

Pennsylvania Biotechnology Center of Bucks County

The *Pennsylvania Biotechnology Center of Bucks County* is a nonprofit corporation, jointly created by the [Hepatitis B Foundation](#) and [Delaware Valley College](#), with a shared vision of sustaining the vitality and beauty of Bucks County and the region, as a place of discovery, education and job creation. It is an innovative space for Entrepreneurs and you can read more about it online at www.pabiotechbc.org

Member organizations resident at the Pennsylvania Biotechnology Center currently fall into the following categories:

- Non-Profit Research & Development
- Non-Profit Outreach and Education
- Biotechnology
- Medicinal Chemistry Technologies
- Contract Research Organizations (CROs)
- Medical Device Technologies
- Nanotechnology
- Facilities Support
- Biotechnology Business Services

NONPROFIT RESEARCH & DEVELOPMENT

Drexel Institute for Biotechnology & Virology Research	
<p>Research Division of Drexel University College of Medicine dedicated to virology and viral hepatitis in particular.</p>	<p>The Drexel Institute for Biotechnology and Virology Research (DIBVR) is a research division of Drexel University College of Medicine, and is the result of an innovative academic partnership between Drexel University and the Hepatitis B Foundation, a national nonprofit research organization. DIBVR faculty share space and resources with the Hepatitis B Foundation and its research institute in the 110,000 square foot Pennsylvania Biotechnology Center located in Doylestown, PA.</p>
Fox Chase Cancer Center	
<p>National Liver Specimen Biorepository</p>	<p>Fox Chase Cancer Center is the region's only hospital devoted entirely to cancer treatment, research and prevention.</p>
Institute for Hepatitis & Virus Research	
<p>Research & Development on Hepatitis, Diseases of the Liver, and other Infectious Diseases www.ihvr.org</p>	<p>The mission of the Institute for Hepatitis and Virus Research is to use discovery science to find new therapies for viral hepatitis and liver cancer; to advance its research discoveries through traditional scholarship and educational opportunities; to nurture biotechnology entrepreneurship; and to promote public health outreach programs to improve the quality of life for those affected by viral hepatitis.</p>

Natural Products Discovery Institute	
<p>Dedicated to making one of the world's greatest collections available to the scientific community.</p> <p>www.npdi-us.org</p>	<p>The Natural Products Discovery Institute (NPDI) is a non-profit research organization that houses Merck's entire US Natural Products library as well as the Schering-Plough Legacy Culture Collection, together forming one of the largest, most diverse and best curated natural products collections in the world. The NPDI's mission is to maintain and develop this collection for human benefit, including discovery of human and animal therapeutics, nutritionals, cosmeceuticals, and research and production tools. In so doing, the NPDI makes this collection available to qualified researchers worldwide, provides industry standard follow-up chemistry to support bioassay driven structure identification and elucidation and teach others about natural products and therapeutic drug discovery.</p>
Pennsylvania Drug Discovery Institute	
<p>www.padrugdiscovery.org</p>	<p>The Pennsylvania Drug Discovery Institute (PDDI) is a non-profit outreach and technology transfer organization that seeks to promote the translation of basic discoveries in biomedical research into commercial opportunities. One of the six initial programs of the PDDI is "ForwardTrack", providing guidance, mentorship and support to promote workforce reentry for senior-level industrial scientists who have been recently displaced due to mergers and acquisitions in the pharmaceutical industry.</p>

NONPROFIT (Outreach and Education)

Delaware Valley College	
<p>Private, four year college</p> <p>www.delval.edu</p>	<p>Delaware Valley College is a comprehensive four-year institution of higher learning with more than 1,650 students enrolled full-time in 35 academic programs, ranging from agricultural, biological and physical sciences, to business administration, computer information systems and secondary education.</p>
Hepatitis B Foundation	
<p>Global education & advocacy for those affected by Hepatitis B virus</p> <p>www.hepb.org</p>	<p>The Hepatitis B Foundation is the only national nonprofit organization solely dedicated to finding a cure and improving the quality of life for those affected with hepatitis B worldwide. It provides comprehensive outreach and</p>

	education programs that touch thousands of lives each year and funds research conducted in its research institute, the Institute for Hepatitis and Virus Research (IHVR).
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BIOTECHNOLOGY

