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SUBMITTED BY: Venn' Le Fox

Oregon Translational Research and Development Institute (OTRADI) and the OTRADI Bioscience Incubator (OBI) Highlights

- Established in 2007, OTRADI operates the State's only collaborative drug discovery laboratory, with robotic equipment and expertise found nowhere else in Oregon.
- OTRADI and OTRADI-Affiliated Researchers have leveraged \$10M in State investment into >\$55M in private, federal and foundation funding for Oregon.
- OTRADI has provided work for over 30 Oregon bioscience companies in the form of scientific expertise, product expansion, grant partnering, introductions to investors, recruitment and expansion.
- OTRADI is opening Oregon's first and only bioscience-specific business incubator, the OTRADI Bioscience Incubator (OBI), in April 2013.
- The OTRADI Bioscience Incubator will provide lab and office space, entrepreneurial mentoring and shared cost-prohibitive equipment to five to nine start-up and growth-phase bioscience companies (est. >50 jobs).
- More examples of OTRADI helping Oregon companies innovate and thrive:
 - o Galena Biopharma: helped to recruit to Oregon, adding over 30 bio jobs in 2012
 - Aronora Biopharmaceuticals: helped to win >\$10M in NIH SBIR small business grants, leading to company expansion and \$30M of big pharma company investment; cornerstone tenants of OTRADI Bioscience Incubator
 - o **13Therapeutics:** introduced to venture capital investors; soon to be cornerstone tenants of OTRADI Bioscience Incubator
 - QE Chemicals: co-wrote successful NIH SBIR small business grant to start their company, providing with scientific experiments to expand company offerings
 - O **DesignMedix:** provided with proof-of-concept funding, performing scientific experiments to expand the company's offerings and patent portfolio
 - Hewlett-Packard: utilized OTRADI's unique lab equipment and expertise to betatest new robotics for HP; novel robotic platform now marketed to public
 - Marker Gene Technologies: granted \$100K due to affiliation with OTRADI through EDA i6 Challenge Award





Oregon Translational Research and Development Institute FACT SHEET				
About OTRADI	Founded in 2007, the Oregon Translational Research and Development Institute (OTRADI) is an Oregon Signature Research Center whose mission is to fuel sustainable economic development of Oregon's bioscience cluster via increased commercialization and retention of growth-oriented bioscience companies.			
Collaborations	OTRADI works with private and public entities to discover, develop and commercialize pharmaceutical drugs, diagnostics, medical devices and products using its expertise and equipment. Some of its partners include: bioscience companies; the Oregon Bioscience Association; economic development organizations, such as the U.S. Economic Development Administration and the Oregon Business Development Department; and all of Oregon's research universities.			
Expertise and Equipment	OTRADI brings the lab to the market by providing its partners with access to scientific expertise and equipment, unique within the State of Oregon. It works to accelerate a product's development and commercialization through strategic partnerships and access to its wealth of resources. OTRADI forms the integral connection or "glue" that links the scientific with the commercial, energizing and simplifying the connection to move medical advances forward, and helping to translate scientific research into tomorrow's discoveries.			
Bioscience in Oregon	The bioscience industry has proven its ability to generate jobs and fuel innovation. Compared to other major industries, Oregon's bioscience sector has led in job creation over the last decade at a pace well above the national average. Here in Oregon, the bioscience industry has grown employment by 30.6 percent from 2001-2010.			
	Oregon Bioscience Association's 2010 annual report states that the bioscience industry is one of the top three economic growth sectors in the state, with 13,423 jobs as of 2010. Oregon's bioscience industry generates a cumulative \$7.1 billion in economic activity per year.			
	OTRADI, and its newest subsidiary project, the OTRADI Bioscience Incubator (OBI), will strengthen the industry by eliminating barriers between innovation and market capitalization and aid Oregon in its economic recovery by fueling job growth.			





