthcare facility in Stockton. Though the exact numbers are unknown, the facility will potentially draw healthcare providers from the Capital region, which could further impact the region's workforce of qualified healthcare professionals.

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"The work you are doing in the high schools, elementary schools is outstanding. Introducing health themes, field trips to hospitals to provide applied learning, experiences to help get them excited about healthcare."
Scott Seamons, Regional Vice President, Hospital Council of Northern and Central California

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LEED CONVERGENCE PROGRAM OPERATION: INDUSTRY PIPELINE

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Panelist Steve Beitler described bioscience workforce needs from an employer perspective. Agilent produces products that are used in chemical analysis, and pharmaceuticals, and Beitler explained that companies like Agilent need qualified professionals across the spectrum: production assistants (requires a high school diploma and training); scientists and engineers (mechanical, chemical, and information management); managers and administrators "A scientific literate public is important for our society," said Beitler. "How do we think of economic, workforce development? Our children, grandchildren—complacency is a great enemy. Convergence is a great example of how we can align our efforts and stay involved," he continued.

Panelist Evelyn Milani shared that federal support of telemedicine (healthcare-related information technology) will provide monitoring and expert care to home-bound and remote patients. "The Sacramento Region is well positioned to take full advantage of this movement by leveraging three of its existing strengths – our existing healthcare infrastructure, our education system such as UC Davis and information technology," she said. "Moreover, the Sacramento Region provides healthcare services to practically the entire North state, positioning us well for telemedicine strategies to deliver rural healthcare," she continued

Paul Phinney, MD, noted that the shortage of physicians in California is significant and projected to become worse due to California's aging population, aging physician population, and an inadequate physician education pipeline, noting that California is the nation's most populous state yet ranks 39th in the number of medical students per capita. This requires the recruitment of physicians from other states or countries to fill this chronic gap.

"The good news is that given the high demand, there couldn't be a better time for young people to consider medicine," said Phinney, noting the availability of pipeline programs, scholarships and tuition incentives. "The Sacramento Region is well positioned as an attractive place to employ physicians with five strong hospital systems and a world class medical school in UC Davis," he said.

EMPLOYER/EDUCATOR ROUNDTABLE

Following the main program, participants engaged in a discussion about the emerging occupations in Healthcare and Biosciences, as well as identifying what skills and training will be needed for these occupations. Participants identified similar occupations to those discussed by the speakers and panelists at the Convergence program, including allied health careers, pharmacists, primary care physicians, clinical laboratory scientists, and stem cell manufacturing.

In addition to the technical skills required for these careers, participants also identified that the industry also requires non-technical skills in communication, collaboration and teamwork, management and leadership, critical thinking, and generational diversity.

Roundtable participants also discussed the following strategies to expand education/ employer partnerships:

- Healthcare network/resource for people who want to be mentors/speakers-website consortium
- Externships for faculty
- Connect and stay connected with younger students (elementary and middle school age)
- Better communication between teachers and employers to meet industry need
- Having industry attend advisory meetings
- More industry conference activities for faculty and students
- Academic relevance reinforced in workplace
- More career exploration opportunities and contextual learning
- Donations of obsolete equipment for training
- Webinar/telecommunications for rural areas

Lastly, the Roundtable participants explored opportunities for developing a regional Healthcare/Bioscience Advisory Council.

Please contact LEED Workforce Development Manager Penny Cobarrubia at pcobarrubia@leed.org if are interested in engaging or participating in a regional Healthcare/Bioscience Advisory Council.

ALSO SEEN AT CONVERGENCE

Participants networking in the hallway prior to the program were greeted by students from some of the region's theme-based Healthcare and Bioscience career academies, including:

- **Arthur Benjamin Heath Professions High School** (Sacramento City Unified School District)
- **Antelope High School's Project Lead the Way Biomedical program and Oakmont High School Health Academy** (Roseville Joint Unified School District)
- **Einstein Middle School** (Sacramento City Unified School District) students Alexis McQuery and Essence Jackson who placed first in the Biofuels and Stem Cells categories, respectively, of the UC Davis/American River College Biotech Expo Poster Contest.

SAVE THE DATES

2010 CONVERGENCE OPERATION: INDUSTRY PIPELINE

May 21st: Clean Energy Tech & Infrastructure
([Click here to register!](#))

September 24th: Public Service & Education

December 10th: Technology & Entrepreneurism

7:30-11:15 am

7:30-9:30 am Program

10-11:15 am Employer/Educator Roundtable
Radisson Hotel, Sacramento

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