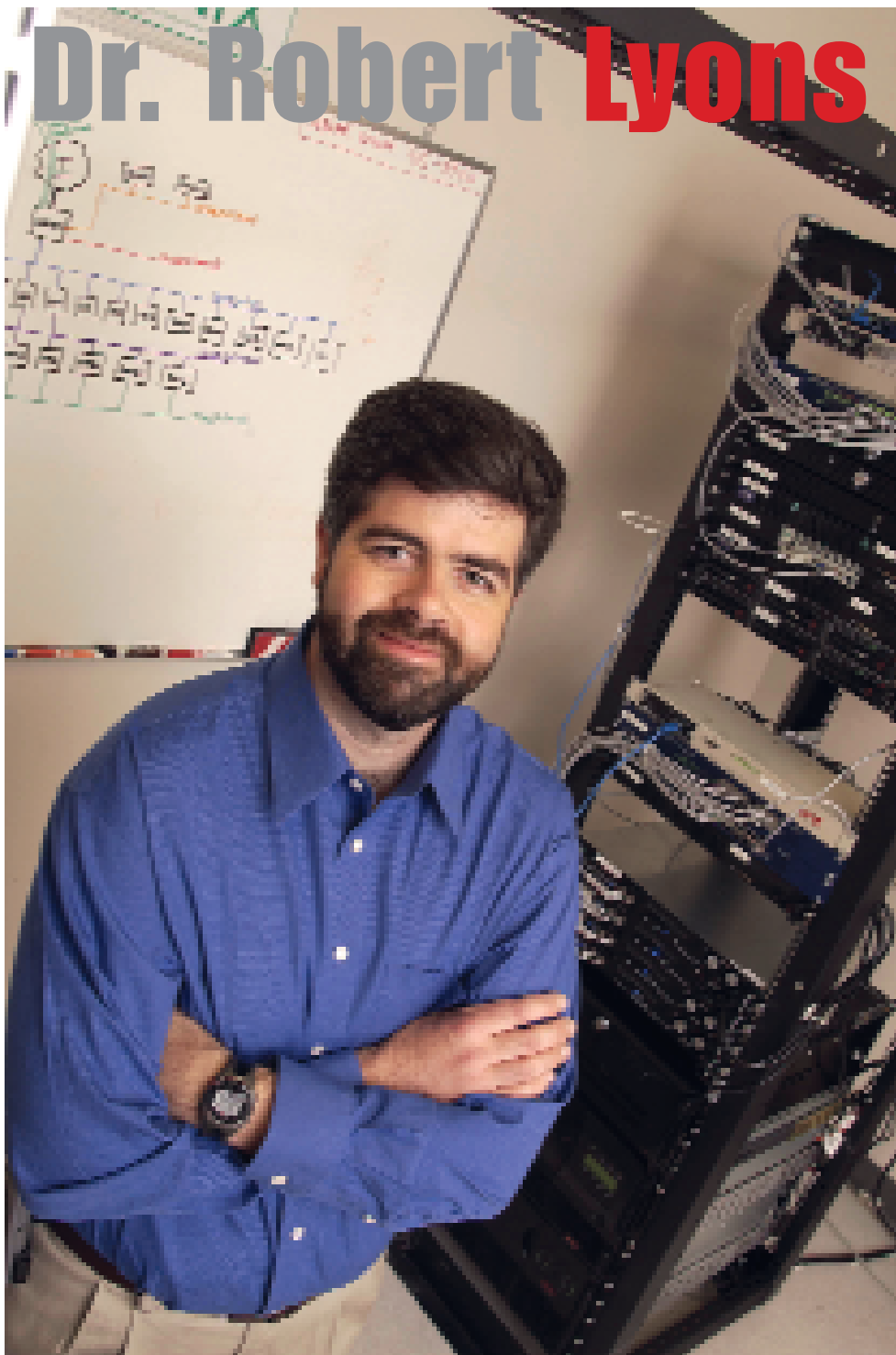


The Technologists

These industry movers and shakers are developing innovative technology solutions to improve life-sciences processes.



