

High-Tech Businesses are Thriving in Region 9

By Region 9 Advocate Yvonne Lee

More than three decades ago, San Diego was at a crossroads trying to find a new path to economic growth. Leveraging the region's immense talents in technology and research, the academic, business, civic and government leaders came together and built a diverse and sustainable innovation eco-platform that has transformed San Diego into the vibrant innovation economy hub that includes over 7,000 tech companies and almost 90 research institutions today. In 2014 alone, over \$500 million new federal science and technology research grants were invested in San Diego.

It is with this can-do, collaborative innovation spirit that the Office of Advocacy held its third annual regional symposium in San Diego on September 16. Co-sponsored by the University of California-San Diego von Liebig Entrepreneurism Center and San Diego State University Research Foundation,

Special Conference Edition

entrepreneurs—startups and established, academics and researchers, business and public sector leaders—gathered for a day of robust and actionable dialogue.

Panelists represented the spectrum including academics from Arizona State University, UC San Diego, San Diego State University, California State University, entrepreneurs from Oceanit, Althea, SkyworksAS, CleanSpark, Analytics Ventures, to government representatives such as the U.S. Patent and Trademark Office, U.S. and Foreign Commercial Service, the Small Business Administration, and the U.S. Citizenship and Immigration Services. The region's

Continued on page 3

In This Issue

Advocacy News

Advocacy Tours Border Crossing Facility.....	2
Medical Tech Company Develops Innovative Test....	4
Accelerator Nurtures Women-led Tech Companies.....	5
Addressing Barriers through Smarter Policy.....	6
Strategies for Small Innovators in the Global Market.....	7
Panel Examines Innovation Trends in Region 9.....	7

Regulatory News

Advocacy Releases Comment Letters.....	4
--	---



Staff of the Office of Advocacy gather outside on the University of California-San Diego campus.

Advocacy Staff Tours U.S.-Mexico Commercial Border Crossing Facility

By Bruce E. Lundegren, Assistant Chief Counsel

As part of its recent regional symposium in San Diego, staff from the Office of Advocacy had the opportunity to visit the U.S.-Mexico border to observe the commercial inspection operations at the Otay Mesa Port of Entry operated by U.S. Customs and Border Protection (CBP) and other federal agencies. Advocacy staff wanted to get a up-close look at the challenges some small businesses face when importing and exporting their products.

Hundreds and hundreds of commercial trucks lined up at the inspection station waiting to cross into the U.S. loaded with everything from fresh produce to consumer goods, electronics, apparel, pick-up trucks, and more.

According to CBP, the Otay Mesa Port of Entry is one of three ports of entry (POE) in the San Diego-Tijuana metropolitan region. The port of entry is the third-busiest commercial port of entry on the U.S.-Mexico border in terms of the dollar value of trade (after Laredo-Nuevo Laredo and El Paso-Ciudad Juárez in Texas). Commercial imports through Otay Mesa are valued at some \$30 billion each year. Advocacy staff toured the commercial operations area, but there is also a passenger vehicle and pedestrian crossing point in a separate location at the facility.

Advocacy's tour was led by the CBP duty officer in charge, who explained that the Otay Mesa facility opened in 1983 and handles over 2,000 commercial trucks per day – that is, roughly 730,000 trucks annually. While only a small percent (approximately three percent) of trucks passing through the facility are personally inspected, each truck passes through a series of radiological sensors, visual observations, and document inspections. Inspectors are looking for various types of contraband such as counterfeit products and adulterated foods.

One of the major concerns is with insect pests, such as invasive beetles and flies. If they are found, a driver has the options of returning to Mexico, having the produce fumigated, or having it seized and destroyed by U.S. agents.

Other major concerns are the smuggling of people, weapons, and drugs. The duty officer said that border agents have discovered secret compartments in trucks filled with contraband and even two small tunnels running under the facility used to smuggle contraband into the U.S. Advocacy staff was shown examples of counterfeit videos, apparel, electronic devices, and invasive pests that had been seized at the border.

