

Portfolio Spotlight: Nobex, Inc.

NOBEX Grows Success With Formation of a Licensing Agreement With GlaxoSmithKline

Drug delivery company NOBEX is moving toward commercial success in providing medically superior solutions to difficult drug delivery challenges. In May 2002, the company formed a strategic alliance with GlaxoSmithKline (GSK), one of the world's top research-based pharmaceutical companies.

"This alliance links us with a premier pharmaceutical company well positioned in diabetes," says NOBEX President and CEO Christopher Price, PhD. "We've developed a delivery mechanism for insulin, and they are building a final product for the patient." Under the terms of the agreement, GSK will fund product

development, manufacturing and marketing of a novel modified oral insulin. The deal is potentially worth more than \$280 million in payments to NOBEX over the life of the agreement in addition to royalties on product sales. Nobex brought the oral insulin product into Phase II clinical trials. An estimate of the costs of diabetes and its complications to the U.S. economy is rapidly approaching \$100 billion per year.

NOBEX uses tools of medicinal chemistry to solve problems of optimal drug delivery in the human body. Not limited to insulin, NOBEX is focused on optimizing the oral delivery of many drugs currently delivered only by injection. For example, the company has an oral version of calcitonin in clinical study for treating osteoporosis and the pain of bone fracture and Apaza™, a small molecule drug for treating inflammatory bowel disease, expected to enter clinical study in early 2003.

"Many drugs, in particular peptides and proteins, have molecular structures that are highly susceptible to being degraded by bodily fluids and enzymes," says Price. "As a result, these protein drugs have only been delivered by injection until now." In working on these drugs, NOBEX is focusing on markets with tremendous potential: each drug delivery product in the NOBEX development pipeline has an estimated market size of at least

\$500 million annually. "Right now we're focusing on 'home-run markets' with huge potential," says Price. "By becoming successful in those markets, we'll gain the luxury of focusing on smaller, but equally important, markets in the future."

Since its inception in 1993, NOBEX has raised \$78 million, closing most recently on a Series F round of \$35 million in August of this year. Price says the company will use the funds for research and operations over the next two years. "We are ready for an IPO, but these are not stable not IPO-type market conditions," says Price. Aurora Funds was an early investor in NOBEX. "No investor has been more attentive and helpful than Aurora," says Price. "They have been super in terms of support and faith in the company. They are old-fashioned VC's through and through."

"We have seen tremendous perseverance in NOBEX," says Jeff Clark, Managing General Partner of Aurora. "They have strong folks at the helm and tremendous market potential. We're looking forward to the next few years of growth."



Christopher Price, PhD
CEO of Nobex



NOBEX at a Glance

Founded: 1993
(Incorporated as Protein Delivery)
Headquarters: Research Triangle Park, NC
Management Team:
Christopher H. Price, Ph.D., President/CEO
Charles F. Osborne, Jr., CFO
James Gordon Still, M.D., Ph.D., CMO
Nnochiri M. Ekwuribe, Ph.D., Vice President, Chemistry Innovation
Jennifer A. Filbey, Ph.D., Vice President, Business and Market Development
Partners:
GlaxoSmithKline
Pharmacia Corporation
BioMedicines Inc.
Novartis Animal Health
Investors:
AEA Investors
AMEX-IDS
Aurora Funds
Crescendo Ventures
EndPoint Late Stage Fund I, L.P.
HealthCap

INVESTING IN EMERGING TECHNOLOGY-BASED COMPANIES

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Aurora Ventures IV Has Second Close

The Aurora Funds is more than halfway to its goal of \$75 million for Aurora Ventures IV. The fund held a second close of \$17 million on October 4, 2002, with a total \$52 million raised to date and a final close planned for early 2003. Investors included the Golden L.E.A.F. "This close was extremely important for us," says Rich Brown, General Partner for Aurora. "It allows us to continue taking advantage of investment opportunities as they come along."

In its mission to make strong investments, Aurora IV has two advisory boards in place, the Engineering Advisory Board and the Life Science Advisory Board. Each board is composed of nine experts in the technology fields who offer independent guidance on industries, and technologies for potential investments. "These board members are crucial to our decision making process," says Doug Gooding, General Partner for Aurora Funds. "They give us a firsthand knowledge of the technology and potential for success."

According to Gooding, the Life Science Advisory Board played a significant role in the two newest investments for Aurora IV, Tissue Informatics and Regado Biosciences.

Regado Biosciences, Inc.

Regado Biosciences, a spinout of Duke University Medical Center, is a drug development company based upon regulatable therapeutics. Aurora made a \$150,000 investment in Regado, which the company is using to recruit a start-up management team, establish a

business plan to build a series A investor syndicate.

"This is a very early stage company, with a tremendous market potential," says Jeff Clark, Managing General Partner of Aurora. The market for Regado's initial focus, antithrombotics, is projected to reach \$22 billion in 2007 (Datamonitor).