A Technological Visionary

WHEN PERSUADING PHARMACEUTICAL COMPANIES TO ADOPT NEW TECHNOLOGIES AND IDEAS THAT ARE FOREIGN TO THEM IT HELPS IF THE ONE DOING THE PERSUADING IS A FORCE IN DRIVING THE INDUSTRY'S EVOLUTION FROM PAPER-BASED DATA COLLECTION TO ELECTRONIC SYSTEMS.

According to Nextrials Inc.'s savvy chief technology officer and cofounder Robert Lyons, Ph.D., it is crucial to respect the industry's existing processes and figure out how to apply bold new technologies in a way that is acceptable, usable, and understandable.

Dr. Lyons is one of the key people behind the development and adoption of the Clinical Data Interchange Standards Consortium's (CDISC) standard, an XML data standard that is changing the way data are transmitted and used by clinical-trial researchers.

Dr. Lyons also is credited with leading the architectural design for the firm's flagship product, Prism. While software development comes naturally to Dr. Lyons — he has been writing programs for more than 20 years — it's not merely a profession, but also how he expresses himself creatively.

Despite his vast experience in technological problem solving, Dr. Lyons believes intrinsically in the importance of the team, and he leads by example rather than by giving directions. For Dr. Lyons, driving the industry's technological evolution is a collaborative experience, involving a group of smart individuals who share a common vision. He attributes much of what Nextrials has achieved to his three cofounders, who have more than 60 years of clinical-research experience combined.

Robert Lyons, Ph.D., Chief Technology Officer and Cofounder of Nextrials Inc., one of the driving forces in pharma's evolution to electronic data collection, hopes that his legacy will be bringing drugs to market safely and more efficiently.



Dr. Michael O'Connell

IT'S A NOBLE GOAL: CREATE FLEXIBLE SOFTWARE SOLUTIONS THAT MAKE CLINICAL AND DISCOVERY DATA MORE ACCESSIBLE, THEREBY ENABLING SCIENTIFIC PROGRESS AND MAKING STARS OUT OF PEOPLE WHO USE THOSE SOLUTIONS.

Michael O'Connell, Ph.D., director of life-science solutions for Insightful Corp., is changing the way the industry views statistics by bringing forward data-management analysis and visualization and reporting techniques that allow people from diverse backgrounds to use complex statistical techniques.

His expertise is paying dividends for Insightful's clients. Dr. O'Connell has been instrumental in creating critical cutting-edge software solutions that enable pharmaceutical companies to better analyze and report complex

clinical and discovery data. He is the driving force behind the state-of-the-art drug-discovery and clinical-data analysis capabilities provided through one of Insightful's software solutions. His group has been responsible for software solutions in the areas of genomics, pharmacokinetics, sequential trial design, clinical and safety data analysis and reporting, and correlated data analysis.

But Dr. O'Connell doesn't just create the software solutions; he also plays the role of statistical educator, helping people from diverse backgrounds to understand complex statistical techniques.

For Dr. O'Connell, the drivers of success — his own, his company's, and his clients' — have been his flexibility and his willingness to embrace collaboration. By listening carefully to those who need solutions, he has helped clients understand complex data relationships and enable them to then pass that knowledge on to business decision makers and ultimately to patients. What clients appreciate about Dr. O'Connell is his sense of urgency in creating software solutions to tackle real business problems that the industry is facing. The bottom line for Dr. O'Connell is creating value for the industry. His motivation is a desire to bring clarity and focus to the drug-discovery and development process.

Michael O'Connell, Ph.D., Director, Life Science Solutions at Insightful Corp., is leading the effort to put informative software solutions into the hands of pharmaceutical companies.

Innovation With Integrity

THE SHIFT FROM PAPER TO ELECTRONIC DOCUMENTS IS AN INDUSTRY-WIDE REALITY, AND THE NEED FOR CLEAR GUIDANCE ON HOW TO PROVIDE REGULATORY AGENCIES WITH COMPLIANT SUBMISSIONS IS PRESSING.