The most interesting aspect of the border tour was



Advocacy staff visit the Otay Mesa Port of Entry. From left: Mark Berson, Bruce Lundegren, Major Clark, Carrie Anderson (assistant chief of casework at the Office of Citizenship and Immigration Services Ombudsman), Claudia Rodgers, Jamie Saloom, Janis Reyes, Rebecca Krafft, Luckie Wren, Erik Gulbrandsen, Rosalyn Steward, Emily Williams, and John Hart.

the sheer scale of the operation and the volume of trucks moving across the border. It was also very efficient: trucks would be pulled from the line to undergo random inspections, where they would be fully unloaded, inspected, and re-loaded in a matter of minutes before proceeding on their way. It was quite an operation to observe and an eye-opening experience of just how much commerce moves across the U.S.'s southern border.

Advocacy News

San Diego, from page 1

voices from Arizona, California, Nevada and Hawaii's innovation sector were ably articulated throughout the symposium. While there was no consensus whether entrepreneurs are born or nurtured, there is agreement that it takes every sector's committed engagement and investment that allow interested persons the tools to seriously explore whether running a business could be a viable choice.

The symposium's keynote address was delivered by California Treasurer John Chiang, who impressed the audience with his mastery of innovation entrepreneurship and spoke on how economic growth and fiscal management had turned California from economic depression to today's healthy economy. He suggested the California turnaround experience could be a best practice and lesson learned for startups and growing businesses which face challenges in budgetary and technological changes.

Molly Gavin, a representative of Qualcomm, spoke about her company's origins as a small business and how receiving a Small Business Innovation Research (SBIR) grant allowed them to grow and eventually propel San Diego's innovation economy.

The speakers agreed that through technology, the world is better connected than ever. Ninety-five percent of the world's customers live outside the U.S. and within 15 years, 2 billion new Asian consumers will join the middle class. San Diego, Region 9, and for that matter, the U.S. are strategically located and poised to reach the global marketplace. From all the positive comments we have heard from the participants, the symposium offered information, resources, connections, networking, and the can-do confidence for all sectors to con-



California Treasurer John Chiang delivers the keynote address.



tinue their exploration in expanding the innovation economy ecosystem. Advocacy is proud to continue our catalytic role in bringing these dynamic ideas and experiences for all to build upon.

Above: From left, Acting Chief Counsel for Advocacy Claudia Rodgers, SBA Region 9 Administrator Donna Davis, and Vice Chancellor for Research at UC San Diego Dr. Sandra Brown.

Pharmacogenomics Company Develops Innovative Test

By David Rostker, Assistant Chief Counsel

While in San Diego, Advocacy staff visited a small innovative medical technology company called AltheaDx to meet with their CEO, Greg Hamilton. AltheaDx offers a genetic test and report, recently introduced to the market, that provides patients and healthcare providers a series of recommendations for the pharmaceutical treatment of pain, cardiovascular disease and psycho-neurological disorders.

This relatively new but rapidly growing field of medicine, called pharmacogenomics, has the potential to significantly reduce drug costs and improve the quality of care, particularly as drug costs continue to outpace inflation and the population ages. AltheaDx chose to focus on pain, cardiovascular disease and psycho-neurological disorders because of relatively large numbers of options doctors have to prescribe for various symptoms and the tendency of drugs to be stacked with the potential for harmful side-effects.

For example, Mr. Hamilton presented the example of a patient under treatment for depression, migraines and other pain, but was taking over a dozen different medications. Their analysis indicated that the patient was on several medications that were not effective with his genetic profile and were, in fact,

causing the migraines.

AltheaDx was very complimentary of the federal government's role in its product's growth and development. The National Institutes of Health has a group dedicated to pharmacogenomics, and the U.S. Food and Drug Administration expeditiously approved the product and has begun labeling drugs with pharmacogenomics interactions where appropriate. Medicare covers this test, and as a result, AltheaDx has been able to demonstrate success, both through cost-savings and

improved care, with patients in nursing homes and other patients on multiple drugs and overlapping symptoms and side-effects.

However, testing of this kind offered by AltheaDx is not covered by most private insurance, and its future growth is highly dependent of getting third-party coverage. AltheaDx is currently seeking venture capital financing to cover the cost of additional clinical trials to demonstrate the cost-effectiveness of its products and convince the market of its value.