By using regulatable therapeutics, physicians will have greater control over the effects of the drugs they administer. "Certain drugs can produce adverse effects that are much more harmful to the patient than the initial procedure or illness," explains Chris Rusconi, co-founder and Vice President of Research of Regado. Regado's new drugs will be developed in tandem with highly specific antidotes.

Regado was founded by three top researchers at Duke University Medical Center: Bruce Sullenger, PhD., Vice-Chairman for Research and Professor, Department of Surgery and a co-founder of Merix Biosciences; Eli Gilboa, Professor, Department of Surgery and a co-founder of Merix Biosciences; and Chris Rusconi, Assistant Research Professor, Department of Surgery. Aurora has been incubating Regado in its office space for the past six months.

Tissue Informatics

Tissue Informatics is a bioinformatics company focused on automating the generation and processing of digital tissue information. Aurora was an investor in the company's \$14 million Series B Round, which closed in June 2002. "We very much wanted Aurora's participation in the round," says Dr. Peter Johnson, Co-Founder and CEO of Tissue Informatics. "In

addition to being very knowledgeable, they help to generate industry contacts and provide strong strategic support."

The company has automated the process of analyzing tissue information. With this technology, the process is no longer labor-intensive with much room for human subjectivity and error, but a rapid, automated generation of quantitative historical data useful for the mathematical comparison of tissue and the correlation of biological data. Applications include toxicology, drug discovery, molecular diagnostics and pathology, with an estimated addressable market of \$1.65 billion annually. This most recent round of funding will be used for technology development and sales, as well as the acquisition of new and complementary technology.

Jeff Clark, Managing General Partner, says much of Tissue Informatics potential is due to its management team. Johnson agrees, "We have been able to attract very experienced managers to Tissue Informatics – most have been CEOs in the past. —It's a wonderful team."

Tissue Informatics at a Glance

Founded: 1997
Headquarters: Pittsburgh, PA
Partners: DiAthege; InforMax
Funds Raised: \$25 million over two rounds
Management:
Peter C. Johnson, MD, Co-Founder, Chairman, CEO
Dennis Meteny, CPA, MBA, President & COO
J. Mark Braughler, PhD, Sr.VP Business Development
David Smith, JD, Sr.VP & General Counsel
Todd Joron, Sr.VP Sales and Marketing
Investors: Aurora Funds; Birchmere Ventures; The Future Fund; Smithfield Trust; InforMax, Inc.; Motorola, Inc.; TVMV Life Science Ventures; The Manufacturers Life Insurance Co.; Angel Investors.

Aurora Companies in the News

InPhonic, a provider of marketing and software services to the wireless phone market, filed to sell up to \$90 million of common stock in an initial public offering, according to a November 1 filing with the Securities and Exchange Commission. InPhonic said it intends to use \$7.5 million of the net proceeds from the offering to repay debt, and the remaining net proceeds will be used to pay accrued dividends on preferred stock, to fund new business initiatives and acquisitions, and for general corporate expenses. The IPO would be the first non-defense, technology-related offering in the D.C. area in over a year.



specializing in Internet Quality Measurement, in September 2003. Porivo's PeerReviewSM global network of more than 10,000 measurement agents, accurately tests, monitors and diagnoses Web performance worldwide across all types of Internet connections, including dial-up, consumer broadband and corporate LAN. PeerReview extends the Gómez Performance Network (GPN) suite to the "last mile" of the Internet, offering unrivaled end-to-end visibility of Web site performance, while also profiling end-user connection rates, locations and ISP networks.



Norak Biosciences, Inc. signed a non-exclusive license agreement with Roche in October 2002 to utilize its TransflurTM technology for G protein-coupled receptor (GPCR) drug discovery. Under the terms of the agreement, Norak will provide its Transflur cell lines expressing GPCR targets of interest to Roche who will then use these Transflur cell lines in a primary screen of its large compound library. Norak will also sublicense a green fluorescent protein (GFP) to Roche for use with Transflur. In addition to upfront cash, assay development fees and milestones, Norak will be able to access certain Roche data from screening with Transflur, and benefit from its HTS know-how. Norak will provide its ongoing support and know how in cell biology for the benefit of Roche.



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Porivo Technologies, Inc., a provider of end-user-oriented Web performance monitoring services, was acquired by Gómez, Inc., a software company

Mobile-Mind

Mobile-Mind, Inc., announced today that Bill Mangino has been named Vice President, of Sales and Marketing. In this newly created position, Mr. Mangino will be responsible for the development and execution of Mobile-Mind's global sales and marketing strategy. Prior to joining MobileMind, Mr. Mangino founded Product Technologies, Inc., a developer of smart card-based, cashless payment systems and multiple application platforms, which he sold to Fujitsu in 1998, where he remained in an Executive Vice Presidential capacity.



MERIX Bioscience, Inc., an immunotherapy company focused on cancer vaccines, has named Clint G. "Skip" Dederick, Jr., Chairman of the Board, as its Chief Executive Officer. Dederick has 30 years of experience in the pharmaceutical and biotechnology industries, serving Group Director, Venture Projects for Sentron Medical, Inc. since 1987.

