



## RESIDENT COMPANIES

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### **Research Park Companies**

#### **Ascentium**

[www.ascentium.com](http://www.ascentium.com)

Ascentium is an interactive marketing and technology consultancy that delivers award-winning experiences and information-driven business solutions. From strategic marketing initiatives to full back-office implementations, we connect you with inspired, effective ideas, and then bring them to life—always keeping sight of what tangible business results look like for you and your organization.

#### **Clear Resolution Consulting**

[www.clearresolutionconsulting.com](http://www.clearresolutionconsulting.com)

Clear Resolution Consulting, LLC is a small business provider of performance management, strategic management, governance, process improvement and development, and technology development and automation solutions to the Department of Defense and the Intelligence Community.

#### **Convergent Technologies Incorporated**

[www.cti-usa.net](http://www.cti-usa.net)

Convergent Technologies, Inc. ("CTI") has been providing professional services to clients since 1997. CTI offers consulting expertise in the areas of Internet solutions, IT Infrastructure Architectures and Systems Integration. CTI primarily offers Engineering & Information Technology Development and Support services. Engineering Services include Feasibility Studies, Business Process Re-Engineering, Software Engineering, Systems and Information Engineering, System Security Engineering & Information Assurance, and Telecommunication Systems Design & Engineering. IT & Development Lifecycle Services include Full Lifecycle Support, Requirements Analysis, Software Engineering Institute (SEI) CMM Process Implementation, Object Oriented Design/Programming, Rapid Application Development (RAD), Systems Programming, Systems Development and Testing, Systems and Database Design, Systems Integration, and Systems & Software Configuration Management (SCM). CTI also offers product development and support services for Wireless & Handheld Computing technology. Using our services a client can effectively implement this technology within their IT infrastructure.

#### **Erickson School of Aging Studies**

[www.umbc.edu/erickson](http://www.umbc.edu/erickson)

The Erickson School of Aging Studies was established at the University of Maryland , Baltimore County (UMBC) in the spring of 2004 with the aim of becoming the preeminent

resource for education, research and public policy on aging and services for the mid-life and aging population. The School currently offers non-credit courses for executives in the Seniors Housing and Care industry, and in January 2006, the School will launch a graduate certificate in Seniors Housing and Care. In the fall of 2006 and the fall of 2007, the School expects to launch a Bachelors Degree and a Masters Degree, respectively, in the Management of Aging Services. Prior to the founding of the Erickson School, UMBC already boasted strong credentials in aging and aging-related areas. For example, some sixteen faculty members specializing in aging, health and public policy already resided across a number of UMBC departments. In addition, a number of educational programs in Health, Aging & Public Policy were already in existence at both the undergraduate and graduate levels. The Erickson School of Aging Studies will build on this strong foundation, and in the process prepare the next generation of leaders to meet the needs of the mid-life and older population.

### **Goddard Earth Science and Technology Center (GEST)**

[www.umbc.edu/gest](http://www.umbc.edu/gest)

GEST is a consortium of three universities and two private sector companies led by UMBC which has a cooperative agreement with the NASA Goddard Space Flight Center to promote research in the areas of Earth and information sciences. The research faculty studies terrestrial physics, the Earth's atmosphere and the hydrosphere using satellite data and powerful computer modeling techniques to help scientists and educators better understand our planet and the processes that shape its future. GEST also operates several educational internship programs at Goddard available to students of all ages from high school age through post-doctoral candidates.

### **Joint Center for Earth Systems Technology (JCET)**

[www.jcet.umbc.edu](http://www.jcet.umbc.edu)

JCET operates under cooperative agreement between UMBC and the Goddard Space Flight Center (GSFC). JCET meets the common interest of UMBC and GSFC to foster graduate and undergraduate teaching in the Earth Sciences and to develop new technology in environmental remote sensing. JCET faculty are affiliated with the Departments of Physics, Math/Statistics, Chemistry, CSEE and Geography and Environmental Systems. JCET's research focuses on five themes: (1) atmospheric radiation, (2) observations, (3) modeling and data assimilation, (4) clouds and precipitation and (5) interdisciplinary studies. JCET faculty based at the Technology Center are working on problems of the Earth's dynamo, gravity, volcanology and ocean productivity

### **Maryland Business Roundtable for Education (MBRT)**

[www.mbrt.org](http://www.mbrt.org)

Founded in 1992, the Maryland Business Roundtable for Education (MBRT) is a coalition of more than 100 leading employers that have made a long-term commitment to support education reform and improve student achievement in Maryland.

### **Med-IQ**

[www.med-iq.com](http://www.med-iq.com)

Launched in 2005, Med-IQ specializes in providing CME/CE that responds to diverse learning styles and offers healthcare professionals greater accessibility. Med-IQ develops educational activities through multimedia formats including live events, interactive Webcasts, podcasts, satellite television broadcasts in hospitals, audioconferences, DVDs, and print publications;

and they measure the efficiency of their clinical and practice management activities through outcomes assessments.

