Solution ACTIVATORS

These technology experts are developing and implementing innovative tools, solutions, and products to address the myriad challenges facing the life-sciences industry.

Dr. Robert HOLMES

Analyze This: Making Sense of the Data

Leveraging his background as a physicist and business executive, Robert Holmes, Ph.D., has built a bridge between analytic science and business insights to lead Qforma's technology team in creating innovative solutions that make healthcare information more actionable.

This unique combination of a deep scientific background and strong business acumen makes him well-qualified to inform and engage clients.

As chief technologist at Qforma, Dr. Holmes' innovative technologies help to identify patterns in disparate healthcare data that address complex issues faced by brands from small to large pharmaceutical companies, as well as specialty pharma, biotech, and medical device organizations.

His algorithms have helped life-sciences sales and marketing professionals make better business decisions. The challenge Qforma's CEO set — to measure the flow of influence through networks of physicians — has been Dr. Holmes' ultimate reward. He explored the vision through a spectrum of analytical frameworks and then translated detailed mathematical concepts into metrics usable by a pharmaceutical sales representative in the field.

With a passion for solving problems, Dr. Holmes makes science cool to the interdisciplinary teams he leads at Qforma in the development of realistic solutions to the commercial challenges the industry faces.

And the clients themselves, who are looking for more effective and efficient ways to engage their customers in a dramatically changing business landscape, may find the advanced analytical techniques that Dr. Holmes was instrumental in developing the coolest of all.

Dr. Robert Holmes is a natural leader with a passion for solving problems.

Did You Know?

Dr. Robert Holmes had the title role in an amateur production of Jesus Christ Superstar.

ANALYTICAL. INQUISITIVE.

NAME: Robert Holmes, Ph.D.

CURRENT POSITION: Chief Technologist, Qforma

DATE AND PLACE OF BIRTH: July 1962; Manchester, U.K.

EDUCATION: MA, physics, Oxford University; Ph.D., Portsmouth Polytechnic; MBA, Open University

FIRST JOB: Research physicist, Central Electricity Generating Board

FIRST INDUSTRY-RELATED JOB: Senior analyst, Qforma

ALTERNATIVE PROFESSION: The legal profession

PROFESSIONAL ASSOCIATIONS: Chartered Physicist (CPhys), Member of Institute of Physics (MInstP)

GIVING BACK: Christ Church; Oxford University

WORDS TO LIVE BY: Discover your passion; then do it

CONNECTED VIA: Facebook; Instagram; LinkedIn

Regardless of the chaotic nature of the data that are available, he has the vision and knowledge to identify a discernible pattern, trend, or statistical anomaly.

The quality and volume of data available to the analyst continues to grow, enabling the development of a new generation of mathematical tools that will shed light on emerging practice patterns and the complex interactions between patients, physicians, and payers. Dr. Holmes looks forward to building those tools.

But first there are some imminent challenges to overcome: reluctance by companies to place bets on the future of healthcare reform with a presidential election under way; and the emergence of smaller niche drugs with the need to find the right patient for the right drug. Combined these two factors are helping to shape a new commercial model, which he says the industry has been slow to adopt.

A great communicator, Dr. Holmes is able to bridge the gap between technology and sales, to ensure everyone understands what can and can't be done, and above all, why. With an easy sense of humor, he is as effective in front of clients as he is in front of his own team explaining a concept that would take most people significant research to even start to understand.

Intelligent and approachable, Dr. Holmes' knowledge is well-rounded and he is an incredibly quick study, while maintaining grace and humility. Always inquisitive, Dr. Holmes maintains that when he stops learning, it's time to bury him.

With a subtle management style, he is able to keep a group of highly intelligent overachievers challenged and engaged. Dr. Holmes believes working in a company with an unusually flat hierarchical structure creates a need for a supportive environment where all team members have the opportunity to ask for or offer support and advice of one another.

In such an environment, he contends, mentoring becomes a shared endeavor where experience and knowledge enable constructive, cross-generational dialogue. PV

Marco van DOEVEREN
Clinical Precision

Marco van Doeveren inspires the people who work for him, who he works with, and for whom he works.

Considered to be one of the most influential people in clinical technology around the world, Marco van Doeveren manages an infrastructure that is leveraged by hundreds of life-sciences companies, thousands of clinical trial professionals, and tens of thousands of investigators, nurses, and patients.

Mr. van Doeveren possesses invaluable knowledge, experience, and understanding of how to transform organizations from paper and legacy solutions into a pure electronic data capture and data management system environment. He brings extensive experience in implementing clinical trials systems, both from the sponsor side, as well as with the perspective of a technology vendor.

In addition to his broad and extensive expertise, Mr. van Doeveren is detail-oriented, pragmatic, and eager to roll up his sleeves. He combines his technical knowledge with engaging discussions about solutions.

From his standpoint as VP of implementation services at Medidata Solutions Worldwide, the industry is having a tough time breaking through the silos of the different clinical departments, looking at the total end-to-end process of clinical development, and being realistic about what is broken and what can be improved.

His warmth and strong commitment to team decision-making have resulted in collaborations that are appreciated by clients.

Did You Know?

