

BIOWORLD® TODAY

TUESDAY
DECEMBER 29, 2009

THE DAILY BIOTECHNOLOGY NEWSPAPER

VOLUME 20, No. 249
PAGE 1 OF 6

Elusys Wins \$143M BARDA Pact to Advance its Anthrax Antitoxin

By Donna Young
Washington Editor

WASHINGTON – Elusys Therapeutics Inc. won a five-year contract potentially worth \$143 million from the Bio-medical Advanced Research and Development Authority (BARDA) to advance the development of the company's inhalational anthrax antitoxin Anthim, a high-affinity deimmunized monoclonal antibody.

Anthim, which has received fast-track status and orphan drug designation from the FDA, targets the protective antigen of *Bacillus anthracis* and neutralizes the lethal effects of anthrax toxins.

The drug is expected to compete with Human Genome Sciences Inc.'s inhalational anthrax antitoxin raxibacumab, whose biologics license application (BLA) was rebuffed last month by the FDA after agency reviewers questioned whether the animal model used in that company's studies had adequately reflected the antimicrobial response from

U.S. patients attacked in fall 2001 by spores sent through the mail.

HGS said it was working to respond to the FDA's complete response letter. (See *BioWorld Today*, Oct. 26, 2009, and Nov. 17, 2009.)

Annapolis, Md.-based PharmAthene Inc., Winnipeg, Manitoba-based Cangene Corp. and Rockville, Md.-based Emergent BioSolutions Inc. also are developing anthrax therapies with BARDA funds.

Under its BARDA contract, Pine Brook, N.J.-based Elusys will receive \$16.8 million for the first year, with the government having the option to continue for four more years if certain performance milestones are met, said CEO Elizabeth Posillico.

Prior to the new contract award, Elusys had received
See BARDA, Page 3

Ask A Simple Question

For Bone, Appetite Regulators, It's Location, Location, Location

By Anette Breindl
Science Editor

While bone remodeling is certainly recognized as being tied to large medical problems – women older than 50 are predicted to have a 50 percent risk of developing a fracture over their lifetime, a statistic that has made anti-osteoporosis drugs among the best-selling drugs on the market – research into bone remodeling is not considered “glamorous,” Gerard Karsenty told the audience at a recent talk at the National Institutes of Health.

The reason for bone remodeling's dowdy reputation, Karsenty said, is that in the modern world, when bone remodeling goes wrong it is no longer deadly. “It doesn't kill anymore,” he said. And “by extension if the disease is not interesting, than function is not interesting.”

See Bones, Page 4

NEW CO NEWS

Naurex Opens the Therapeutic Window for NMDA Modulators

By Trista Morrison
Staff Writer

When Naurex Inc. started making the investor and partnering rounds with its NMDA receptor modulator for depression, the company “met with a ton of skepticism,” said CEO Derek Small.

That's because plenty of drug companies had already explored modulation of the N-methyl-D-aspartate (NMDA) receptor, a glutamate receptor subtype that controls brain activity. A few NMDA modulators are FDA-approved, including Namenda (memantine, Forrest Laboratories Inc.) for Alzheimer's disease and ketamine for sedation. But at

See Naurex, Page 5

INSIDE:	OTHER NEWS TO NOTE: CELL THERAPEUTICS, COMPUGEN, MEDIMMUNE	2
	CLINIC ROUNDUP: ADVAXIS, VICAL	5



OTHER NEWS TO NOTE

• **Cell Therapeutics Inc.**, of Seattle, said its board adopted a shareholder rights plan, in which one preferred stock purchase right will be distributed for each common share held as of the close of business Jan. 7, 2010. The plan is designed to deter coercive takeover tactics.

• **Compugen Ltd.**, of Tel Aviv, Israel, said it discovered and experimentally validated CGEN-671, a new drug target for epithelial tumors. Specifically, CGEN-671 is a membrane splice variant of CD55, a known target for gastric cancer. Initial studies confirmed the existence of the predicted CGEN-671 transcript and demonstrated that, compared with normal tissue samples, it is highly expressed in colon carcinoma tissue. In mRNA experiments, CGEN-671's expression level in various healthy tissues was up to 200 times lower than the expression level of CD55, suggesting that the splice variant might be a superior drug target candidate. The news sent shares of Compugen (NASDAQ:CGEN) up 27.5 percent, or \$1.12, to close Monday at \$5.20.