### **National Association of Educational Procurement (NAEP)**

[www.naepnet.org](http://www.naepnet.org)

The National Association of Educational Procurement, Inc. is the professional association serving colleges and universities nationwide. NAEP was organized in 1921 to provide a forum where campus purchasing professionals might share valuable information. We are the professional association dedicated to serving higher education by providing those with purchasing responsibility with the specialized information they must have. Our mission is to advocate the development, exchange and practice of effective and ethical procurement principles and techniques within the higher education and associated communities, through continuing education and networking.

### **Observation Baltimore**

[www.observationbaltimore.com](http://www.observationbaltimore.com)

Observation Baltimore, repeatedly rated “One of the World’s Best Focus Group Facilities” by Impulse Survey, features three spa-like and technology-friendly focus group suites. Each spacious suite is elegantly appointed, including tiered observation, client lounges with closed-circuit viewing, and every creature comfort. Observation Baltimore’s practices are environmentally kind and our offices have been constructed with LEED certified, energy-saving materials.

We offer precise recruiting of consumers, physicians, healthcare and business-to-business professionals for market research studies. We are seasoned market research industry experts with proactive client services.

Observation Baltimore is a division of The Research Group, a full-service market research firm. The Research Group and Observation Baltimore are headquartered at UMBC’s BW Research & Technology Park.

### **Physicians Practice, Inc.**

[www.physicianspractice.com](http://www.physicianspractice.com)

Physician's Practice, an innovative healthcare media and education company, creates content to help physicians strengthen their practice operations through its award-winning journal, Physicians Practice(R), America's Leading Practice Management Journal, popular Web site, audio conferences, newsletters, satellite television programs, and live seminars. Visit [www.PhysiciansPractice.com](http://www.PhysiciansPractice.com) for additional information about its highly-acclaimed educational solutions.

### **Retirement Living TV (RLTV)/Erickson**

<http://www.rl.tv>

The RLTV Building is the home of Retirement Living TV, the only cable network dedicated to serving the needs of adults 50+ with information and entertainment that inspires and changes the perception of aging. The network has Emmy award-winning programming that addresses a variety of subjects and genres including health, finance, travel, reality, comedy and drama. It is RLTV's vision to be the top television network, online destination, and media brand for adults 50+. The building will also house Erickson's Marketing and Information Technology

Departments. The Erickson entities will collaborate with UMBC faculty and students in the Erickson School and the departments of Media and Communication Studies, Visual Arts, Information Technology, and Marketing through research and internship opportunities.

### **RMF Engineering, Inc.**

[www.rmf.com](http://www.rmf.com)

The firm of RMF Engineering, Inc. (RMF) was incorporated in 1983 with its initial focus on mechanical and electrical engineering. Since then, RMF has expanded its services and has five office locations. The firm is nationally recognized for the analysis, planning, and design of complex buildings and campus utility generation and distribution systems. Disciplines include: mechanical, electrical, civil, structural, infrastructure, and aquacultural engineering. Other services include commissioning, plant operations, emissions testing, and non-destructive testing. The firm also has several experienced LEED Accredited Professionals.

### **RWD Technologies**

[www.rwd.com](http://www.rwd.com)

RWD Technologies was founded in 1988 by Dr. Robert W. Deutsch, and its registered trademark, We bring people and technology together®, describes RWD's founding mission and continues to define its strategy for success.

The company is comprised of three operating groups: Applied Technology Solutions integrates enterprise-class software systems, develops custom applications for pharmaceutical and other regulated industries, and provides global blended eLearning solutions; Enterprise Learning Solutions provides support services to organizations that utilize SAP, PeopleSoft, and Oracle systems and has developed software products to train end users of these systems; and Performance Solutions engages in lean consulting and vehicle launch support services to the automotive industry, reliability improvement to the railroad industry, and human performance improvement services to the petroleum and chemical industries.

Headquartered in Baltimore, Maryland, with offices in the United States, Canada, Great Britain, France, Germany, Belgium, Japan, and Australia, RWD has more than 750 employees. Partnerships and alliances with recognized industry leaders such as SAP®, Peoplesoft®, Documentum®, Siebel Systems®, Arbortext®, and Interwise® enrich RWD's capability to support their clients' business growth by satisfying demands for unique skills and technology products. RWD's focus on understanding end user needs, integrated approach to business solutions, and strong methodologies will continue to be at the center of their growth strategies as they anticipate emerging opportunities of the years ahead.