Advocacy staff visit AltheaDx, from left: Charley Maresca, Linwood Rayford, David Rostker, Lynn Bromley, Caitlin Cain, Rebecca Greenwald, Miriam Segal, Mike Landweber, and Yvonne Lee.

Advocacy Issues Regulatory Comment Letters

The following comment letters have been recently issued by the Office of Advocacy:

9/21/15: Comments to the U.S. Fish and Wildlife Service on the revision of the Section 4(d) Rule for the African Elephant. <http://>

go.usa.gov/3uA84

9/8/15: Comments to the Federal Communications Commission on a proposed rule, "Protecting and Promoting the Open Internet."

<http://go.usa.gov/3uA8P>

9/4/15: Comments to the Department of Labor Wage and Hour Division, on the proposed rule, "Defining and Delimiting the Exemptions for Executive,

Administrative, Professional, Outside Sales and Computer Employees." <http://go.usa.gov/3uA9d>

8/26/15: Comments to the General Services Administration on a proposed regulation to implement Executive Order 13673, "Fair Pay and Safe Workplaces." <http://go.usa.gov/3uAXT>

Continued on page 5

Accelerator Nurtures Women-led Technology Companies

By Dillon Taylor, Assistant Chief Counsel

Business accelerators like mystartupXX provide tools to help entrepreneurs launch and scale the businesses that will contribute to job creation and economic growth. Launched at the University of California-San Diego in 2012, mystartupXX serves to encourage and empower female students interested in entrepreneurship.

Advocacy staff recently visited mystartupXX and met with two of the leaders of the accelerator, Lada Rasochova, Ph.D., MBA, and Rosibel Ochoa, Ph.D. During the visit, Dr. Rasochova and Dr. Ochoa discussed how the nation has fewer jobs and less economic prosperity because women are not starting high growth companies at the same rate as men. To address this, the mystartupXX accelerator is committed to changing statistics and making entrepreneurship more inclusive, diverse, and economically impactful.

MystartupXX leads a nine-month long accelerator program that is focused on guiding participants through forming and leading teams, evaluating business ideas, developing prototypes, obtaining market feedback, testing business models, obtaining funding, and launching a business. Teams that participate in the program have access to a co-working space that offers them opportunities to learn from their peers and network with



Advocacy staff visit mystartupXX, from left: Teresa Coaxum, Pat Delehanty, Jennifer Clark, Shelia Myles, Akira Loring, Dillon Taylor, Dr. Rosibel Ochoa (of mystartupXX), Ngozi Bell, Dr. Lada Rasochova (of mystartupXX), and Henry Sanders.

program alumni and supporters.

Advocacy staff had the opportunity to visit the mystartupXX co-working space and to meet with a team creating a data analytics product that can be used to develop sales customer leads. The team described the invaluable benefit of having working space and mentors to help in launching their product. The team also talked with Advocacy about some of the regulatory burdens they face.

To the leaders of mystartupXX,

meetings and conversations like this with Advocacy staff are all part of helping teams overcome barriers and launch businesses. Ultimately, the goal for mystartupXX is making entrepreneurship inclusive, diverse, and economically impactful.

Advocacy's recent research report, "Understanding the Gender Gap In STEM Fields Entrepreneurship," underscores many of these same issues.

Regulations, from page 4

8/26/15: Comments to the Department of Labor on Proposed Guidance to Implement Executive Order 13673, "Fair Pay and Safe Workplaces." <http://go.usa.gov/3uA5Y>

8/21/15: Comments to the

Department of Labor on a proposed rule, "Defining and Delimiting the Exemptions for Executive, Administrative, Professional, Outside Sales and Computer Employees." <http://go.usa.gov/3uA5B>

8/5/15: Comments on the Environmental Protection Agency's

rule, "TSCA Reporting and Recordkeeping Requirements for Chemical Substances When Manufactured or Processed as Nanoscale Materials." <http://go.usa.gov/3uA5w>

Addressing Barriers through Smarter Policy—Federal Initiatives

By Janis Reyes, Assistant Chief Counsel

Small business entrepreneurs may have great ideas, but they often face challenges at every step of the process in commercializing those innovations. The panel, “Addressing Barriers through Smarter Policy—Federal Government Initiatives,” featured representatives of various government agencies that highlighted programs they have developed to foster entrepreneurship and overcome these barriers. This panel was moderated by Dr. Christine Kymn, Chief Economist and Director of Economic Research at Advocacy.