• **Emerald BioStructures Inc.**, of Bainbridge Island, Wash., said an article published in the Dec. 27, 2009, issue of *Nature Biotechnology*, detailed the application of structure-based drug design to engineer allosteric small-molecule modulators of phosphodiesterase-4, with reduced side effects. Researchers established the structural basis of PDE4 regulation through crystal structures of the PDE4 regulatory domain in contact with small molecules.

• **Inhibitex Inc.**, of Atlanta, received notice from Nasdaq that its stock has closed below the minimum \$1 bid price for 30 consecutive days. The firm until June 21, 2010, to regain compliance for continued listing.

• **MedImmune LLC**, of Gaithersburg, Md., a unit of AstraZeneca plc, filed its formal reply to the FDA's complete response letter for motavizumab, a next-generation version of Synagis (palivizumab) aimed at preventing respiratory syncytial virus in pediatric patients. The November

complete response letter asked for further information regarding the drug, though no additional clinical trials were requested. (See *BioWorld Today*, Dec. 2, 2008.)

• **Pfizer Inc.**, of New York, received a complete response letter for Lyrica (pregabalin) capsules CV as a monotherapy in generalized anxiety disorder. The FDA determined data included in the new drug application were insufficient.

• **Sinovac Biotech Ltd.**, of Beijing, filed an application with Chinese regulators to start a human trial with a vaccine against enterovirus 71, which causes hand, foot and mouth disease. In preclinical studies, the vaccine showed cross-protection and demonstrated effectiveness in animal models.

• **Soligenix Inc.**, of Princeton, N.J., said an article published in the January 2010 edition of *Infection and Immunity* detailed characteristics of several immunodominant regions of ricin A chain, the antigenic component of RiVax, its vaccine to protect against exposure to ricin toxin. The research, funded in part by the National Institutes of Health, showed that a monoclonal antibody directed against a region of the ricin A chain was shown to bind the ricin A chain with high affinity and be capable of neutralizing ricin toxin in a cell-based killing assay. When administered to mice, the antibody was sufficient to protect the animals against both systemic and mucosal ricin challenge. RiVax is in Phase I safety trials and in nonhuman primate efficacy trials.

• **Trimeris Inc.**, of Durham, N.C., said would-be purchaser **Arigene Co. Ltd.**, of Seoul, South Korea, requested another extension for the tender offer for all of Trimeris' outstanding shares from Dec. 28, 2009, to Jan. 15, 2010. It is Arigene's third extension request since the companies' entered the merger agreement in October, under which Arigene offered to buy Trimeris for \$3.60 per share, or about \$81 million. Trimeris said it will evaluate its rights and remedies under the merger agreement if Arigene is not able to complete the purchase of shares tendered under the offer. (See *BioWorld Today*, Oct. 5, 2009.)

BioWorld® Today (ISSN# 1541-0595) is published every business day by AHC Media LLC, 3525 Piedmont Road, Building Six, Suite 400, Atlanta, GA 30305 U.S.A. Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. BioWorld® and BioWorld® Today are trademarks of AHC Media LLC, a Thompson Publishing Group company. Copyright © 2009 AHC Media LLC. All Rights Reserved. No part of this publication may be reproduced without the written consent of AHC Media LLC. (GST Registration Number R128870672).

ATLANTA NEWSROOM: Managing Editor: **Glen Harris**. Assistant Managing Editor: **Jennifer Boggs**. Senior Staff Writer: **Karen Pihl-Carey**. Senior Production Editor: **Ann Duncan**. Staff Writer: **Randy Osborne**.

WASHINGTON BUREAU: Washington Editor: **Donna Young**. Staff Writer: **Catherine Hollingsworth**.

WEST COAST BUREAU: Staff Writer: **Trista Morrison**.

EAST COAST BUREAU: Science Editor: **Anette Breindl**.

BUSINESS OFFICE: Senior Vice President/Group Publisher: **Donald R. Johnston**. Marketing Coordinator: **Sonia Blanco**. Account Representatives: **Bob Sobel, Randee Papush**.

DISPLAY ADVERTISING: For ad rates and information, please call **Stephen Vance** at (404) 262-5511 or email him at stephen.vance@ahcmedia.com.

REPRINTS: For photocopy rights or reprints, call our reprints department at (404) 262-5479.

PRESS MATERIALS: Send all press releases and related information to newsdesk@bioworld.com.

SUBSCRIBER INFORMATION

Please call **(800) 688-2421** to subscribe or if you have fax transmission problems. Outside U.S. and Canada, call **(404) 262-5476**. Our customer service hours are 8:30 a.m. to 6:00 p.m. EST.