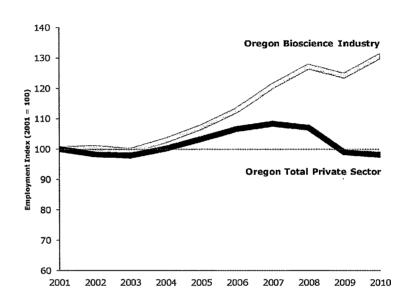
Contributions to Oregon's Economy	OTRADI is dedicated to broad-based bioscience research, with an emphasis on industry growth and job creation in Oregon. Its partners can leverage OTRADI's equipment and expertise to attract federal funding for bioscience research; increase the speed, number and quality of scientific products commercialized in Oregon; and translate these products into new, Oregon-based bioscience companies, resulting in high-paying sustainable jobs.	
Companies and Economic Development	OTRADI has worked with more than 35 Oregon bioscience companies (see accompanying document on Economic Development Examples). OTRADI helps companies incorporate, take root and grow jobs in Oregon.	
Educating Tomorrow's Scientists and Creating Jobs in Oregon	As part of OTRADI's mission to foster industry job growth in Oregon, it participates in the Saturday Academy: Apprenticeships in Science and Engineering Program. Through this program, OTRADI scientists mentor high school students, exposing them to careers in the scientific field. OTRADI also sponsors area university programs and individual students to conduct scientific research in Oregon.	
	Since 2008, OTRADI and OTRADI-affiliated researchers at statewide universities have collectively generated more than \$55 million in federal and private grants. These funds have primarily supported start-up bioscience businesses, professors, scientific technicians, post-doctoral researchers, graduate students and undergraduates pursuing science education and training in Oregon.	
Funding and Support	In addition to generating revenue from its own services (over \$415K since 2009), OTRADI is partially funded by a legislative allocation to the Oregon Innovation Council (Oregon InC) and is administered by the Oregon Business Development Department (OBDD).	
Location	OTRADI and the OTRADI Bioscience Incubator (OBI) are located on Portland's South Waterfront at 4640 SW Macadam Avenue, Suites 250 and 200, Portland, OR 97239.	
For More Information	For more information about OTRADI, visit http://www.otradi.org or email OTRADI Executive Director, Dr. Jennifer Fox at jfox@otradi.org or call 503-227-1814.	







OREGON • Oregon's bioscience industry is sizable and growing at a rapid rate. Over the decade, the state increased employment in the biosciences by nearly 31 percent and maintained a growth trajectory even during the later, more difficult economic period of 2007 through 2010 (up 8 percent). Though Oregon does not have a specialized employment concentration in any one subsector, it is clearly emerging in each of the five major components with strong overall job gains since 2001 in each.



Bioscience **Employment Tier**



Summary of State Performance in Industry Related Metrics

Metrics	Oregon	United States
Bioscience Industry, 2010		
Total Bioscience Industry Employment	13,423	1,605,533
Bioscience Industry Location Quotient	0.68	n/a
Biosciences Industry Establishments	762	70,006



Business Journal

Biotech gets an incubator

Premium content from Portland Business Journal by Andy Giegerich, Business Journal staff writer Date: Friday, November 30, 2012, 3:00am PST



Cathy Cheney | Portland Business Journal

Interim head Jennifer Fox says the incubator will attract venture capitalists.



Andy Giegerich

Business Journal staff writer- Portland Business Journal

The state is about to make a big bet on biotech.

The Oregon Translational Research and Development Institute, a state-funded effort to commercialize bioscience, plans to open the state's first biotech incubator in Portland's South Waterfront District.

Roughly \$1 million in state money will fund the incubator.

Supporters say the incubator, which will open this spring, could launch dozens of companies that generate hundreds of millions of dollars in annual revenue and employ hundreds of workers.

The Oregon Bioscience Incubator will initially include up to six bioscience companies.

Among the first tenants: the <u>Oregon Health & Science University-spawned</u> drug company 13therapeutics, which has so far raised \$7 million in start-up and venture capital funds.

<u>Jennifer Fox</u>, OTRADI's interim director, said the incubator could attract investors who tend to bypass Portland biotech startups in favor of Seattle and Silicon Valley-based companies.

"It could make it easier for venture capitalists who want to visit more than one company at a time," Fox said. "Incubators offer one-stop shopping. And when more companies receive funding here, it's more likely that they'll stay and expand here."