A highly respected technology expert, Jinsoo Kim is providing that expertise through the company he founded in 1992, Image Solutions Inc. (ISI). Mr. Kim is well-known to people in the pharmaceutical and biotechnology industries, particularly those involved with software and outsourcing solutions for electronic regulatory document submissions and clinical-trials management. As CEO and president of ISI, Mr. Kim is leading the industry toward the use of eCTD submissions for new drug applications. The company has been involved with more than 100 eCTDs and 400 e-submissions.

Mr. Kim is well-respected not only for his technological know-how, but also for the way he treats his employees and the way he conducts business. Though new to management when he started ISI, Mr. Kim has proven himself to be a leader that many would do well to emulate. He believes that his foremost commitment must be to the people who work for him, not to the company's bottom line. He cares deeply that staff are happy and believes that whatever business decisions he has to make must be done with his employees in mind.

With a mission of integrity, satisfaction, and innovation, Mr. Kim ensures his company is not only a leader in its field but also a good corporate citizen. He makes certain that ISI donates 10% of its profits to charitable causes each year.

A man of deep faith, Mr. Kim believes it is important to be thankful for his successes and to remain humble. He considers himself to be a hard worker, rather than a charismatic leader. But to others he is both inspirational and motivational. When his name is mentioned, supporters say, it brings a smile of respect and recognition.

A respected and well-liked leader, Jinsoo Kim, President, CEO, and Founder of Image Solutions Inc., believes in putting his employees first and ensuring integrity in everything he does.

JINSOO KIM



DR. CHRISTOPHER AHLBERG



Visualizing a Big Impact

IN A TOUGH COMPETITIVE ENVIRONMENT, PHARMA AND BIOTECH COMPANIES NEED TO FIND WAYS TO GAIN A COMPETITIVE ADVANTAGE, but often the nugget of information that

will give a company the edge is in-house, waiting to be uncovered. Solutions that can help companies find this valuable knowledge lie with innovators who truly understand the challenges and have a new way of looking at the problem.

Christopher Ahlberg, Ph.D., cofounder and CEO of Spotfire Inc., is just such a person. He is helping pharmaceutical companies gain a competitive advantage through the use of visual analytics.

The idea for Spotfire emerged while Dr. Ahlberg was working as a visiting researcher at the University of Maryland's Human-Computer Interaction Lab in the early 1990s. At the time, traditional analytical tools for drug discovery were rigid in design and were discipline-specific, preventing users from incorporating new data sources or repurposing these tools for other research processes.

Dr. Ahlberg knew there had to be a better approach, and his groundbreaking research on visualization and human/computer interaction led to the formation of Spotfire in 1996.

The company's software applications allow data to be integrated, transformed, analyzed, and presented in various visualizations that dramatically increase insight and understanding of complex information, allowing users to rapidly identify problems and opportunities.

Under Dr. Ahlberg's guidance, Spotfire's technology solutions enable forward thinking, such as identifying good and bad drug candidates earlier in the research and development process.

Dr. Ahlberg has put in place an experienced management team that is transforming the way pharmaceutical and biotechnology companies make decisions.

Christopher Ahlberg, Ph.D., CEO and Cofounder of Spotfire Inc., is a forward-thinking leader who is helping pharmaceutical and biotechnology companies gain greater insight and tackle critical business problems through advanced visualization tools.

Nancy Smerkanich



A Regulator's Regulator

A COMBINATION OF HUMOR, A STRONG WORK ETHIC, AND REAL INSIGHT ARE VALUABLE CHARACTERISTICS for a leader in the regulatory space, especially the complex world of electronic submissions.

As VP of regulatory affairs at Octagon Research Solutions Inc., Nancy Smerkanich brings to the table a wealth of experience from her years in the pharmaceutical industry, as well as a determination to seek new and innovative ways of working.

Because of that dedication, as well as her practicality and approachability, Ms. Smerkanich's colleagues and clients refer to her as the regulatory go-to person.

She is committed to fostering good practices within industry and

Out-of-the-Box Vision

A TECHNOLOGY ENTREPRENEUR WHO CAN TRANSLATE VISION INTO THE CREATION of a new software market time and again will have a long-term impact on the life-sciences industry. Zack Rinat is that entrepreneur — a seasoned leader and founder of three ground-breaking technology enterprises.