Glen Harris, **(404) 262-5408**

Jennifer Boggs, **(404) 262-5427**

Anette Breindl, **(518) 595-4041**

Trista Morrison, **(858) 901-4785**

Donna Young, **(202) 739-9556**

Catherine Hollingsworth, **(301) 576-0667**

Senior Vice President/Group Publisher:

Donald R. Johnston, **(404) 262-5439**

Internet: <http://www.bioworld.com>



AHC Media LLC

BARDA

Continued from page 1

about \$34 million in government funding from BARDA, Health and Human Services, the Department of Defense and the National Institute of Allergy and Infectious Diseases to support Anthim's development, Posillico told *BioWorld Today*.

The company has completed 11 animal efficacy studies and two human safety trials since 2002, she said.

"So we really have well-documented efficacy," Posillico said.

Data presented earlier this month in Washington at BARDA's annual Public Health Emergency Medical Countermeasures Enterprise conference showed that up to 79 percent of cynomolgus monkeys treated with a single intravenous dose of Anthim at the onset of symptoms survived a lethal inhalational challenge with anthrax spores, she noted. (See *BioWorld Today*, Dec. 4, 2009.)

Additionally, data from a rabbit model study showed that a single dose of Anthim provided up to 94 percent survival when administered after symptoms of disease were present, Posillico explained.

Preliminary results from the company's Phase I dose-escalating clinical safety study demonstrated that the antibody was safe and well tolerated at doses at or above the anticipated efficacious dose in humans.

The new BARDA funds will support Elusys' manufacturing scale-up process for Anthim, additional human safety studies and pivotal nonclinical effectiveness studies in animals, Posillico said.

"They really want to make sure we have a roadway all the way out to BLA licensure," she said. "So we have mapped out our entire development program up to that point."

Elusys' earlier safety studies each had about 40 healthy human volunteers.

The expanded safety study, however, plans to enroll up to 300 to 400 volunteers, Posillico said.

Anthrax remains "one of the top bioterrorism threats facing the nation," BARDA said in a statement.

"Regardless of whether there are terrorist attacks or not, the government is still very much focused on their mission to make sure that we have these therapeutics available," Posillico said.

BARDA's contract award to Elusys, she added, "is a really good indication that the government is serious about bringing these therapeutics to the stockpile and having them available, should anything occur."

BARDA's advanced development contract awards are not just important for companies developing medical countermeasures, such as Anthim, Posillico stressed.

"They recognize the needs of companies like ours and other companies in this space, that we need these development dollars to bring these novel therapies to the market," she said.

Because Anthim has been deimmunized, "it reduces the potential for any kind of immunogenicity," Posillico explained.

It also has been "affinity enhanced," which she said makes the antibody target and bind to the protective antigen toxin, preventing it from bonding to cells.

"So it prevents the whole cascade of toxin-related cell death," Posillico said.

Anthim's high affinity also makes it effective at a much lower dose than other antibodies currently in development, including HGS' raxibacumab, which she said requires an "eightfold higher" dose than Elusys' drug.

"So there should be some economy of scale there," Posillico said.

She also noted that Anthim, which is an intravenous treatment, also has demonstrated that it can be "equally effective" when given intramuscularly, a route of administration that would be more convenient.

"Ultimately, the government would like to have more rapid administration if a lot of people were infected," Posillico said.

Elusys is hoping to avoid the animal rule issues that snarled the approval of HGS' raxibacumab, she said.

The rule, which permits a drug's effectiveness to be demonstrated in animals when it is unethical or not feasible to conduct controlled clinical trials in humans, was issued in 2002, with the FDA providing draft guidance last January.

Raxibacumab was one of the first big tests of the rule, Posillico noted.

"It has been a learning process" for government and industry, she said. "We are all sort of learning. It is not a well-trodden path."

BARDA, Posillico added, has been trying to help "negotiate" some of the new questions raised by the FDA as the process evolves.

But overall, she maintained, regulators are interested in "making sure these drugs are safe." ■

FINANCINGS ROUNDUP

• **Sunesis Pharmaceuticals Inc.**, of San Francisco, filed a shelf to raise up to \$50 million through the sale of common stock and warrants. The number of shares and share price will be determined at the time of any offering. Proceeds will be used to support further development of lead product, voreloxin, a quinolone derivative set to enter Phase III testing in cancer, as well as for working capital, capital expenditures and other general corporate purposes. The company reported separately that it has regained compliance with the minimum \$1 bid price for continued Nasdaq listing. Shares of Sunesis (NASDAQ:SNSS) closed at \$1.15 Monday, down 13 cents.