About 50 percent of the Oregon Bioscience Incubator's 13,000 square feet has already been leased.

Fox said OTRADI could eventually expand into other parts of the Willamette Wharf building, which will host the facility. The incubator will initially occupy about 27 percent of the Southwest Macadam Avenue Wharf structure.

The incubator will include six "wet labs," or large research areas that include plumbing fixtures. It will also provide startups with offices, conference rooms and shared equipment facilities.

State funds will cover the initial \$1 million build-out costs. The money comes from 2011 funds provided through the Oregon Innovation Council. Oregon Inc., the state-led effort to back startups and commercialize the public university research, has allotted some \$10 million to OTRADI since 2007.

The project, which is expected to open in 2013's second quarter, could extend the Oregon biotech industry's recent upswing. The industry continues to grow locally, with more than 13,000 new workers joining the field in 2010.

OHSU, <u>Portland State University</u> and other public universities are increasingly commercializing research, a process known as "tech transfer."

OHSU reported last week that it reached record tech transfer figures in such areas as procuring patents and private research funds.

Portland's biotech incubator could also launch similar efforts in Eugene and elsewhere throughout the state.

It will also cement the South Waterfront district's role as Portland's research hub. The bioscience incubator will sit about a half-mile south of OHSU's Center for Health and Healing, the South Waterfront's aerial tram station.

The bioscience space will offer between two and three times as much space as the Portland State University Business Accelerator. The Accelerator accommodates far more companies, 30 in all, than the new incubator will. Biotech companies tend to require sprawling spaces because their labs contain large pieces of equipment.

"We do have nine bioscience companies at the Accelerator, and they need a place to grow up and out to," said <u>Angela Jackson</u>, the Accelerator's manager. "There's a hole in the landscape, and we're glad there's someone there to fill it." In the case of 13therapeutics, the company will continue developing its anti-inflammatory peptides that treat such conditions as Crohn's disease and arthritis.

"The incubator will provide a rich environment for creating critical mass that's necessary for new companies," said <u>Tom Bruggere</u>, the company's CEO. "In Oregon, biotech is a fledgling industry. A lot of shared experiences can happen here that can help everybody."

OTRADI, which is a nonprofit, plans to move its own operations from PSU's downtown campus to the Macadam space. Fox and other OTRADI staffers and officers will help startups navigate grant compliance rules and other legal issues so the companies can focus on product development.

The group will also link pre-revenue businesses to venture capitalists and other funding sources.

By some estimates, it costs \$1 billion to get a biotech product to market over 10 years. Lab spaces cost about \$500 per square foot.

A Bend-based Amplion Research study released this month found that the Food and Drug Administration has approved fewer biomarker-based tests this year than it did in 2007. Those tests help determine whether patients can take certain medicines or undergo certain treatments.

However, <u>John Audette</u>, Amplion's president, said the research indicates that states should spend more, not less, to develop the biotech industry.

"An incubator would only encourage research by governmental entities and private companies," Audette said. "We believe that would help the FDA get up to speed on their approval process."

Area tech transfer supporters added that the incubator will make it easier for them to launch new companies. Such businesses could include the four that PSU expects to launch over the next two years.

"Remarkably, for a place that doesn't have a medical school, we have a lot of companies that are centered on medical devices and pharmaceuticals," said <u>Joe Janda</u>, director of PSU's innovation and intellectual property division. "Those companies need spaces exactly like the one that OTRADI is putting together."

Fast Fact

The Oregon Translational Research and Development Institute hopes to generate enough revenue within five years to become self-sustaining.



Non-Profit Plans Bioscience Complex In Portland's South Waterfront

OPB | Dec. 04, 2012 10:04 a.m. | Portland, Oregon

CONTRIBUTED BY:

KRISTIAN FODEN-VENCIL

An Oregon research center has announced plans to open a new bioscience complex in Portland's South Waterfront District.

The Oregon Translational Research and Development Institute is non-profit, funded primarily by the state. It focuses on taking ideas generated in university labs or at small start-ups and helping them progress to market.

The institute is renovating a building close to the Willamette River. It'll have individual labs, offices, shared equipment and conference facilities. The director Jennifer Fox says they plan to house up to six companies.