Advanced Neural Dynamics	
Compounds for neurological disease www.advneuraldynamics.com	Advanced Neural Dynamics is a drug discovery company focused on preclinical advancement of novel compounds for the treatment of neurological disease. The specialty of the company is neuroprotection from agents that are involved in the causes of neurological impairment.
ALS Biopharma	
Biochemistry discoveries www.alsbiopharma.com	ALS Biopharma, LLC is the only biotechnology company with both a protein-based biologic and small-molecule therapeutics platform technology directed toward providing new therapeutic options for the treatment of the devastating condition of amyotrophic lateral sclerosis (ALS, Lou Gehrig's disease).
Atrin Pharmaceuticals	
Anti-Cancer Drug Discovery	Atrin Pharmaceuticals is an early stage, emerging biotechnology company focused on developing proprietary medications for the treatment of oncological diseases that currently do not have very effective therapies. Atrin has identified an innovative therapeutic approach that will target major solid cancers including breast, pancreatic, lung, ovarian and colon.
Callidus Biopharma	
Pharmaceuticals used in enzyme replacement therapies	Callidus BioPharma, Inc. is a product-driven biotechnology company focused on developing superior follow-on biologic drugs (improved bio-similars or "bio-betters"). We strive to create superior products by combining the required scientific understanding of protein therapies and their clinical indications to address deficiencies with existing biologics. We are initially developing recombinant lysosomal enzymes with improved protein stability and drug targeting as potential treatments for certain rare genetic diseases called lysosomal storage disorders. Callidus is also developing a platform protein expression technology which has the potential to significantly increase protein yield and reduce manufacturing costs

	for recombinant proteins.
Forge Life Science	
	FORGE is an early stage biopharma dedicated to commercializing innovative small molecule broadspectrum antiviral compounds and vaccine manufacturing improvements based on intellectual property emanating from Princeton University.
GfreeBio	
Structure-based drug discovery www.gfree.com (under construction)	GfreeBio is a structure-based design company that uses free-energy based simulations to rapidly identify and optimize new drug candidates. We use the proprietary Site Identification by Ligand Competitive Saturation (SILCS) technology to map protein binding sites in order to identify key binding sites, predict the types of chemical functionality needed for binding, and providing an estimate of the free-energy of binding. Since the simulations that provide the free energy maps need only be computed once, this approach is faster and more accurate than other conventional structure-based approaches. GfreeBio stands ready to partner with small and large pharmaceutical partners to accelerate their structure-based discovery programs.
Immunotope	
Immunotherapy of cancer and infectious disease, early diagnosis of cancer www.immunotope.com	Immunotope is a clinical stage biotechnology company dedicated to developing and commercializing new approaches to the diagnosis, treatment and prevention of recurrence of cancer and infectious diseases by exploiting its innovative immuno-proteomics platform technology. Immuno-proteomics antigen discovery platform identifies comprehensive antigenic signatures consisting of peptides and parent proteins from tumor pathways that are critical for the development of antibody therapeutics and immunotherapeutic vaccines.
Mid-Atlantic BioTherapeutics, Inc.	
Biopharmaceutical Research and Development	Mid-Atlantic BioTherapeutics is developing the novel compound IMT504 as a vaccine adjuvant and immunotherapeutic agent. IMT504 has demonstrated impressive safety and immunostimulative profile in multiple animal models and in humans.
Novira Therapeutics, Inc.	
Drug Discovery	Novira is an antiviral drug discovery company

www.noviratherapeutics.com	launched in 2009 that is focused on the discovery of novel, first-in-class therapeutics for the treatment of HBV and HIV, two global diseases in need of better therapies.
Russell Biotech	
Focus on developing products for bioseparations market www.russellbiotech.com	Russell Biotech, Inc is a Delaware Limited Liability Corporation, whose mission is to develop products and technology for the separation of biological materials. The markets for the Company's technology are in excess of \$6 B and rapidly growing. Future markets include clinical diagnostic products for the early detection of liver cancer, therapeutic products to better enable stem cell therapy and bio-processing products that will revolutionize production of therapeutic proteins.
Seneb BioSciences, Inc.	
	Seneb BioSciences, Inc. is an early-stage biopharmaceutical company focused on the development of life altering therapeutics for rare neurological and orphan drug diseases. The company also offers contract research services including discovery, process development and production of protein and small molecule therapeutics.
Solaris Therapeutics, Inc.	
Novel small-molecule drug for diabetes www.solarisrx.com	Solaris Therapeutics is a start-up company focused on generating small molecule therapeutics against targets in the E3 ligase family of proteins. Its lead program has generated novel high-affinity inhibitors of one such ligase involved in glucose metabolism; the company is currently optimizing the lead candidate for further development in the fields of diabetes and obesity. Additional possible therapeutic areas of interest for E3 ligase inhibitors include CNS, musculoskeletal, infectious disease and oncology, all of which are potential follow-on targets of this technology.
Sonitu Pharmaceuticals	
Small molecule therapeutics for cancer www.sonitu.com	Sonitu Pharmaceuticals is a biopharmaceutical company utilizing innovative target-based approach to design and discover novel drug candidates that can be developed as novel treatments for liver disease and for combating bio-terrorism.
Synergy Pharmaceuticals	
IBD inhibitors	Synergy Pharmaceuticals, Inc. (SGYP.OB) is a publicly listed company focused on