Bones

Continued from page 1

But Karsenty disagrees. “Bone is the only organ that contains a cell type” – namely, the osteoclast – “whose only function is to destroy the host tissue,” he pointed out. And a function that has been preserved over 3 million years “is not just to send older and wealthier ladies to the endocrinologist at the end of the 20th century and the beginning of this one.”

Karsenty, who is professor and chairman of the department of genetics and development at Columbia University, described his own team’s journey to understand bone remodeling – which, he said, has “profound implications for the treatment of disorders as diverse as diabetes and osteoporosis, traditionally regarded to be distinct and unrelated.”

In a nutshell, Karsenty’s hypothesis can be summed up as the idea that “bone mass, appetite and reproduction are controlled by the same hormones.”

That idea, Karsenty said, came from clinical observations that osteoporosis follows gonadal failure, and obesity protects from osteoporosis, as well as the realization that evolutionarily, being able to repair injured bone was much more critical than it is today.

“If you cannot repair a fracture, you lose mobility,” he said, and for most of human history, repairing fractures has been a do-it-yourself activity.

“Bone remodeling is your very own orthopedic surgeon,” he said.

Karsenty, whose team has been looking at bone remodeling for more than a decade, began with studying leptin, which appears during evolution with the osteoclast, and is a well-known player in appetite regulation.

Leptin also influences bone mass, but research into how it does so, Karsenty said, soon uncovered a seeming paradox: destroying the part of the brain with most leptin receptors leads to increased bone mass and obesity. But knocking out those same leptin receptors genetically had no effect on bone mass – or, for that matter, body mass index.

Lesion experiments have their critics as being a brute-force method, akin to smashing a radio to see how it works, and so the easiest interpretation of such conflicting results is to assume that the more modern and more specific technique must provide the true answer.

But Karsenty’s conclusion was a different one: that leptin does play a role, but primarily, by acting elsewhere.

Karsenty focused his suspicion on serotonin, because serotonin reuptake inhibitors, or SSRI’s, are a class of anti-depressants that both lower bone mass and decrease appetite.

Through a series of experiments, his team has worked out how serotonin signals to increase bone mass and decrease appetite in the brain – actions that are inhibited by leptin.

Moreover, serotonin that is synthesized in the gut – which happens to be most of it – has the opposite effect on bone mass: Via the wnt co-receptor *Irp5*, it inhibits osteoblasts, bone-making cells that work in tandem with osteoclasts to regulate overall bone mass.

“I don’t know of any other molecule that takes the opposite influence on the same physiological function depending on its site of synthesis,” Karsenty said.

Karsenty said that in the aggregate, his team’s work might lead to new approaches to treating osteoporosis. Going after *Irp-5* might allow tweaking bone buildup by osteoblasts rather than bone destruction by osteoclasts, an approach which he termed a “holy grail” of osteoporosis drug development.

As a separate point, he added, the work supports his skepticism of using invertebrate models to study vertebrate biology.

Unlike developmental biology, which has been driven by discoveries in simple-to-work-with invertebrates, “when one speaks of vertebrate physiology, you cannot really rely on fly or *C. elegans*. . . . If you study physiology in vertebrates, it has to be done with a vertebrate animal model. This notion that there is a conservation of genes and of gene function is so dominant that we think that because it is true in developmental biology, it will be true in physiology. And it is not,” Karsenty added. ■

maccine

Preclinical PK/PD and Biomarker Programs

Maccine combines dedicated *in vivo* resources with world class imaging, analytical, telemetry and technology platforms allowing you to determine the dynamics of relevant measures in a relevant model when you need it most.

business.development@maccine.com ■ Tel: +1 202 558 0262

Discovery Support ■ GLP Safety Assessment

Naurex

Continued from page 1

the doses needed to treat depression, drugmakers ran into serious side effects like psychosis and high abuse potential, and most companies threw in the towel.

One example was Merck & Co. Inc.'s noncompetitive NMDA receptor antagonist MK-801, also known as dizocilpine. Early trials conducted in sedated patients appeared promising, but when the drug was given to alert patients, it induced symptoms similar to schizophrenia. That basically "shut down the whole field," Small said.

Yet data had shown that NMDA modulators could significantly reduce depression in treatment-resistant patients, if only the side effects could be controlled. And those seriously depressed, treatment-resistant patients need new options, Small said, noting that around 500,000 patients are admitted to hospitals annually for depression, and more than 150,000 of those patients admitted to suicide attempts. The severity of the disease "really looks a lot more like cancer than people think," Small said, and the only treatment option is sedation.