### **Solvern Innovations**

[www.solvern.com](http://www.solvern.com)

Solvern Innovations was formed in 2003 as a corporation in the state of Maryland under the leadership of Andre Gudger. In the beginning, Solvern Innovations grew rapidly supporting Fortune 500 clients and various Laboratories with Software and Data management solutions. Many of the new employees came from the University of Maryland Baltimore County (UMBC) – specifically to create data visualization and executive dashboard tools. As a Solutions Innovator, the company formed a partnership with the University of Maryland College Park to commercialize emerging technologies and deliver these solution based technologies several customers to include commercial, industry and federal government clients. In 2004 the

company expanded its base to include providing high end scientific professional services along with its innovative products to the Intelligence Community and Military. Solvern Innovations has become a leading provider of comprehensive information and communications products and solutions, training, and technology services for National Security, Department of Defense, and the Security of our Homeland. Today, Solvern Innovations is a national resource as we apply our expertise in systems engineering, information assurance\security engineering, software development and engineering, information technology, operational concepts, program & business management, and enterprise modernization to address our countries mission critical needs. Over the years, the company has continued to evolve to meet the changing needs of its customers by providing top-notch engineers and scientists experienced in a wide range of technologies.

### **UMBC ACTiVATE® Program**

[www.umbc.edu/activate](http://www.umbc.edu/activate)

UMBC's Achieving the Commercialization of Technology in Ventures through Applied Training for Entrepreneurs (ACTiVATE®) program introduces highly-driven, mid-career women to the basics of entrepreneurship and technology commercialization. Trainees will work with technology innovations from universities in the region and turn them into technology-based, start-up companies. ACTiVATE® is a systematic model for increasing the commercialization of technology innovations from research institutions in the State of Maryland by training women entrepreneurs to create technology-based, start-up companies.

### **UMBC Alex. Brown Center for Entrepreneurship**

[www.umbc.edu/entrepreneurship](http://www.umbc.edu/entrepreneurship)

UMBC established the Alex. Brown Center for Entrepreneurship in Spring 2000 through a generous gift of \$1million from The Alex. Brown Foundation. Since its inception, the Center has worked closely with the Baltimore business community with one vision in mind - to create one of the leading university centers for entrepreneurship in the country for universities its size. UMBC's entrepreneurial spirit, dynamic and diverse academic environment, commitment to excellence in research and education, and experience in economic development provide a strong platform for creating and supporting entrepreneurship in the region. UMBC believes that entrepreneurship is the ability of an individual to identify a goal, provide the leadership and muster the assets necessary to reach that goal. As such, individuals pushing the envelope in science and technology, breaking new ground in the creative arts or crafting new solutions to society's problems can all be entrepreneurs. At UMBC, we believe in entrepreneurship. It is our mission to infuse the university with the thinking and attitude, activities and ideas that will inspire entrepreneurial accomplishment in all its forms.

### **UMBC Office of Technology Development**

[www.umbc.edu/otd](http://www.umbc.edu/otd)

The UMBC Office of Technology Development is responsible for commercializing new technologies developed as a result of UMBC's research activity so that the fruits of that research in the form of new products and services can be made available to the general public.

### **UMBC Research Park Corporation**

Ellen Hemmerly, Executive Director

410-455-8400  
hemmerly@umbc.edu

The bwtech@UMBC Research Park is a five building, 41-acre university-affiliated business park, with over 350,000 square feet of Class A office and laboratory space designed for technology companies and research institutions. Over 20 organizations call the Park home, including the U.S. Geological Survey, RWD Technologies, NASA/Goddard Earth Science and Technology Center, Retirement Living TV and RMF Engineering. bwtech@UMBC's unique public-private partnership offers tenants access to world-class UMBC faculty, students, technology, programs and facilities. Located directly adjacent to the UMBC campus and minutes from BWI Thurgood Marshall Airport, the Park is convenient to a number of federal agencies and research centers such as NSA, NIH, FDA, DOE, The Johns Hopkins Hospital and the University of Maryland Medical Center. bwtech@UMBC companies also benefit from the Park's federal HUBZone and state Enterprise Zone designations.

**United States Department of the Interior, U.S. Geological Survey (USGS)  
Maryland-Delaware-District of Columbia Water Science Center**  
<http://md.water.usgs.gov>

The U.S. Geological Survey is the Nation's largest natural-science agency and has the principal responsibility within the Federal government for providing the Nation with reliable, impartial information to describe and understand the Earth, including mapping, assessing geologic resources and hazards, understanding natural biological resources, and providing hydrologic information for appraising the Nation's water resources. This information is used to minimize loss of life and property from natural disasters, manage resources, enhance and protect the quality of life, and contribute to wise economic and physical development. The Maryland-Delaware-D.C. Water Science Center conducts regional water-resource investigations, consisting of basic data collection and research on the streams, springs, lakes, and aquifer systems of Maryland, Delaware, and the District of Columbia. Streamflow, ground-water levels, and water-quality data are collected at numerous locations, and water-use data are collected throughout the area. These hydrologic data and other data are used in research and hydrologic studies to describe the quantity, quality, and location of the area's water resources. The collection, analysis, and interpretation of the data are done in cooperation with other federal, state and local agencies, universities, and research centers.