<p>www.synergybio.net</p>	<p>development of proprietary drugs to treat gastrointestinal (GI) disorders, inflammatory bowel diseases and colon cancer. Dr. Kunwar Shailubhai, CSO is the pioneer researcher to discover therapeutic applications of Guanylate Cyclase C agonists to treat human diseases. Our lead drug candidate (SP-304) is in clinical development to treat chronic constipation (CC) and constipation-predominant irritable bowel syndrome (IBS-C); and a second drug, SP-333, in pre-clinical development for GI inflammatory diseases.</p>
<p>TherimuneX Pharmaceuticals</p>	
<p>Biopharmaceutical Research and Development</p> <p>www.therimunex.com</p>	<p>TherimuneX Pharmaceuticals, Inc. is a developing-stage biotechnology. The Company's core technology, a new class of immunologically active lipopeptides, is the discovery of Dr. Thacker, the Company's Founder, President & Chief Science Officer. The technology is protected by an issued US Patent and PCT patent filings. TherimuneX has developed a first-in-class broad spectrum, anti-infective agent and is currently conducting IND enabling safety studies with this new molecular entity. This first drug product is targeting prevent and treatment of antibiotic-resistant infections in the hospital-acquired infections market.</p>
<p>Trovib, LLC</p>	
<p>Unlocking the power of nature for industrial biosolutions</p> <p>www.trovib.com</p>	<p>Trovib is supplier of rare microbial extracts, plant extracts and microbial strains to customers across a broad array of industrial biotech markets. Our vast, genetically diverse collections serve as a powerful discovery platform for novel industrial biotechnology products. Trovib focuses on agricultural, energy, manufacturing and environmental applications. Industrial biotechnology is the use and application of modern biotechnology for the sustainable production of chemicals, manufacturing materials and fuels.</p>

MEDICINAL CHEMISTRY TECHNOLOGIES

<p>Enantigen Therapeutics</p>	
<p>Glucosidase inhibitors</p> <p>www.enantigen.com</p>	<p>Enantigen Therapeutics, Inc. is an innovative pharmaceutical company striving for excellence in the discovery, development and commercialization of novel drugs to treat life</p>

	threatening infectious diseases. The primary focus is on the development of oral therapeutics for the treatment of Hepatitis B, Hepatitis C, Hepatocellular Carcinoma (HCC), and other viral related diseases.
Fox Chase Chemical Diversity Center, Inc.	
Drug discovery www.fc-cdci.com	Fox Chase Chemical Diversity Center, Inc. (FCDDC) provides early-stage translational drug discovery research to academic and biotechnology collaborators, with core competencies in medicinal chemistry.
IteraMed, Inc	
Medicinal Chemistry www.iteramed.com	IteraMed is a U.S. based business that is focused on "value added" organic synthesis, consulting, and drug discovery at offshore rates.
Pharmabridge	
Medicinal chemistry and custom design and synthesis of pharmaceutical compounds and intermediates www.pharmabridgegroup.com	Pharmabridge Inc. provides contract research and development service for pharmaceutical and biotechnology industries. Our goal is to provide first class service by offering competitive prices, unique products, timely shipments, and by providing competent technical support.

CONTRACT SERVICE ORGANIZATIONS (CROs)

DiagnoSearch Life Sciences Inc.	
Full service CRO providing clinical development support in India, Mexico and South Korea. www.diagnosearch.com	Established in 1995, DiagnoSearch Life Sciences is a full service CRO with 15 years of Phase I-IV experience across a broad range of therapeutic areas having supported 135+ clinical trials, passed 160+ CQA audits with 130 professionals. We are operational in India, Mexico and South Korea with US BD office in Doylestown, PA.
Flowmetric	
Polychromatic Flow Cytometry and ImmunoHistoChemistry www.flowmetric.com	FlowMetric is a niche contract research organization (CRO), focused on providing polychromatic analytical flow cytometry services and aseptic cell sorting to pharmaceutical and biotech companies. FlowMetric is committed to providing timely, expert, and comprehensive test services and analytics as part of pre-clinical drug discovery and clinical trial support for its clients. FlowMetric offers integrated, cost-effective, and specialized polychromatic flow cytometry services delivered with an uncompromising commitment to quality.

MEDICAL DEVICE TECHNOLOGIES

Advanced Vertebral Solutions	
Vertebral Implants	Advanced Vertebral Solutions™ is developing and commercializing a unique “active steering” technology platform for spinal surgery that is comprised of proprietary implants and delivery instruments designed for minimally invasive spine surgery.
Cerora, Inc.	
EEG Test Devices www.bcimedical.com	Cerora is a medical device company focused on point-of-care brain health assessment through portable EEG technology in conjunction with activated testing protocols.
Lone Oak Medical Technologies	
Medical devices for bone mineral densitometry www.loneoakmedical.com	Lone Oak Medical Technologies, LLC was founded in 2007 for the purpose of acquiring an existing peripheral bone density measuring device used to screen people, especially postmenopausal women, for loss of bone mass which can lead to osteoporosis. This measuring device is called the accuDEXA and currently there are over 3,000 in use worldwide. However, it was developed over ten years ago and is too heavy to be considered portable. Thus, the accuDEXA needed to be redesigned to include modern technology such as new software, faster results, and records of patient’s results that can be transmitted electronically. This redesign research project is about 70 percent finished and our new accuDEXA will be introduced in the summer of 2010.
Magellan Medical Imaging	
Diagnostics www.mmimed.com	Magellan Medical Imaging provides service, repair and parts for most ultrasound systems including Philips, Siemens, ATL and GE. Fully operating systems also available.
Patients' & Consumers' Pharma	
Medication devices www.pandcpharma.com	Patients' & Consumers' Pharma designs proprietary technologies to prepare personalized medication products for the human and veterinary markets. P&C Pharma has two unique technologies in development – INSTA™, an automated compounding system and MAESTRA™, a manufacturing technology for fully-variable oral combination dosage forms. P&C Pharma products will allow healthcare providers to easily and economically provide

personalized therapy to their patients.

NANOTECHNOLOGY

CaPtivate Pharmaceuticals

Hormone therapy products; Proprietary calcium phosphate nanotechnology (CAP) for novel vaccines

www.captivatepharma.com

CaPtivate Pharmaceuticals is a development-stage biotechnology company focused on developing improved vaccines and vaccine delivery systems through its proprietary calcium phosphate (CaP) nanoparticle adjuvant technology. Among the company's lead vaccine programs are the development of CaP-adjuvanted influenza vaccines (seasonal and pandemic strains) for injection or mucosal administration and the development of mucosal vaccines for hepatitis B and herpes simplex- 2 (HSV-2).

Pennsylvania Bio Nano Systems

Bio Nanoparticle company

www.pabionano.com

Pennsylvania Bio Nano Systems, LLC provides industry with a support platform for investigations of the bio- nanoparticle interface through supplying samples of nanoscale materials that have undergone physio-chemical characterization and associated consulting services. Client firms would be interested in evaluating the environmental, health and safety aspects of a test material through *in vitro* and *in vivo* testing, as well as generating environmental transport information.

FACILITIES SUPPORT EQUIPMENT

Tescor, Inc.

On-site walk-in Freezer Facility

www.tescor-inc.com

Tescor is the world leader in Climatic Testing Equipment for the Automotive, HVAC, Pharmaceutical and Life Sciences industries. Tescor custom-engineered systems enable R&D or QC Labs to test their products in conformance with the appropriate ASHRAE, ARI, AHAM, RAC, IEC or JIS, and ISO standards. Tescor has commissioned several hundred projects to date in the area of calorimetry and environmental test facilities. These projects have been completed for many large, world-leading Automotive, HVAC and Pharmaceutical companies, both domestic and international.

BIOTECHNOLOGY BUSINESS SERVICES

Artemis Solutions

Business Support Services

Artemis Solutions was formed to provide grant

www.artemis-finance.com	<p>support and financial management services to early stage technology based companies. Artemis Solutions specializes in the application, submission and administration of SBIR grants to early stage technology based companies. Artemis has a proven record in obtaining government funding for its clients.</p>
<p>Cross Current Corporation</p>	
<p>Systems Integration and Software Development www.crosscurrent.com</p>	<p>Cross Current Corporation is a systems integration and development company, specializing in healthcare. We deploy and support a healthcare business intelligence and analytics platform that sits atop existing databases, pulls data directly and in real-time from those databases, and deploys, parses, and generally presents the data in customized, Web and Cloud-enabled dashboards.</p>
<p>Keystone Innovation Zone</p>	
<p>KIZ & R&D Tax Credits and Other PA Resources</p>	<p>Pennsylvania Keystone Innovations Zones have been established in communities that host academic institutions and are designed to foster innovation and create entrepreneurial opportunities.</p>
<p>Launch Innovations PA, LLC</p>	
<p>Technology transfer and commercialization services</p>	<p>Launch Innovations LLC holds Intellectual Property primarily developed by the IHVR, although it may also serve as a Tech Transfer entity for technologies developed elsewhere. The goal of Launch Innovations is to successfully commercialize these technologies by licensing the IP to existing companies or aligning it with executives who will serve as CEOs for spin-out companies.</p>