Naurex is hoping GLYX-13, its glycine site functional partial agonist, will one day provide a new option.

The Evanston, Ill.-based biotech was founded by Joseph Moskal, director of the Falk Center for Molecular Therapeutics at Northwestern University. Moskal had conducted extensive research in learning and memory, and he determined that the best way to modulate the NMDA receptor was by partially agonizing the glycine site. But the target was "very hard to drug," Small explained, so Moskal eschewed the traditional medicinal chemistry route and took a "completely backward" approach.

Moskal developed an antibody, which he later made into a tetrapeptide sequence, and which Naurex later made into an oral drug. The process "took 20-some-odd years" and represented "a path that pharma would never embark on," Small said.

Along the way, Moskal raised some grant money and, in 2000, he founded a start-up called Nyxis Neurotherapies Inc. That company was recapitalized and relaunched as Naurex in March 2008, with venture capitalist Small acting as CEO.

Naurex has raised \$2 million in equity and \$10 million in grant funding to date. The company plans to raise a Series A financing in the first half of 2010 to fund Phase II trials with GLYX-13 as well as an investigational new drug application filing with the lead compound from the NRX1050 series, fully synthetic mimetics of GLYX-13.

For now, progress with GLYX-13 is starting to silence the critics.

The drug generated a buzz at the recent American College of Neuropharmacology meeting, where preclinical data showed robust antidepressant activity and an ability to alleviate both the negative and positive symptoms of depression. The drug started working in 20 minutes –

opposed to the weeks required with existing depression drugs – and the effect of a single dose lasted at least 96 hours.

Perhaps most importantly, Naurex did not see typical NMDA modulator side effects. The drug's therapeutic index was 500, while the therapeutic index of ketamine is about 0.5, according to Small.

A randomized, double-blind, placebo-controlled Phase I study is under way in healthy volunteers. Naurex will track both safety and pharmacokinetics.

Naurex isn't the only biotech seeking to revive NMDA modulators in depression. Evotec AG earlier this year signed a \$300 million deal with Roche AG for EVT101, which is selective for the NR2B region of the NMDA receptor. (See *BioWorld Today*, March 10, 2009.)

But Small said those types of drugs might have a therapeutic index of 3 or 4 – nothing near GLYX-13.

With such a potential safety advantage, Naurex is planning to pursue a rapid path to market by focusing initially on severely depressed hospitalized patients, but the company envisions using follow-on molecules to expand into earlier-stage patients. All stages of depression represent an unmet need, considering that about half of all patients don't respond to initial therapy and remission rates remain high.

Small said the recent preclinical data presentation has triggered active partnering discussions. ■

CLINIC ROUNDUP

- **Advaxis Inc.**, of North Brunswick, N.J., reported 36-month survival in two of the 13 evaluable patients treated with its live, attenuated *Listeria monocytogenes* cancer vaccine in a Phase I trial, suggesting the possibility of persistent immune protection from only a two-dose initial regimen. The study involved patients with advanced, recurrent, metastatic cervix cancer who have failed prior cytotoxic treatment.

- **Vical Inc.**, of San Diego, said an independent safety monitoring board recommended that the Phase III trial of Allovectin-7 in chemotherapy-naïve patients with Stage III or Stage IV metastatic melanoma continue per the protocol. The study is expected to complete enrollment of the planned 375 subjects in the next few weeks. The AIMM (Allovectin-7 Immunotherapeutic for Metastatic Melanoma) trial is being conducted under a special protocol assessment and is testing overall durable response rate with Allovectin-7 compared to dacarbazine or temozolomide at 24 weeks as the primary endpoint. Partner **AnGes MG Inc.**, of Osaka, Japan, is funding the trial under the companies' 2006 collaboration agreement. Shares of Vical (NASDAQ:VACL) jumped 22 percent, or 61 cents, to close Monday at \$3.36. (See *BioWorld Today*, May 31, 2006.)

APPOINTMENTS AND ADVANCEMENTS

AEterna Zentaris Inc., of Quebec City, appointed Pierre Lapalme to its board.

Affymetrix Inc., of Santa Clara, Calif., added Andrew J. Last as chief commercial officer.

Alexion Pharmaceuticals Inc., of Cheshire, Conn., named William R. Keller to its board.

AlphaRx Inc., of Hong Kong, named Ruby Hui president of China operations.

