

# OHSU and Economic Development

## Translating research into business opportunities

### 2009 Startup companies based on OHSU research

#### APDM, Inc.

APDM, Inc. ([www.apdm.com](http://www.apdm.com)) is a medical technology company with a strong culture of research, development and innovation. They specialize in developing superior technologies for clinical assessment of movement disorders, such as Parkinson's disease.

Their mission is to develop innovative solutions that improve the quality of life for people with movement disorders. Their vision is to provide complete solutions for assessment and monitoring of people with movement disorders that will optimize therapy, accelerate clinical trials, and improve quality of life.

APDM continues to deepen its roots in Portland. It collaborates closely with scientists, faculty, and clinicians at Oregon Health & Science University (OHSU), Portland State University (PSU), and Oregon Institute of Technology (OIT).

#### DeltaPoint, Inc.

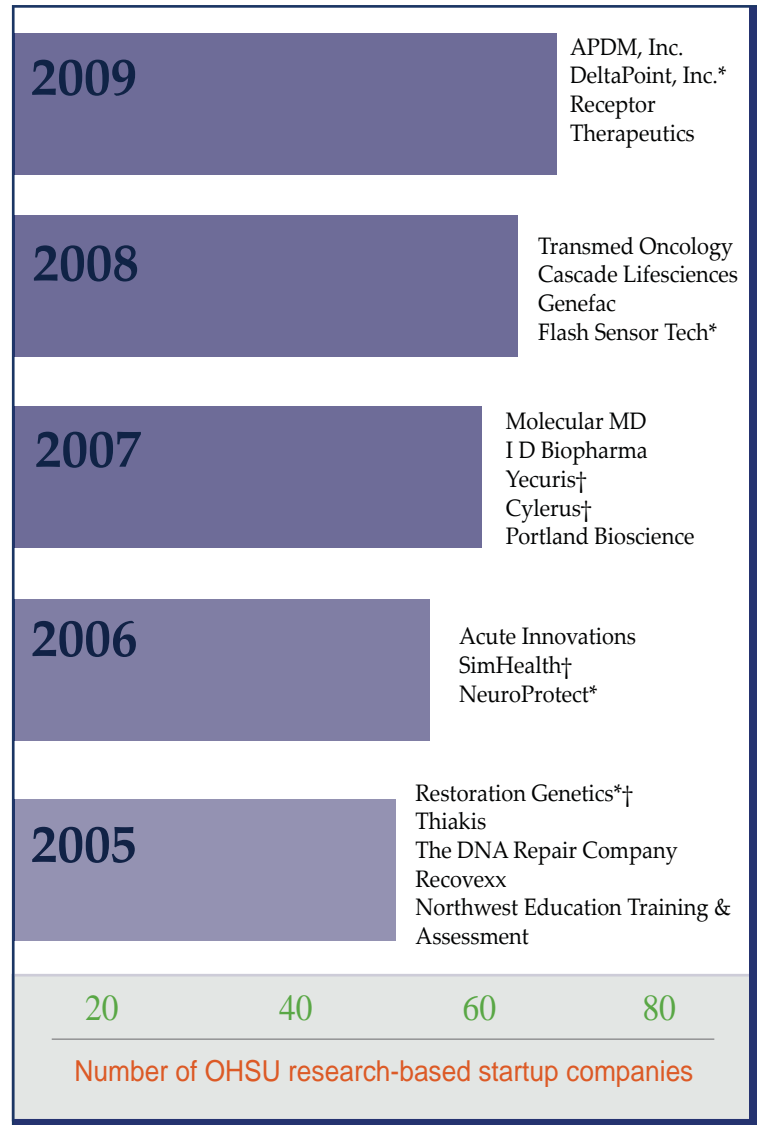
DeltaPoint, Inc., ([www.deltapointinc.com](http://www.deltapointinc.com)) is an early stage medical technology company based in Portland. The company is commercializing a patent-pending cancer diagnostic imaging biomarker developed in the laboratory of William Rooney, PhD and Xin Li, PhD, both of OHSU's Advanced Imaging Research Center.

By analyzing dynamic contrast enhanced magnetic resonance imaging (DCE-MRI) data, DeltaPoint's software is the first with the capacity to reliably and non-invasively discriminate benign from malignant tumors.

#### Receptor Therapeutics

Receptor Therapeutics is a green-field start up company focused on more effective cancer therapy. The company's two programs consist of the PoLi Drug Delivery system, a biocompatible drug delivery formulation targeting ovarian cancer and Onco-D, a vitamin-based therapeutic targeting a broad variety of cancers.