“IP or intellectual property strategy should be part of your business strategy,” said panelist John Cabeca, Director of the U.S. Patent and Trademark Office (USPTO) new Silicon Valley satellite office opening this October. Cabeca stated that small businesses face challenges patenting innovative ideas and products, because of the complexity of the patent application process and the cost of hiring practitioners to navigate the system. To help small entities, PTO sets lower fees for patent applications, provides extensive information on their website (www.uspto.gov), and has created many pro-bono and educational programs.

Connecting entrepreneurs with government resources to fund their innovative ventures is the goal for serial startup founder Nagesh Rao, Chief Technologist and Entrepreneur in Residence in the Office of Investment and Innovation at the Small Business Administration (SBA). SBA is the coordinating agency for the Small Business Innovation Research program (SBIR) and the Small Business Technology Transfer Program (STTR); both programs fund research and development for innovative small businesses. Rao



The panel, “Addressing Barriers through Smarter Policy: Federal Government Initiatives,” was moderated by Advocacy’s Chief Economist and Director of Economic Research Dr. Christine Kymn, and included panelists John Cabeca, Nagesh Rao, Carrie Anderson and Richard Swanson.

demonstrated the new SBA website at this panel (www.sbir.gov), which makes it easier to search for SBIR and STTR programs at 11 agencies.

Carrie Anderson, Assistant Chief of Casework for the Office of the Citizenship and Immigration Ombudsman at the U.S. Department of Homeland Security, stated that her office receives many inquiries from small entrepreneurs who face challenges in understanding and obtaining immigration visas to remain in the United States or to hire necessary foreign national talent for their businesses (www.dhs.gov/topic/cis-ombudsman). Anderson explained that most immigration programs are decades old and are not flexible; and many startup businesses are denied immigration visas because they do not operate like traditional businesses. The United States and Citizenship and Immigration Services (USCIS) recently established its own Entrepreneur in Residence program

to hire experts to understand this new climate; one of the products of this initiative was a new website to help entrepreneurs understand the types of immigration visas that are available (www.uscis.gov/eir).

“Ninety-five percent of the world’s customers are outside of the United States,” explained Richard Swanson, Regional Director of the Pacific South Network of the International Trade Administration of the U.S. Department of Commerce (www.trade.gov). The goal of this office is to help small businesses and entrepreneurs reach this vital international market and increase exports. Swanson stated that small businesses often face challenges understanding the export, tariff and trade regulations. To help small entities, ITA has field offices throughout the nation and they also host trade shows to provide face to face contact with overseas markets.

Strategies for Small Innovators in the Global Market

By Rosalyn Steward, Assistant Chief Counsel

The panel, “Strategies for Small Innovators in the Global Market,” focused on panelists from Region 9 identifying the innovative strategies that regional businesses, educational institutions, investors and incubators are developing to sustain the region’s innovation ecosystem. Panelists also identified what they feel is currently working and where they see a role for federal government support or policy reform.

Dr. Rosibel Ochoa, the Senior Executive Director for Entrepreneurism and Leadership at the University of San Diego’s von Liebig Entrepreneurism Center, moderated the panel. Dr. Susan Baxter, the Director of the California State University Program for Research and Biotechnology discussed the diversity of the California State University system and the focus on upstream entrepreneurship that characterizes the Innovation Corps Program (I-Corps) programs. Dr. Baxter says that academic research has a seven-year life cycle when taking something from an idea to the

market, and the way to success is a combination of partnering with other institutions, having mentor networks, and plugging in to shared facility space.

Navid Alipour, the managing partner of Analytics Ventures, said that when investing in companies,

he looks for companies that have monthly recurring revenue but are not yet incorporated. This gives him the ability to get involved with a startup but minimizes his risk. In regard to new businesses getting

Continued on page 8



The panel, “Strategies for Small Innovators in the Global Market,” included from left, moderator Dr. Rosibel Ochoa, and panelists Dr. Susan Baxter, Navid Alipour, Michael Firenze, and David Enloe.