### **Life science and technology Incubator Companies**

**Aurora Analytics, LLC**  
[www.umbc.edu/aurora](http://www.umbc.edu/aurora)

Aurora Analytics, LLC is focused on the development and manufacture of innovative consumer and research diagnostic products based on a proprietary amine modification/detection technology. Aurora Analytics, LLC aims to be the first company to provide a non-enzymatic, on-site test for the presence of amines in food products as an effective indicator of food freshness. With the strategic product benefits of sensitivity, rapid results, ease of use and low-cost, Aurora Analytics, LLC will first target seafood processors and inspectors followed by the butcher, grocery chain, restaurants and home use markets. As part of its mission, Aurora Analytics, LLC also provides contract custom analytical and organic synthesis services.

**Biomedica Management Corporation**

Biomedica Management Corporation is a Small Business Disadvantaged Company 8(a) certified by the Small Business Administration, operating in the field of the biomedical sciences and research & development. Biomedica signed a CRADA agreement with US Army Institute for Surgical Research to study an intracavitary hemostatic agent for use in the battlefield. The study was funded by TEDCO, and a second round of funding is assured by Johnson & Johnson.

### **Columbia BioSystems, Inc.**

Columbia BioSystems Inc. is a company engaged in molecular Nano-diagnostics using Molecularly Imprinted Polymers (MIPs) for the rapid detection of pathogens such as Methicillin-resistant Staphylococcus aureus (MRSA), Anthrax, HIV, and Trypanosomiasis (sleeping sickness). The company uses MIPs to bind to unique proteins and, upon binding, change color thereby signaling the presence of the bacteria, virus or parasite.

### **Kydes Pharmaceuticals, LLC**

<http://kydespharmaceuticals.com/>

Kydes Pharmaceuticals, LLC is a start-up pharmaceutical company with a vision to design scientifically sound and cost-effective pharmaceutical products based on the state-of-the-art knowledge and technologies.

### **Noxilizer, Inc.**

[www.noxilizer.com](http://www.noxilizer.com)

Noxilizer has developed a sterilization process based on the oxides of nitrogen. Using this technology, we are pioneering the development and commercialization of a superior gas sterilization system with potential application in two large market segments: biotherapeutics and hospitals. For biotherapeutic applications, the Noxilizer process serves as an enabling technology. Noxilizer has successfully demonstrated the ability to sterilize biologic therapies, drug-device combination products, medical devices and implants. In the past, some of these products could not be sterilized with existing technology or could only be sterilized using aseptic manufacturing – costing millions of dollars. The lack of such a cost-effective sterilization process for this large and emerging class of products has become a development and commercial barrier. For hospital central sterilization departments, Noxilizer's system is being developed for use with sophisticated, reusable surgical equipment. The safety and broad compatibility of the Noxilizer technology provides a significant competitive advantage over existing sterilization systems.

### **Pearl Lifescience Partners, LLC**

Pearl Lifescience Partners, LLC is developing a proprietary platform for improved effectiveness of commercial vaccines using a modified viral particle vaccine technology. The technology uses inactivated, surface-engineered virus particles to induce an immune response against infectious agents.

### **Practice Minders, LLC**

Practice Minders has developed a hosted software application available by subscription or license. It is the first fully automated, turn-key, patient marketing, retention and relationship management tool developed to meet the specific requirements of the healthcare industry and its providers.

## **PsychNostics, LLC**

PsychNostics, LLC has developed a diagnostic blood test for Bipolar Disorder and ADHD. This proprietary test uses the Membrane Potential Ratio (MPR™) as a diagnostic blood test marker for Bipolar Disorder (BPD) and Attention Deficit Hyper Active Disorder (ADHD). The test results have been published in peer reviewed scientific journals. Clinical psychiatrists have validated the reliability of this test through clinical trials. PsychNostics, LLC is currently engaged in the development of broader uses of this technology nationwide. Further research is underway to elucidate the biological pathway and the proteins involved so that they could be used as drug targets for developing more effective drugs for these illnesses. Efforts are being made to partner co-development and marketing arrangements with other companies to develop these technologies.

## **Quantum Medical Metrics, LLC**

[www.qmminc.com](http://www.qmminc.com)

Quantum Medical Metrics, LLC. is involved in research, development and production of x-ray spectral imaging systems and advanced quantitative imaging algorithms for the diagnosis and monitoring of human musculoskeletal disease.

## **StormCenter Communications, Inc.**

[www.stormcenter.com](http://www.stormcenter.com)

StormCenter Communications, Inc. is an innovative environmental communications company. They have two key areas of operation: Envirocast program creates partnerships between federal, state, non-profit and corporate entities with the media in order to accomplish StormCenter's goal of "Increasing the Environmental IQ of America". Second they develop decision support systems for emergency management, NOAA National Weather Service and the media.