Fox said, "I think it's very forward thinking of the state of Oregon to invest in these kinds of incubators. And I know that the south Willamette Valley is looking at their own incubator space as well. So I hope that there will be an incubator network across the state in years to come. And we'll be able to have a shared network of facilities, best practices, entrepreneurial experience etc."

Fox says half the space has already been reserved. A study by the Oregon Bioscience Association found that more than 13,000 people were employed in this growing sector in 2010.

OTRADI Bioscience Incubator (OBI)



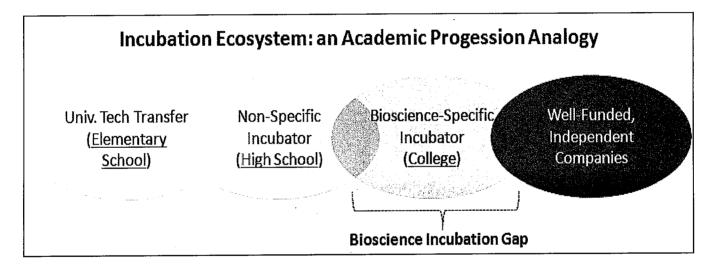


OTRADI Bioscience Incubator

OTRADI Bioscience Incubator (OBI) Role

OBI Mission Statement:

The OBI will fuel sustainable economic development of Oregon's bioscience cluster via increased commercialization and retention of growth-oriented bioscience companies.



Collaboration is Key:

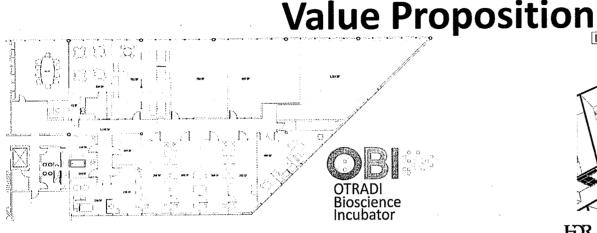
The OBI is fueled by collaboration with entrepreneurs, private industry, academia, industry associations, public sector agencies, angel investors, and venture capitalists.

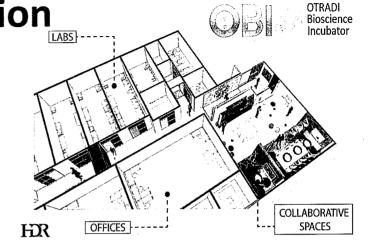
Aligning the individual goals of these stakeholders with OBI's mission is key to fueling the growth of bioscience companies in Oregon.





OTRADI Bioscience Incubator (OBI):