With his third company, Model N, Mr. Rinat has pioneered a best-practices technology approach to help pharmaceutical manufacturers address revenue management with a software solution that aligns pricing, contract development and management, payment of trade incentives, and government regulatory reporting into a unified approach to minimize the risk of regulatory and Sarbanes-Oxley noncompliance and eliminate the revenue leakage that costs life-sciences companies millions of dollars a year.

Mr. Rinat is no stranger to challenge. In each of his ventures — NetDynamics, an application server pioneer acquired by Sun Microsystems as part of JavaSoft, and Trading Dynamics, a trading exchange technology acquired by Ariba for its supplier network — Mr. Rinat has innovatively approached and resolved problems. His love for taking on what others call the impossible has driven his success. While he



has devoted many volunteer hours to the development of educational programs and informative sessions for the Drug Information Association (DIA). She currently leads the eCTD Subcommittee under the DIA Electronic Submission Special Interest Area Community. In 2004, her accomplishments and efforts were recognized by the association with the DIA Outstanding Achievement Award.

Ms. Smerkanich directs equal energy toward training internal personnel on the drug-development life cycle and to larger initiatives. She is regarded as a positive influence not only for her talents and the way she exemplifies leadership, but also the way she interacts with peers across the industry. Because of her experience and leadership, she has become a frequent speaker at industry conferences. Her presence is often requested by senior-level clientele who want to understand industry trends to clarify or establish their own corporate strategy.

In her position at Octagon, Ms. Smerkanich aims to set a standard for both the quality of work and the dedication that is needed to meet the industry's challenges. She believes strongly in training and communication at various levels and has the ability to explain complex new regulatory requirements in an easy-to-understand manner. And she wants to make the job fun.

At the same time, Ms. Smerkanich is always willing to roll up her sleeves and do what needs to be done.

Nancy Smerkanich, VP of Regulatory Affairs at Octagon Research Solutions Inc., is regarded by many as the most approachable, knowledgeable, and practical regulatory consultant in the industry, but what she'd like to be known for is making a hard job look easy and fun.

understands that there is always risk involved in following a dream, he strongly believes that it is a lot better to try and risk failure than to not try in the first place.

An experienced business executive and leader, Mr. Rinat strives to create a working environment with a tight focus on the company's vision, while adhering to core values, such as demonstrating respect for individuals and their personal choices, bringing together different perspectives to achieve excellence in results, defining a hierarchy of responsibilities, and creating an alignment between the objectives of the customers and the objectives of the staff. He also believes that to be successful, a leader needs to exemplify uncompromising integrity along the journey. By adhering to these core values and hiring the best and brightest people, Mr. Rinat has been able to create an environment where his employees can flourish and are empowered to carry the vision forward.

Zack Rinat, Founder and CEO of Model N, is an expert in creating successful start-up operations and new markets for advanced technology solutions.

Philip Brennan



THE PHARMA INDUSTRY HAS BEEN CRYING OUT FOR SOMEONE WITH THE TECHNOLOGICAL SAVVY TO RESHAPE HOW SALES AND MARKETING ANALYTICS ARE DONE.

For the past 10 years, Philip J. Brennan has been mentoring dozens of analysts and managers in response to the need for better modeling, salesforce sizing, call planning, and alignments.

As VP of operations for marketRx and one of the company's founders, Mr. Brennan believes it's not about the data, but rather the analysis of the data. What differentiates one pharma company from another is an organization's intellectual property and its ability to analyze information.

Nevertheless, Mr. Brennan does not consider analytics to be the domain of a select few, and he cofounded marketRx on the

premise that pharmaceutical and biotechnology companies are capable of doing their own internal analysis.

Mr. Brennan's goal is to develop Web-based tools to help clients better understand their data and, as a result, improve their marketing and sales initiatives.

While the company was built on a vision, Mr. Brennan has not lost touch with the day-to-day aspects of running a thriving organization, and he devotes much of his time to the company's staff.

He believes that personnel issues — promotions, raises, employee morale — and the professional development of staff should be given great care.

As with all entrepreneurs, marketRx is part of Mr. Brennan's family and its success meant risk and hard work.

At the same time, however, Mr. Brennan believes in the importance of life balance, of being a good husband, a good father, a good friend, and a very successful entrepreneur.

According to Philip J. Brennan, VP, Operations and Cofounder of marketRx Inc., data are dead and analytics is the next wave of the informatics age.

Dr. Edward Ikeguchi

HARD WORK PAYS OFF. For one industry innovator, that hard work is about a relentless dedication to advancements in the field of life sciences. As cofounder and chief medical officer of Medidata Solutions Worldwide, Edward Ikeguchi, M.D., is working hard to bring innovative technologies, processes, and services to the healthcare industry.

Dr. Ikeguchi learned the importance of perseverance from his days on the Olympic shooting circuit. One of his coaches told him and other aspiring athletes that hard work pays off in the long run, though not always when you expect it, in the form you expect it, or even in the industry or field you expect it. It paid off then for Dr. Ikeguchi: he won a Gold Medal in Los Angeles in 1984 with the U.S. Olympic Shooting Team. It's also paying off for Medidata, the pharma and biotech industry, and ultimately patients.

Dr. Ikeguchi serves as the voice of the physician, mastering regulatory compliance and creating unique technologies that will better deliver life-enhancing drugs to patients around the world.

His experience as an assistant professor of clinical urology at Columbia University, his experience in the hospital setting, and his expertise as a clinical investigator in numerous trials for the National Institutes of Health (NIH) have been invaluable. He is frequently asked

On Target
With
Innovation

to present at health technology conferences around the globe. His contributions to science are respected by customers, students, and peers, reflected in the 1997 Arnold P. Gold Foundation Humanism & Excellence in Teaching Award for Outstanding Resident Role Model Skills.

Today, Dr. Ikeguchi is a role model for the staff at Medidata, and he strives to ensure others in the organization have the same vision of bridging the gap between bench top research and the clinic. A believer in incorporating the skills of others, Dr. Ikeguchi finds tremendous value in bringing together a group of people with diverse styles and strengths. Innovation is what excites Dr. Ikeguchi, and he will continue to develop solutions that help companies improve efficiencies and improve the conduct of clinical research.

Edward Ikeguchi, M.D., Cofounder and Chief Medical Officer of Medidata Solutions Worldwide, believes that there are opportunities with technology solutions to make clinical trials faster and more efficient.

Howard Asher

Setting the IT Standard

REGARDED AS A VISIONARY IN THE LIFE SCIENCES, Howard Asher has a reputation for working toward industry solutions focused on reducing the time and cost of drug discovery long before most people even realized there was a problem. Based on this vision, Mr. Asher founded the nonprofit Life Sciences Information Technology (LSIT) Global Institute in 2004 to champion better information technology practices.

Mr. Asher began his career with Pfizer in 1969, working also at Baxter and Bayer in marketing, sales, and product development. In 1979, he founded Advanced Bioresearch Associates (ABA), a life-sciences-FDA regulatory affairs consulting firm. Serving as president, CEO, and chairman of ABA for 20 years, he secured approval for hundreds of medical products, including drugs, biotherapeutics, medical devices, and *in vitro* diagnostics.

He founded BioQ Inc. in 1999 with a goal of helping industry expedite the regulatory process using innovative software solutions. Mr. Asher also served as the director of global life-sciences worldwide for Sun Microsystems, and it was during this time that he founded LSIT.

Mr. Asher and his colleagues at LSIT are striving to develop good informatics practices (GIP) guidelines that can be trusted and validated to improve global public health by ensuring that IT solutions and systems deliver on the promise to accelerate the discovery and development of drugs and diagnostics.

Mr. Asher's dedication to the industry is extensive. He has served on many company boards over the years as well as on the board of BIOCOM. He also often is tapped as a keynote speaker and panel moderator at discussions on computational predictive modeling and personalized medicine. And he has led the formation and the design of the first Master in Regulatory Affairs (MRA) degree program with the FDA and California State University.

Howard Asher, Founder and Chairman of Life Sciences Information Technology Global Institute, has dedicated his career to developing trusted IT solutions to accelerate the discovery process.