## **Synaptic Research, LLC**

[www.synapticresearch.com](http://www.synapticresearch.com)

Synaptic Research LLC is a biotechnology company which conducts research and develops products based on naturally-occurring large protein molecules. Specifically, the company engineers proteins derived from toxins which affect the synaptic junction. A well-known example of such a protein is the Botulinum Neurotoxin, or BoNT. This protein has unique qualities of targeting and persistence which make it an excellent candidate for further engineering and development of therapeutic and pharmaceutical products.

## **Valens Therapeutics, Inc.**

[www.valenstherapeutics.com](http://www.valenstherapeutics.com)

Valens Therapeutics is a pharmaceutical company focused on the development of therapeutic products for the treatment of neovascular diseases including certain pathological conditions in the eye and cancer. The Company's initial focus is on ophthalmologic disorders caused by unregulated angiogenesis and which offer major opportunities for improved therapies. The ultimate goal is to offer a platform technology of multiple indications for both the ophthalmology and oncology markets. The company's business strategy also includes providing to scientists in the private, government and academic sectors full access to a GMP qualified cleanroom suite for the manufacturing of biologics.

## **Advantage Incubator Companies**

### **CardioMed Device Consultants**

[www.cardiomedllc.com](http://www.cardiomedllc.com)

CardioMed Device Consultants, a minority-owned company that provides a broad range of regulatory consulting, engineering consulting, and regulatory department training services. Although the company focus is on cardiovascular and general hospital devices, their education, experience, and broad knowledge of FDA's processes and requirements have proven valuable for manufacturers of medical devices intended for various medical specialty areas.

### **Farfield Systems, Inc.**

[www.farfieldsystems.com](http://www.farfieldsystems.com)

Farfield is an SDV Small Business that specializes in providing Program/Business Management Support, Database Design/Development, Systems & Software Engineering, Information Technology services, Intelligence Support, and Training.

### **Intellibit Systems, LLC**

[www.intellibitsystems.com](http://www.intellibitsystems.com)

Intellibit Systems LLC. is a minority-owned, and veteran-owned business providing professional network data communications and information technology support services to government and commercial clients. They also offer professional information technology education and public outreach services.

### **The Nixon Group, LLC**

The Nixon Group, LLC, an SBA 8(a) certified, (SDV) multi-disciplined company with over 11 years experience in the healthcare, financial services and real-estate industries. The company is currently pursuing contract opportunities with the NIH in areas related to biostatistics.

### **Premier Management Corporation (PMC)**

<http://premgmtcorp.com/>

Premier Management Corporation (PMC), an 8A, Service Disabled Veteran-Owned (SDV) small business founded in November 2004. The company provides consulting services to government agencies in the areas of financial operations and acquisitions, and recently established divisions focusing on cyber crimes and network security. While still offering financial consulting services, the Company's focus is shifting to developing technologies that detect vulnerabilities and attacks via the Internet in government computer networks. Current customers include NSA and the FBI.

### **Technology Security Associates**

[www.technology-security-associates.com](http://www.technology-security-associates.com)

Technology Security Associates (TSA), a Service-Disabled Veteran-Owned Small Business, supports a wide-ranging group of Department of the Navy acquisition programs in the areas

of technology and information security and international programs. TSA also supports several small and large commercial clients in Information Security.

## **Clean Energy Technology Incubator Companies**

### **Amethyst Technologies, LLC**

[www.amethysttech.com](http://www.amethysttech.com)

Amethyst Technologies, LLC has services to offer all entities that manufacture parenterals or pharmaceuticals, perform aseptic filling, manufacture medical devices, treat patients, build laboratories, provide blood bank services, manufacture veterinary medicines, and perform animal testing. Amethyst provides cGMP compliant, custom, creative, and cost effective services (4Cs) for FDA regulated activities to increase its customers' profitability, ensure compliance, and promote patient safety. They are experts in the current FDA, ISO, WHO, AAMI, EU, PDA, ISPE, and USP guidelines and recommendations. Their staff is composed of engineers, software experts, and scientists.

### **amidus, LLC**

[www.amidus.com](http://www.amidus.com)

amidus works with clients in the tradeshow and high technology industries to help them formulate and realize their strategy. Their areas of expertise include marketing, business, and technology. amidus has developed an innovative business model, customized software tools, and a comprehensive client servicing methodology. Their value proposition is based upon extensive experience in understanding and resolving real business issues.

### **Clean Green Chesapeake, LLC**

CGC intends to develop algal cultivation systems with:

- Highly integrated systems that reduce harmful discharges while offering multiple high-value output streams, such as agricultural feeds and biofuels.
- Cultivation facilities that are deployable in small- to moderate-scale and can be operated in decentralized settings.
- Polymicrobial communities & regional adaptation of natural ecosystems for environmental enhancement.

### **COLUMBIA Technologies, LLC**

[www.columbiatechnologies.com](http://www.columbiatechnologies.com)

COLUMBIA Technologies, LLC is an innovative environmental testing and information systems firm. Their patented SmartData Solutions ® provides fast, accurate and cost-saving 3-dimensional maps of underground pollution to dramatically lower the cost and risk of real estate redevelopment and contaminated site cleanup. COLUMBIA Technologies works with the UMBC community to further develop new technologies particularly in the area of chemical sensors data management systems and Internet based applications.

### **Plant Sensory Systems, LLC**

[www.plantsensorysystems.com](http://www.plantsensorysystems.com)

Plant Sensory Systems, LLC. is an agricultural biotechnology company that develops technology to improve crop performance and alleviate negative environmental impact. We

optimize the ability of plants to acquire and utilize nutrients to increase biomass, yield, and crop quality. One of our areas of research addresses nitrogen use efficiency (NUE). Increased NUE allows the farmer to decrease the amount of nitrogen-based fertilizer applied to the field without affecting yield. Reducing nitrogen application will decrease production costs and nitrogen runoff, which detrimentally affects the environment. Another area of research targets carbon metabolism to increase levels of sugar, oil, and cellulose, which can be converted into biofuel.

## **Accelerator Companies**

### **Athena Environmental Sciences, Inc.**

[www.athenaes.com](http://www.athenaes.com)

AthenaES™ specializes in the development and commercialization of advanced biotechnology-based products. Throughout its eleven year history, the company has maintained a broad perspective for applying its core competency, the use of proteins and enzymes for commercial applications, to develop products. As such, the company currently markets its products and services through two business units and maintains an exploratory R&D group. The Athena Enzyme Systems Group™ provides specialty reagents and proteins for the production and recovery of recombinant proteins along with providing contract R&D services. Products include: Expression Media, Serum-free Media, Protein Refolding kits, and the PDQ Protease Assay™. This business unit also provides specialized contract research, development and manufacturing services for the production of recombinant proteins. The Athena Environmental Services Group™ designs, develops and manufactures environmentally responsible products. Products developed include: The Bilge Pill™, a biodegradable cleaning product for the removal of oil in boat bilges, and a plant nutrient supplement used in hydroponics, hobby gardens and horticulture that replaces conventional fertilizers, and the Sting Thing™, an enzyme-based invertebrate sting treatment product. More recently, this group developed and has introduced a water-soluble, reversible glue, MagiGlue™. The Athena Exploratory Science Group™ has the mission to pursue research with the potential for significant commercial, environmental and social impact. These projects are far reaching in their scope and represent high risk, high-value projects.

### **Blue Wave Semiconductors, Inc.**

[www.bluewavesemi.com](http://www.bluewavesemi.com)

Blue Wave Semiconductors, Inc is a high-tech start-up involved with materials and devices for the ultraviolet spectrum. The company has acquired a license with the University of Maryland on advanced semiconductor materials and devices for detection and monitoring of Ultraviolet light. Currently, the company provides various solutions to the semiconductor R&D community, the Federal Government and the Semiconductor Industry. For example, the company is becoming a significant presence in the production of high temperature wafer heating systems for thin film deposition technology used by the Semiconductor Industry and the R&D Community.

### **Celsis In Vitro Technologies**

[www.celsis.com/invitrotechnologies](http://www.celsis.com/invitrotechnologies)

Today's pharmaceutical companies are challenged to manage the exorbitant costs associated with new drug discovery and development. The average cost of bringing a new drug to market is estimated at more than \$800 million spent over an average period of 12-15 years. Consequently there is tremendous pressure during lead optimization for companies to identify problems and select the right compounds for further development. The use of in vitro models and methods to evaluate compounds for Absorption, Distribution, Metabolism, Excretion, and Toxicity (ADME-Tox) properties significantly decreases the investment required in drug discovery and preclinical development. Celsis In Vitro Technologies (Celsis IVT) is the premier world provider of specialized products and services within the in vitro technologies industry. Since 1990, pharmaceutical and biotechnology companies have relied on Celsis IVT to accelerate their product development efforts through the use of our quality in vitro products and services for ADME-Tox applications.

We manufacture high-quality products with large lot sizes to ensure consistent results. Our customers' research needs are met by both continually improving our current products and enhancing our current product offerings with new uses and applications. We also use these same products in the research services that we conduct for our CRO clients. Our strongest asset is our scientific and technical team, who serve as an extension of our customers' R&D departments by offering real-world experience, technical expertise and extensive knowledge of the regulatory requirements for drug development. By enabling our customers to make the best decisions on their drug candidates, Celsis IVT delivers value by bringing new products to market faster and more cost effectively.

### **Cognate BioServices, Inc.**

[www.cognatetherapeutics.com](http://www.cognatetherapeutics.com)

The combination of highly experienced staff and GMP facilities makes Cognate BioServices one of the most experienced contract manufacturers of cell-based products in the U.S. today. Cognate is a fully-integrated contract BioServices organization providing the highest level of scientific and management expertise to clients who are focused on the commercialization of cell-based products. Our comprehensive service package supports companies in the specific areas of Preclinical Research, Assay Development, Regulatory Services, Process Development, and cGMP Cell-Based Manufacturing. Cognate has outstanding expertise to provide guidance or take projects from start to finish. Cognate provides cGMP compliant manufacturing to support client efforts to bring their product to the clinic. Cognate's staff has played a material role in the submission of 16 approved Investigational New Drug Applications (INDs) with the FDA for clinical trials of cell-based therapeutics in the U.S. These INDs cover numerous types of stem cells, immune cells and other primary cell types.

### **Creative Systems & Design, LLC**

[www.csd-llc.com](http://www.csd-llc.com)

Creative Systems and Design, LLC is a research and development company located in Baltimore, Maryland. We are a special facility dedicated to the design and development of prototype electro-mechanical systems through consultancy, contract R & D projects and product development. Our company's goal is to provide engineering solutions with quality, value and service to our customers.

### **Cybergroup, Inc.**

[www.cybergroup.com](http://www.cybergroup.com)

Cybergroup, Inc. is a professional services firm with expertise in Internet and Intranet business strategy, Internet marketing and Internet/Intranet technology solutions. Cybergroup provides a comprehensive range of Internet, Intranet and website products and services with a primary focus on web to database integration utilizing Macromedia's ColdFusion. Advanced web software development efforts and partnering arrangements with strategic vendors have enabled Cybergroup to develop and/or resell several software products that are based on ColdFusion. Cybergroup develops, sells, customizes and implements e-commerce store software, handheld (PDA) e-commerce solutions and website content publishing solutions.

## **Epitaxial Technologies**

[www.epitaxialtechnologies.com](http://www.epitaxialtechnologies.com)

Epitaxial Technologies develops and produces breakthrough sensor products, including detector modules and arrays, as well as ultra-sensitive and single-photon counting photoreceivers. These patented products have widespread application in free-space lasercomm, imaging lidar and infrared imaging for missile defense, homeland security, telecommunications, spectroscopy and bio-imaging. The Company's patented on-chip optically amplified photoreceiver technology enables at least ten times the bandwidth of wireless datacom and is the most sensitive photoreceiver pound-for-pound.

## **NASA's Ocean Biology and Biogeochemistry Calibration and Validation Office**

Stan Hooker

410-533-6451

[stanford.b.hooker@nasa.gov](mailto:stanford.b.hooker@nasa.gov)

## **Next Breath, LLC**

[www.nextbreath.net](http://www.nextbreath.net)

Next Breath, LLC is a contract pharmaceutical research and development organization dedicated to pre-clinical identification and evaluation of commercially viable respiratory and nasal drug delivery platforms. NB's business will discover and exploit optimal drug and delivery device combinations that will increase our partners' probability of success when their products advance into human clinical trials and the marketplace. Next Breath seeks to meet the pharmaceutical industry's outsourcing needs and to provide intellectual expertise to biotechnology companies that are developing inhalation products.

## **TechGuard Security, LLC**

[www.techguardsecurity.com](http://www.techguardsecurity.com)

TechGuard Security, LLC is a global provider of innovative Network Security Solutions, Security Product Development, System Integration, Project Management and Security Services addressing the challenges associated with network security and privacy. TechGuard products include The Great Walls of Fire® firewalls, IDS and Spam filters. Techguard initiatives include securing network infrastructures, maintaining firewall integrity, identifying network vulnerabilities, managing information security, and staying aware of privacy issues and changing security concerns created by a global Internet and cyberterrorist threats. TechGuard serves U.S. Government Agencies, Fortune 1000 businesses, financial sector, legal, manufacturing and medical community clients as a trusted security products and services provider.

## **Affiliate Companies**

### **Amulet Pharmaceuticals**

[www.amuletpharma.com](http://www.amuletpharma.com)

Amulet is an R&D focused company with a novel drug delivery platform technology that can be adapted to a wide variety of medical applications. The platform is based on a class of chemical compounds that exhibit predictable and controllable release of nitric oxide, combined with unique methods of nitric oxide delivery. The company has synthesized several new chemical entities in the form of NO-releasing polymers, small molecules, and has

developed NO-delivery strategies to bulk fluids. The nitric oxide (NO) donors can be used in polymerized forms to reduce the adhesion of microbes and platelets to medical devices, used to sterilize and preserve human platelets and plasma, make vascular stents and grafts more biocompatible, and numerous other biological applications.

### **Fluorometrix**

[www.fluorometrix.com](http://www.fluorometrix.com)

Fluorometrix designs, manufactures and markets advanced bioreactor systems. The Fluorometrix family of products are designed to significantly offset the cost of labor and materials of the highly labor-intensive fermentation and cell culture processes that are the heart of biotech and pharmaceutical R&D.