Onco-D was developed in part in the laboratory of Tomasz Beer, MD, Professor of Medicine in the Division of Hematology & Medical Oncology at OHSU.



\* Companies funded by the BioScience Innovation Program

† Companies funded by the Springboard Program

# Research and Commercialization at OHSU

OHSU research has resulted in 40 startup companies since 2000, bringing the total number to 71 since the early 1970s. Of those 40 companies, 27 are currently based in Oregon or were so at one time. Additionally, startup companies based on OHSU research employ nearly 3,000 people, including approximately 2,400 in Oregon.

OHSU excels at cutting edge research, which has propelled it into the top ranks of the nation's academic medical centers. In fiscal year 2009, the university garnered over \$300 million in research awards from all funding sources. Each new research grant in itself is like bringing new business to Oregon.

OHSU is diligently translating discoveries, wherever possible, into commercial applications. The **Office of Technology Transfer and Business Development (TTBD)** is the university's bridge to industry. TTBD is forging ties with the entrepreneurial and local business community to create a framework of support for the development of companies utilizing OHSU research.

The **Innovation & Seed Fund** is part of TTBD's strategic plan to accelerate development of an infrastructure to spur the growth of Oregon's nascent bioscience industry. It is a robust program designed to catalyze the development and commercialization of OHSU research. Its five main components are:

- **BioScience Innovation Program** - Research & development funding for commercially promising technologies.
- **Springboard Program** - Covers initial startup company costs.
- **Seed Program** - Equity investment syndicated on a 3:1 basis.
- **Internship Program** - MBA and law students work on business and legal projects.
- **Consulting Program** - Funds earmarked as needed for specialized services such as regulatory consulting.

Funding provided through the **BioScience Innovation Program** has resulted in several successful outcomes:

- Six projects have resulted in new Oregon-based startups
- Four projects have received external follow-on funding for additional development
- Two projects are under negotiation for license to company
- Two projects are seeking funding for additional development
- Two recently-funded projects are in process

As of 2009, the ISF is funded through the **University Venture Development Fund**. This fund was established by Oregon legislature to assist activities that support the translation of research into commercially viable products and services. As a result of this legislation, contributors to the ISF can receive a tax credit in return for their support of OHSU's commercialization activities.

Additional support for translational research can be found through **The Oregon Clinical and Translational Research Institute (OCTRI)**. OCTRI, which is funded by the National Institutes of Health, is devoted to the development of clinical and translational research.

At the heart of OCTRI is a partnership between OHSU and Kaiser Permanente's Center for Health Research. This partnership brings together a strong biomedical research university and an innovative practice-based research center associated with a large patient population. OCTRI's primary aims are to:

- Provide space, equipment, funding, and professional resources to support transformative and translational health research.
- Create a "Research Commons" - a coordinated infrastructure of core research tools.
- Nurture a new generation of highly-trained, interdisciplinary investigators.

OHSU's investments in additional world-class research facilities both on the South Waterfront and on Marquam Hill will further enhance those prospects. The Bioscience Research Building, for example, houses a cutting-edge MRI system equivalent to only one other site in the United States, the National Institutes of Health itself. These innovative programs help drive OHSU's research and will contribute even more significantly to the region's economic development.

## OHSU Startups Prior to 2005

Acea Pharmaceuticals	Najit Technologies
Acute Innovations	NeuroProtect
Adaptive Solutions	NW Neurologic (Neurocrine)
Adapx	NwETA
Advanced PsychSystems	Novacea
AMES Technologies	OraSure Technologies
Animated Speech	Orexigen Therapeutics
Artielle Immunotherapeutics	Oxiquant (Adherex)
Attain Technologies	Physio-Monitor
BioSpeech	ProteoGenix
CeNeS Pharmaceuticalse	Receptor BioLogix
Cascade Biologics (Invitrogen)	Recovexx
Cascade Oncogenics	Restoration Genetics
Columbia Biotechnologies	Revitus (BioVascular)
EBM Solutions	SimHealth Consultants
Elepar	Sunset Laboratories
Et Tu Software	Targeted Gene Delivery
FEI Company	Thiakis
Fluent Speech Tech	The DNA Repair Company
Fonix	Thetus Corporation
Galois Connections	Triple Point Biologics
Genetic Information Management	TrueDisk
Genovics	Veribeam
Health Outcomes Technologies	Vertedyne
Hedral Therapeutics	Virogenomics
Information Risk Group	Vox Technologies
Integra Telecom	WireX (Immunix)
Keshner Research	Zeus Semiconductor (3C)
Naiad	Znomics