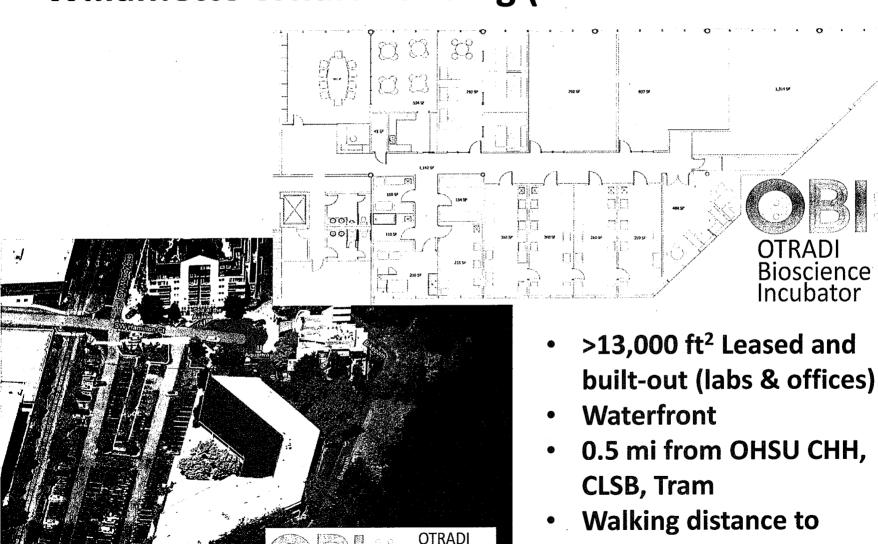


- Opening in April 2013
- 13,000 sq. ft. new lab/office space for 5-9 bioscience companies and OTRADI
- Companies will have access to laboratories, cost-prohibitive equipment and shared conference/meeting spaces
- OTRADI on site to provide scientific work, grant partnering & mentoring
- Entrepreneur-in-Residence to provide mentoring and help start-up companies access capital
- Provide new vehicle for strategically showcasing start-up companies and proof of concept projects for VC investment
- Achieve surge in early stage capital invested in Oregon technologies





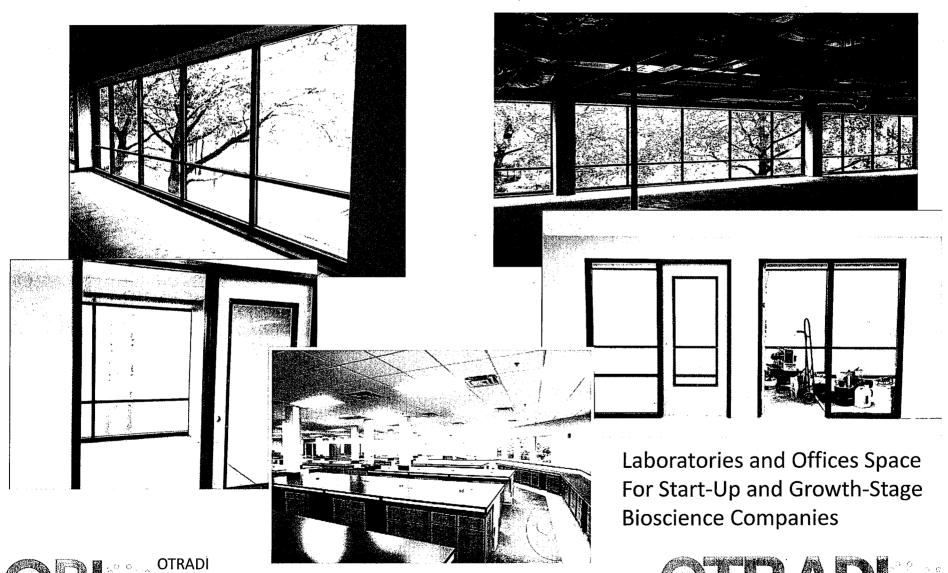
OBI Location: Willamette Wharf Building (4640 SW Macadam)



Bioscience

streetcar

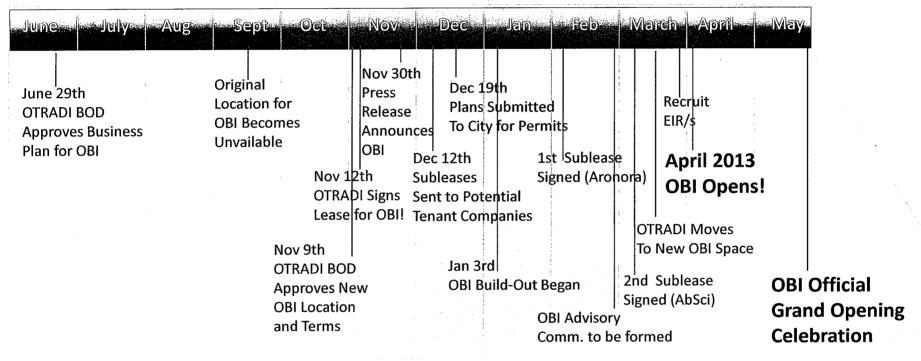
OTRADI Bioscience Incubator (OBI) Build-Out to be Complete in Spring 2013



OBI Progress to Date & Timeline

2012

2013



Work with Architects & Contractors on OBI Space
Track and Maintain OBI Budget & Build-Out Schedule

Search for OBI Location & Lease Negotiations

Sublease Negotiations & Company Recruitment

90-Day Build-Out Schedule





OTRADI Bioscience Incubator (OBI)

Architectural Rendering of Collaborative Shared Spaces:

