Companies Formed using the University Venture Development Fund since 2016



Microbiome Engineering is developing a Gut-Brain chip that integrates dynamic flow, high throughput testing and discovery of microbiome mediated neuroactive compounds. This chip acts as a screening tool to quickly identify promising strains and compounds and decrease development costs. The M.E. Gut-Brain chip will be the first for early screening of neuroactive microbial compounds. https://www.microbiomengineering.com/ Corvallis



Siliprin

A 3d silicone Printing service enabling soft robotics. https://www.3dsiliconeprinting.com/



e-MSion. Our mission is to advance mass spectrometry-based life sciences research by offering accessible electron capture dissociation (ECD) fragmentation. The new and complementary data our ExD Cell enables unlocks new avenues of protein characterization that will be of value to drug manufacturers and researchers alike. https://e-msion.com/



eChemion's patent-pending "Chemical Stabilization of Graphite Surfaces" technology protects flowbattery reactor surfaces from oxidative damage during battery cycling without sacrificing its electro catalytic activity. http://www.echemion.com/

Corvallis

Corvallis



Medema Labs. Mechanical design and manufacturing software solutions melding manufacturing know-how and computational advances into desktop applications between CAD and CAM to find the best way to manufacture and assemble parts. https://medemalabs.com/



SutureGard Medical Inc. Challenging wound closure made simple, fast and safer with the SUTUREGARD® ISR Retention Suture Device and HEMIGARD® Adhesive Retention Suture Device. https://suturegard.com/ **Corvallis**



HazAdapt, Inc. Emergency and disaster guides made convenient and customizable. Helping you and your community prepare, respond, and recover from life's different hazards. https://www.hazadapt.com/

Corvallis



Grotthuss, Inc. is developing a new battery technology for energy storage, rechargeable Zn metal batteries https://www.grotthuss.org/
Happy Valley



Espiku specializes in the development of portable, modular systems for water desalination and wastewater treatment. Our innovations are well-suited for treating produced water from unconventional oil & gas extraction and for desalinating highly concentrated brine. https://www.espiku.com/
Bend



Beet, Inc. is developing high efficiency thin film solar cells based on a newly recognized absorber material platform. The proposed technology enables simple, polycrystalline thin film solar cell manufacturing in a tandem geometry allowing high photoconversion efficiencies using low-cost raw materials and processes. http://www.beetsolar.com **Corvallis**



TerrAmor, Inc. is developing precision pest control products as alternative solutions for specialty agriculture. https://www.terramoragsolutions.com/



NexTC Corporation creates state-of-the-art processes for manufacturing thin film coatings. NexTC provides high-performance, low-cost insulator and conductive oxide coatings to manufacturers in energy conversion, energy efficiency, and electronics markets. The coatings allow customers to dramatically reduce manufacturing costs, grow markets, and introduce new products. https://www.nextcmaterials.com/ **Corvallis**



Rogue Approach is an engineering design and testing company that specializes in small (1-3 kW) hybrid powertrains for Unmanned Aerial Vehicles. Rogue Approach's hybrid powertrains can be used as a range extender for multicopters to enable 2+ hour flight times. https://rogueapproach.com/
Bend

Vibriosis Dipsticks is developing a dipstick, which provides the rapid analysis of the presence of vibriosis contamination in oyster spelt tanks.

Blueberry Tree, Inc. has developed a blueberry rootstock, which can develop blueberry trees which will increase the yield of mechanical harvesting of blueberries. **Aurora**

RenewCat, Inc. is developing new renewable, environmentally friendly high-performance surfactant and disinfectant molecules derived from biomass for applications such as laundry detergents and fungicides.

Corvallis

GRW Engineering has developed a patent-pending process specifically for treating landfill leachate efficiently, reliably, and sustainably. GRW's leachate treatment process returns water to the site that is suitable for land application under existing NPDES permits. https://grwengineering.com/

Corvallis

Biotesserae Camunity, LLC. A nanobody-based platform for the production of a new class of therapeutics for canine cancer. **Corvallis.**

Pacific Vaccines, Inc. develops vaccines for bacteria-based illnesses. Presently, the team is developing a vaccine for Gonorrhea and is looking forward to making vaccines for other sexually transmitted diseases.

Corvallis

Spine by Design is developing spinal surgical decision support software that minimizes physician inter-evaluator variability in patient evaluation using fully automated image processing by machine learning.

Corvallis

Precision Drip Systems has developed a precision irrigation system, which allows for the ultimate control in water stress management. This is for high-end crops such as grapes that create their best (most expensive) juice when they are stressed.

Aurora

PediaNourish LLC will manufacture devices and materials for the optimal nourishment of premature neonates in the neonatal intensive care units. The current innovation is an automated system to control glucose infusion rates in premature infants to prevent hyper- and hypoglycemia.

Corvallis

EZDataMD, LLC developed a framework including a number of algorithms that can automatically and efficiently process 3D point cloud data. It can process a large dataset containing hundreds of millions of points within several minutes, comparing against the manual process can take hours, if not days, excluding the required training. https://lidartools.com/ **Corvallis**

Luculer, LLC is creating new light-emitting materials and fabrication methods for highperformance, ecofriendly micro-LED, a new generation display technology. **Corvallis**

TARF Inc. is creating smart flashlights that project contextualized information (based on location and application) along with light. Rather than create a completely new hardware form-factor device that people have never used before (the head-mounted display) as the vehicle for delivering AR, we instead use the ubiquitous flashlight for beam AR on to surfaces. **Corvallis**



Aronora is a privately held, early clinical stage translational biopharmaceutical company engaged Translational biopharmaceutical company eng in the discovery, research, and commercial development of proprietary biological

therapeutics. http://aronorabio.com **Portland**

> PDX Pharmaceuticals aims to improve human health and medicine through innovative therapies for various forms of cancer. We combine expertise in nanotechnology and cancer systems biology to develop novel therapeutics based on nanoparticle platforms for co-delivery of siRNA, drugs, vaccines, and/or immunotherapies.

http://www.pdxpharm.com/

Portland



NeuraMedica is an early-stage startup focused on the development of a novel, bioabsorbable surgical clip for durotomy closure. https://www.neuramedica.com/ **Oregon City**



and is currently under clinical translation. https://www.inherenttargeting.com/ **Portland**

Inherent Targeting is developing nerve targeted fluorescent contrast agents to improve surgical outcomes. Our technology provides direct highlighting of nerves during surgery in real time



The Spoonbill Foundation is a US-based not-for-profit foundation focused on changing the landscape of rare disease therapeutics. It aims to discover, develop, and deliver therapeutics for PKAN and all NBIA disorders in partnership with the NBIA community as swiftly as possible and at the lowest cost.

https://spoonbillfoundation.org/ **Portland**



Ksana Health, Inc. was founded in 2019 to translate the tools and findings of the University of Oregon's Center for Digital Mental Health into products and services that will transform mental health care and research. Led by Nick Allen, a Professor of Clinical Psychology with extensive research and clinical experience, and Will Shortt, an experienced software business leader and startup CEO, Ksana Health aims to give clients, practitioners, administrators, and researchers the tools that will define the future of mental health. Digital technology is producing the greatest treasure trove of data on human

behavior that has ever existed, but that its potential for social and health benefits has barely been realized. We aim to bring that potential to life.

https://www.ksanahealth.com/

Eugene



Perceptivo, LLC launched in 2019 to create a new pediatric audiology testing protocol that is fast, non-invasive, objective and doesn't require anesthesia or a sleeping patient. Based on discoveries made by Terry Takahashi and Avinash Bala at the UO, the method relies on autonomic orienting responses that are recorded and analyzed electronically. UVDF funding provided initial $_{\sf S}$ specialty equipment to prove out the technique and to establish the company, which received an SBIR Phase 1 award from the NIDCD in 2020. Further development of the system is being supported by a Commercialization Initiation grant from the M. J. Murdock Charitable Trust in 2021. **Eugene**



Defunkify is the business name of Dune Sciences, Inc. Dune Sciences is a technology spin-out from the University of Oregon's chemistry department. Dune's founders, Dr. John Miller and Dr. Jim Hutchison are leading researchers in surface chemistry and engineered

materials. Using state of the art tools and facilities at the University of Oregon, they have created scientifically superior, environmentally friendly solutions for products ranging from electron microscopy tools to anti-microbial coatings for textile manufacturers. In 2015, while working to increase the durability and effectiveness of new textile coatings, Dune's scientists invented technology that has been used on an entirely new line of high-performance and environmentally friendly cleaning and deodorizing products. This technology was launched under the Defunkify® brand name in mid 2016 and is now available nationally in grocery, specialty retail, industrial cleaners, and online.



Floragenex is a biotechnology company providing innovative solutions for genomic analysis in human, plant and animal systems. Floragenex has delivered impactful results in hundreds of genomics studies focused on

answering fundamental questions in genetics, ecology, evolutionary biology and biomedical research. Floragenex was acquired by Portland based Sedia Biosciences. http://www.floragenex.com/

Eugene & Portland



http://www.mabdx.com

Eugene

mAbDx specializes in creating novel immunodiagnostics through biomarker discovery and immunoassay development. They are committed to developing effective diagnostics for diseases characterized by the common features of great clinical urgency and unmet diagnostic needs.



MitoSciences was a new biotech company launched to produce and distribute immunoassay platforms and high performance monoclonal antibodies and with the mission of advancing mitochondrial research and developing products that support critical research in cancer, neurodegeneration and metabolic disorders. By 2011 MitoSciences, Inc. had over 200 products in the areas of metabolism and apoptosis, including antibody cocktails, sandwich ELISA kits, in-cell ELISA, flow cytometry antibodies and enzyme activity assays. The company was then acquired by the UK-based research tools company Abcam, a leading provider of protein research and detection tools. MitoSciences-branded products are still sold today at the Abcam website and the MitoSciences division is still headquartered in Eugene and recently acquired another Eugene biotech company, MarkerGene.

http://www.abcam.com

Eugene



InVivo Biosystems was launched as Nemametrix and was based on a costeffective rapid c. elegans-based drug development tool that has evolved into a first-in-class drug discovery and

development platform following the acquisition of Knudra Transgenics, a Salt Lake City-based genetic modification company whose operations were brought to Eugene in 2019. As an expert in CRISPR genome editing, InVivo Biosystems creates custom genome-edited C. elegans and zebrafish models

to enable aging, developmental and disease studies.

http://invivobiosystems.com

Eugene



Perpetua Power Source Technologies, Inc. develops and manufactures advanced renewable energy solutions that enable their customers to develop, deploy and benefit from next-generation wireless sensor applications. By extending battery life,

or replacing batteries altogether, their products enable wireless sensors to collect more data over a given time period and offer opportunities to effectively operate in a wider range of environments. Perpetua's plug-and-play Power Pucks® power the world's leading wireless sensors and are available for purchase from Perpetua, as well as directly from Emerson and GE. Applications range from powering pressure, temperature, vibration, and other sensors within industries spanning metallurgy, chemical processing, power plants, oil and gas, and many others. https://perpetuapower.com/

Tangent



AirOmatix, Inc.

AirOmatix is creating technologies with the potential to improve methods of oxygen concentration, storage, and delivery for use in healthcare, athletic, and food storage and transportation settings.

Portland



Captis Biotechnology, Inc.

Captis Biotechnology is a diagnostics company with the mission of commercializing discoveries that address major challenges in disease and pharmaceutical detection and monitoring. The technologies developed by Captis research and diagnostics are towards the treatment of chronic diseases

such as cancer, cardiovascular and Alzheimer's.

https://www.captisbiotech.com/

Portland



Diatomix, Inc./IOTA

Diatomix's patented and proprietary green chemistry technology improves the quality of air we breathe by continuously lowering levels of airborne chemical pollutants. Synthetic materials like

laminate floors and fibers in carpets, as well as some cleaning supplies, release harmful chemicals such as formaldehyde, benzene, toluene, and butanol into your home. Because indoor environments often lack proper airflow, indoor air quality is often far worse than outdoor air quality leading to an increase in asthma and other respiratory ailments across the globe. Diatomix removes these harmful materials. https://www.diatomixcorp.com/

Portland

SBIR Phase I, II and IIb awards Angel Investment (less than \$1MM) Selling Product



FluxMagic, Inc.

FluxMagic's mission is to develop the world's best performing energy conversion devices for renewable energy applications, consumers and industrial applications for: Magnetic

gearing; Variable stiffness magnetic actuators; Electrodynamic wheels. https://fluxmagic.com/

Portland

SBIR Phase I awards (multiple)



LiquidWire, Inc. "Made To Move" Liquid Wire is dedicated to merging electronics into the physical world through our range of dynamically stretchable and

flexible circuits. Their proprietary Metal Gel soft circuits conform naturally to any flexible surface with best-in-class pliability to ensure comfort and durability, allowing design of multi-layer circuits with surface mount components, replacing traditional Printed Circuit Boards functionality with a circuit that bends, twists and stretches unlike any other electronics on the market.

Portland

Series A investment [~\$10MM]



Lite Devices, Inc.

Lite Devices develops distributed sensor systems for use in wildfire detection and environment monitoring. With increased capacity for early detection firefighters and forest service personnel can act to mitigate the potential risks fires pose to life, property, and resources throughout the West and anywhere in the world where there is the potential for devastating wildfires. https://litedevices.com/

Portland



Magwire, Inc. "Enabling the next generation of flexible electronics using Transparent Conductive Films"

Magwire opens up the door for the next generation of flexible electronics.

Our patent-protected approach uses nickel-coated

copper nanowires (NiCuNW), patterned using traditional photoresist methodologies, which are then aligned for plasmatic welding using a magnetic field. The result is a highly conductive film that is transparent, and yet also flexible.

https://www.magwire.org/

Portland



Stark Street Materials Corporation "Next Generation Radiation Shielding"

SSMC utilizes a proprietary polymer-bismuth fabric to create lightweight materials which absorb radiation. Garments

utilizing SSMC materials are lighter than lead equivalents, more flexible for user comfort, sterilizable, and of course, lead-free.

https://www.starkstreetmaterials.com/

Portland

SBIR Phase I Award

ThermoCap, Inc.

ThermoCap utilizes a proprietary system of thermogram analysis to differentiate minute differences in complex protein mixtures. The company is currently pursuing two product lines: (1) drug development analysis by measuring uptake and efficacy of candidate pharmaceutical compounds, and (2) diagnostics of complex protein mixtures such as blood plasma.

Portland



Titania Purification, Inc. [Closed, 2020]

Titania Purification pursued water polishing systems for industrial applications requiring ultrapure water (ex. semiconductor manufacturing) using a technology based on a light-activated titanium dioxide catalyst.

Portland