Althea Technologies Inc., of San Diego, named James Matsuura director of formulation development.

Amarin Corp. plc, of Dublin, Ireland, appointed John F. Thero chief financial officer. It also named Joseph S. Zakrzewski executive chairman, effective Jan. 1, 2010.

AnaptysBio Inc., of San Diego, appointed Sean Stevens director of cell biology.

Anesiva Inc., of South San Francisco, named Ted W. Love and David C. U'Prichard to its board, following completion of the merger with Arcion Therapeutics.

BiOasis Technologies Inc., of Vancouver, British Columbia, named Delara Karkan senior industry scientific advisor.

BioCryst Pharmaceuticals Inc., of Birmingham, Ala., elected Charles A. Sanders to its board.

Bioheart Inc., of Sunrise, Fla., elected Lee Jones to its board.

Canaan Partners, of Westport, Conn., named Tim Shannon venture partner.

CellCyte Genetics Corp., of Eastgate, Wash., appointed Douglas Cerretti chief science officer and director of business development.

Concert Pharmaceuticals Inc., of Lexington, Mass., appointed Lijun Wu vice president of biology.

Cornerstone Pharmaceuticals Inc., of Cranbury, N.J., named Robert C. Shepard acting chief medical officer. It also appointed Andrew K. W. Powell executive vice president, general counsel and secretary.

Cytochroma, of Markham, Ontario, appointed Peter Moldt to its board.

Cytokinetics Inc., of South San Francisco, appointed Pat Gage to its board.

Cytomedix Inc., of Rockville, Md., appointed Craig B. Mendelsohn to its board.

Vivus Inc., of Mountain View, Calif., promoted Peter Tam to president.

WuXi PharmaTech, of Shanghai, China, appointed Hui Cai vice president of business development.

Next year's biggest biotech event won't be a conference or meeting –
The place to be seen is in print.

BIOWORLD®

20TH ANNIVERSARY SPECIAL EDITION MAGAZINE

As *BioWorld* celebrates its 20th anniversary, we're publishing a special keepsake magazine to commemorate 20 years of biotech industry progress.

This 4-color, glossy, keepsake edition magazine celebrates the past 20 years of biotech with articles that can't be missed. With the *BioWorld 20th Anniversary Special Edition Magazine*, you'll save money by advertising in just one place at one time. Don't miss out! Space is limited and the reservation deadline is March 1, 2010!

For rate card and more information, contact Stephen Vance:

Call: 1-800-688-2421 ext. 5511 or 404-262-5511

Fax: 404-262-5560

E-mail: Stephen.vance@ahcmedia.com

The BioWorld®

Biofuels Report 2009: Lane-Changing Trends and Fork-in-the-Road Dynamics



The Biofuels Report 2009: Lane-Changing Trends and Fork-in-the-Road Dynamics chronicles, analyzes and projects the foremost and ancillary aspects of one of the most significant markets that will impact the future well-being of humanity and the environment, as well as the mercantile ventures of opportunistic biofuels producers and investors.

The comprehensive focus of the subject matter:

- **Summarizes** the prevalent investment trends that are driving biofuels' acceleration.
- **Analyzes** the broad "Kitchen Sink" feedstock strategy's capacity to progress, or restrict, biofuels' market economics and technology development.
- **Examines** which technologies are cruising ahead & which are running on fumes.
- **Assesses** the delicate, but imperative, relationship between oil companies and biofuels producers.
- **Identifies and profiles** the key players steering this market to its objective destination.
- **Illustrates** market projections, R&D evolution and analyses of key industry dynamics with edifying visual graphics.
- **Update** on the "Foodstock for Feedstock" debate.
- **Delineates** the milestone barometers that will incrementally presume biofuels industry success through the mid-century.
- **Evaluates** the commercial viability of algae production and other evolving technologies,
- **Dissects** biofuels processing concepts and project finance arrangements.
- **Reveals** which dynamic has the means and motive to, conversely, be the most threatening, as well as the most facilitative factor impacting the biofuels market!

This report offers value and vision to:

- Biofuels producers
- Oil industry executives and researchers at biofuels companies
- Bio-scientists
- Alternative energy investors
- Economic development groups
- State and federal government officials
- Agriculture industry
- Investors and analysts
- Attorneys working in the industry
- Lobbyists
- Energy firms
- Transportation industry

Mention priority code S09428-EM/7789.

How To Order:

Call:
1-800-688-2421 or 1-404-262-5476

Online:
www.bioworld.com/biofuels

E-mail:
orders@bioworld.com