### **Mayur Technologies (MTECH)**

MTECH is a small dynamic company providing Information Technology and Engineering Products and Services to clients in federal government and Commercial sector. MTECH's core strength is the collective education, experience and skills of the Principals of the company. They have successfully provided, and continue to provide, innovative and state-of-the-art solutions to solve complex problems in science, engineering and business sectors. In addition the company maintains a pool of highly qualified and skilled people to provide these services. MTECH works closely with its customers in adopting new and emerging technologies to improve their existing business process and align their IT and engineering investments with their business strategies.

## **Research, Training and Educational Components**

### **Research Triangle Institute, Inc. (RTI)**

[www.rti.org](http://www.rti.org)

Research Triangle Institute Inc's Transdisciplinary Behavioral Science Program (TBSP) uses RTI's range of capabilities to advance a transdisciplinary and translational theoretical and methodological framework for the study, prevention, and treatment of high-risk behaviors such as drug abuse and aggression. Our research is predicated on recent studies in behavioral and molecular genetics, neuroscience, biology, physiology, environmental health, psychology, and the social sciences whose findings describe the interactive influence of environment and genetics on high-risk behaviors.

### **UMBC Training Centers**

[www.umbctrainingcenters.com](http://www.umbctrainingcenters.com)

UMBC Training Centers offers high quality, affordable training and certification to individuals and organizations in the Baltimore region. Through its strategic alliance with UMBC, Training Centers draws on university faculty and industry practitioners to provide state-of-the-art coursework that leads to career advancement and improved organizational performance. Training Centers offers noncredit courses in the areas of information technology, biotechnology, engineering, professional development, business and allied health. Training Centers also provides flexible, custom training for business, government and the nonprofit sectors through its Contract Training initiatives.

## **University Tenants**

### **The University System of Maryland IT Projects Coordination Office**

The USM IT Project Coordination Office is a cooperative effort of all University System of Maryland campuses to collaborate on the investigation, acquisition and implementation of appropriate solutions to the challenges of the next generation of Administrative and e-Learning Software. The USM IT Project addresses issues of new technologies and proposes specifications that define capabilities needed to support students, faculty and staff during the next ten-year cycle. It identifies commonalities among campuses, determines areas of cost effective collaboration, seeks partnership opportunities with vendors and provides a structure for decision making on approaches to software implementation. In addition to movement on new underlying technologies, the Project Office will propose new front end approaches using currently existing administrative systems to allow campuses to develop and implement additional services while transitioning to new information systems.

## **ACTiVATE Companies**

### **Encore Path**

[www.encorepath.com](http://www.encorepath.com)

Encore Path sells proprietary neural regenerative stroke rehabilitation devices. The Company's first product will be a patented arm training device known as BATRAC which has been shown to unmask neural pathways in the brain, leading to restoration of arm movement in patients who have moderate arm paralysis. This device will be available in early 2008. Encore Path will introduce several stroke therapy devices to the market to address the rehabilitation needs of more than 780,000 people who experience a stroke every year and the over 5 million people currently living with stroke.

### **Foligo, LLC**

[www.foligotherapeutics.com/](http://www.foligotherapeutics.com/)

Foligo is developing new cancer therapeutics using antisense technology that targets the folate receptor, which is present in many cancer types but not expressed in normal cells. This approach might be especially useful for treating ovarian cancer.

### **Syan Biosciences, LLC**

[www.syanbiosciences.com](http://www.syanbiosciences.com)

Syan Biosciences is a privately held, start-up company founded in 2006 focusing on the development of lab-on-a-chip technologies for biosensors used in the in vitro diagnostic point-of-care market. Syan is developing new, highly specific and sensitive biosensors to easily and accurately monitor diseases. Rapid diagnosis of disease is extremely important, not only in saving lives but also in saving a great deal of time and cost in patient treatment. Measurement of markers in blood samples provides the convenient means of assessing, diagnosing, monitoring, risk-stratifying, prognosing and guiding therapy for patients with suspected disease.

## **Traxion Therapeutics, Inc.**

[www.traxiontx.com](http://www.traxiontx.com)

Traxion Therapeutics Inc. is a biotech company focused on the development of novel drugs for the treatment of intractable pain, specifically neuropathic pain. Neuropathic pain afflicts more than 10 million people in the US alone and the incidence is set to increase significantly. Sales of prescription drugs for neuropathic pain are over \$5 billion and at 7% annual growth, it is one of the most rapidly-growing segments of the pain market. Traxion has assembled a diversified portfolio of novel, proprietary small molecule products to address this market opportunity. These products use more selective, mechanism-based approaches which exploit recent scientific discoveries in order to develop more effective, better tolerated treatments for neuropathic pain. Traxion's experienced team plans to take these products through to Phase II proof of concept studies and then enter worldwide corporate partnerships for later-stage development and commercialization.