Panel Examines Innovation Trends in Region 9

By Pat Delehanty, Advocacy Economist

A diverse panel discussed innovation trends and entrepreneurial success stories within the region of California, Arizona, Nevada, Hawaii, and Guam. Moderated by Interim Chief Executive Officer and President of the San Diego Taxpayers Association Theresa Andrews, the panel included Dr. John Crockett, Senior Director of Research Advancement and Innovation at SDSU Research Foundation, Jan Sullivan, Chief Operating Officer of Oceanit and Trustee of University of Hawaii,

Dr. Audrey Iffert-Saleem, Executive Director, Entrepreneurship and Innovation Initiatives, Arizona State University, and Jinger Zeng, Chief Operating Officer and Co-Founder at Skyworks Aerial Systems.

This balanced mix of leaders from the academic and private sector offered a unique perspective on the drivers of growth within their respective innovation ecosystems. Crockett described the importance of the collaborative interplay between research univer-

sities and startups, and challenged universities to re-think their role in facilitating deeper and broader entrepreneurial learning, especially in San Diego’s three main sectors: military, biotech, and high tech.

Iffert-Saleem discussed creating pathways to entrepreneurship for students in Arizona that are inclusive to anyone with an idea. As a successful young entrepreneur, Zeng offered her experience of going from an engineering student

Continued on page 8

Global Market, from page 7

the word out about their company, Mr. Alipour says businesses should utilize their state and local elected officials to help publicize their company.

Michael Firenze, the President and CEO of CleanSpark, said that having a solid vision for your company is a way to attract talent and

drive sales. Seventy percent of his company is comprised of women, so flexibility is key for retaining employees. Trade associations help bring people in the field together and foster acceleration.

David Enloe, the CEO of Althea, said that tax credits are extremely helpful to startups, and announced that his company won the California Competes Tax

Credit by the California Governor's Office of Business and Economic Development. The group shared many good ideas for improvements on SBIR grants and university technology transfer offices and surviving and thriving in the Region 9 innovation ecosystem.

Innovation Trends, from page 7

interested in doing research at a national lab to founding a robotics company in Nevada poised to grow her business to the next level. Wearing multiple hats as a COO and trustee at the University of Hawaii, Sullivan stressed the importance of a balanced and high quality of life as an entrepreneur.

Each panelist touched on how innovation can come from any-

where, and entrepreneurial environments must be diverse and inclusive to reach full potential. Significant cultural and organizational barriers were cited as challenges to innovation growth such as departmental silos and gender biases. However, the panel all agreed that the future was a bright one especially if universities and the private sector continued to work together.

As the conversation shifted into

policy changes needed to foster growth, panelists suggested a range of ideas including debt forgiveness programs for student entrepreneurs, encouraging more women, minority, and immigrant entrepreneurship in STEM fields, additional procurement and contracting resources for startups, updated work policies for women, and making higher education more accessible and affordable.

Explore Advocacy!

 **Website** www.sba.gov/advocacy

 **Email** advocacy@sba.gov

 **Blog** advocacysba.sites.usa.gov

 **Facebook** www.facebook.com/AdvocacySBA

 **Twitter** www.twitter.com/AdvocacySBA

 **Listservs** (News, regulatory news, research and statistics) www.sba.gov/content/connect-us-0

The Small Business Advocate

Managing Editor Brooke Nelson, Brooke.Nelson@sba.gov

The Small Business Advocate newsletter is published by the U.S. Small Business Administration's Office of Advocacy. It is distributed electronically to 35,000 subscribers.

The Office of Advocacy is the independent voice for small business in the federal government. The office is the watchdog of the Regulatory Flexibility Act (RFA) and the source of small business statistics. Advocacy advances the views and concerns of small business before Congress, the White House, the federal agencies, the federal courts, and state policymakers.

To begin receiving the newsletter or to update your subscription, visit www.sba.gov/content/connect-us-0

Address Office of Advocacy, U.S. Small Business Administration, MC 3114, Washington, DC 20416

Phone (202) 205-6533



Federal Recycling Program
Printed on recycled paper