Aurora Highlights

Bonnie McCullough has joined the Aurora team in the capacity of controller. Bonnie works with Aurora's financial and administrative infrastructure, including internal portfolio company analysis and financial reports to institutional and individual investors. Bonnie also supports Aurora CFO Bill Lampley in assisting Aurora's early stage portfolio companies build the financial infrastructure that entrepreneurs need for success. Ms. McCullough is a CPA and was a 10-year veteran with Ernst & Young, LLC, where she was a Senior Manager specializing in tax consulting.

WANTED: LIFE SCIENCE ASSOCIATE The Aurora Funds, a dynamic and growing organization, is expanding its team and seeks a full-time associate/principal.

The ideal candidate would possess an MD. In addition, the candidate should have a PhD in a Life Sciences area, such as molecular biology, and would have completed his/her residency. An MBA or other advanced degree(s) is desired. Contact: Bill Lampley blampley@aurorafunds.com 919-484-0400

Richard B. Fair, Professor of Electrical and Computer Engineering for Duke University and a member of the Aurora Funds advisory committee, has been named the 2003 Recipient of the Electrochemical Society Award in Solid State Science and Technology. This award was established for "distinguished contributions to the field of solid state science," and is awarded during the spring meeting of the Electrochemical Society.

The Aurora Funds
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Rich Brown ♦ Doug Gooding ♦ Peter Fair
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Portfolio Talk

Aurora Information Technology Companies Bucking the Trend



Rich Brown, Aurora Funds General Partner

After tremendous growth in the late 1990's and 2000, market conditions for information technology companies have become bleak, with both private and public companies feeling the sting. In addition to the tremendous drops in the valuations of publicly-traded companies, once promising start ups are struggling to stay afloat or closing their doors for good.

Despite the poor performance of many information technology start-ups, Rich Brown, general partner of the Aurora Funds, says there are a few IT companies experiencing notable success during the downturn. "A few years ago, the rapid growth in the IT industry spurred many young companies to expand in an effort to capture a piece of the boom," says Brown. "For some, that meant expanding horizontally into markets where the company did not have the necessary expertise. It worked for some, but for many, it didn't."

Now that the market has retreated to a more manageable growth level, Brown believes that the success of companies is based on their ability to hunker down and focus on particular niches in strong market verticals. "I'm excited about the opportunity for our IT portfolio companies, particularly Blackboard and Foresight."

Blackboard, Inc., an online education software, e-learning company based in Washington, DC. The five-year-old company is projecting \$ 70 million in

revenue for 2002, and has achieved revenue growth each quarter for nearly two years, most recently announcing third quarter revenues of \$19 million, a 38% increase over third quarter earnings last year. "At a time of general retrenchment in the industry, Blackboard's proven and now profitable business model ensures that we are poised for continued growth and investment in client success," says Peter Repetti, CFO of Blackboard.

The company's Q3 2002 EBITDA was positive \$1.0 million, and they ended the quarter with \$16.0 million in cash and generated \$3.2 million in positive cash flow for the quarter. "This amount of revenue growth for such a young company would be considered a success in good market conditions," says Rich Brown, General Partner of the Aurora Funds.

In response to the market slowdown, Foresight, a developer of business-to-business e-commerce software, narrowed its focus to the specific niche of software solutions for the healthcare industry. "Foresight realized the tremendous need for its software in that industry, and took steps to make themselves the market leader," said Brown. Most recently, Foresight became the first company to offer newly released Implementation Guidelines addenda as part of its HIPAA ValidatorTM solution suite to offer end users tolls for compliance with the Health Information Portability and Accountability Act of 1996 (HIPAA).

"Ironically, these two companies are in Internet-based niches, the hardest hit sector of IT," says Brown. "It just proves that when companies have the basics—a solid value proposition supported by a sound business model, strong management and a good market opportunity, the success will most likely be there."

Current Portfolio Companies

Life Sciences

Cropsolution
www.cropsolution.com

Emageon
www.emageon.com

Insect Biotechnology, Inc.
www.insectbio.com

MERIX Bioscience, Inc.
www.merixbio.com

Nobex
www.nobexcorp.com

Norak Biosciences, Inc.
www.norakbio.com

Regado Biosciences, Inc.

StemCo Biomedical, Inc.
www.stemcobiomedical.com

TissueInformatics, Inc.
www.tissueinformatics.com

TriVirix International, Inc.
www.trivirix.com

United Emergency Services
www.unitedemergency.com

Volumetrics Medical

Information Technology

Alerts, Inc.
www.alerts.com

Blackboard
www.blackboard.net

Broadband Home
www.broadbandhome.com

Engenia Software
www.engenia.com

Foresight
www.foresight.com

Gomez
www.gomez.com

HAHT Commerce
www.haht.com

InPhonic
www.inphonic.com

MicroMass Communications
www.micromass.com

Mobile-Mind
www.mobile-mind.com

psiloQuest
www.psiloquest.com

Unitive
www.unitive.com

VetCentric
www.vetcentric.com