In early 1990 just after the fall of the Berlin Wall, Marco van Doeveren chipped several pieces out of the wall that he still has at home.

His work standards and proven results make him a true inspiration to the hundreds of customers, partners, and colleagues he has touched.

In motivating others, Mr. van Doeveren emphasizes each person's contribution, identifies his team's strong points, and leverages the knowledge that exists with creative approaches.

He cares for everything in his life, work and personal. And he takes a pragmatic approach, preferring to keep things simple.

An avid photographer, his big picture perspective, combined with an acute attention to detail, shines through in his unique creative output. PV

COMPASSIONATE. PRAGMATIC.

NAME: Marco van Doeveren

CURRENT POSITION: VP, Implementation Services, Medidata Solutions Worldwide

DATE AND PLACE OF BIRTH: September 1965, Rotterdam, Netherlands

EDUCATION: B.S., Public Administration, Erasmus University Rotterdam; MBA, Maastricht School of Management

FIRST INDUSTRY-RELATED JOB: Manager, customer service, medical device company

ALTERNATIVE PROFESSION: Professional photographer

GIVING BACK: Boston Food Bank

WORDS TO LIVE BY: Take one day at a time.

CONNECTED VIA: LinkedIn

Dr. Robert HOLMES
A Model Mind

Getting Personal with
DR. ROBERT HOLMES

FAMILY: Sons Alex, 14; Tom, 26

HOBBIES: Photography; painting; piano; literature

READING LIST: Feynman for insights into how the world works; Tolstoy and Austen for insights into people's motivations

FAVORITE BOOK: Don Quixote

FAVORITE MOVIE: Koyaanisquatsi

BUCKET LIST: Sample at least one dram from every whiskey distillery in Scotland

FAVORITE SMARTPHONE APPS: Gmail, Google Calendar

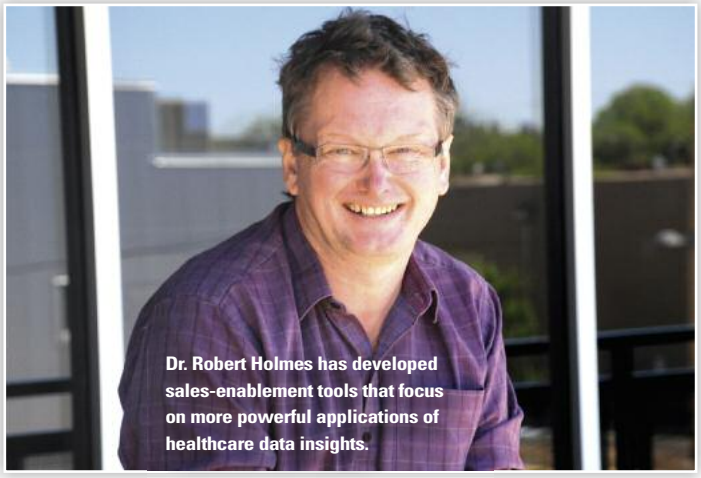
INSPIRED BY: His team

LIFE LESSONS: Study physics, not mathematics, it's about the real world, it's more useful and you'll enjoy yourself more — a high school teacher

MOST UNUSUAL PLACE VISITED: Watching the sunrise from the top of Temple 4 at Tikal, Guatemala

UNDER THE CLOAK OF INVISIBILITY: The arroyo behind his house to watch the pack of coyotes that live there

TIME TRAVEL: To the time and place of his demise — and then never go there again



Dr. Robert Holmes has developed sales-enablement tools that focus on more powerful applications of healthcare data insights.

A physicist and mathematician with a degree from Oxford, Robert Holmes, Ph.D., has been with Qforma since its inception, and took on the role of chief technologist in 2009. Using scientific techniques developed at Los Alamos National Laboratory to model the behaviors of large numbers of interacting individuals, Dr. Holmes manages Qforma teams in data mining, mathematical modeling, and social network analyses to develop algorithms that identify physician peer networks and the patterns of behavior and most influential physicians within those networks.

He has developed sales-enablement tools that focus on more powerful applications of healthcare data insights. He was instrumental in the development of a revolutionary approach to measuring practice behavior changes as they evolve over time and a system of metrics that make the data actionable.

Taking on the role of chief technologist at Qforma has been a career highlight, and in particular he says it has taught him to surround himself with brilliant people, give them clear objectives and the resources to accomplish their goals, then leave them alone.

His poise and knowledge inspire those around him. For example, while working on an impromptu video project, Dr. Holmes was able to speak off the cuff on several different topics, repeat what he had just said, and make each take better than the last.

He might describe his speaking prowess as being argumentative by nature, and says if he wasn't a technologist, he might do well as a lawyer.

Born and raised in the United Kingdom, Dr. Holmes received a Ph.D. with degrees in physics and applied mathematics. Having benefited enormously from his education, he is eager to give back and contributes to his alma mater, Christ Church, Oxford University.

The opportunities he has enjoyed in life were enabled by his physics professor, who advised the 17-year-old Robert Holmes to consider reading physics instead of mathematics, his chosen subject, at university, noting that physics is about the real world, is more useful and enjoyable. Dr. Holmes says he followed his professor's advice and has never regretted it. Years later, throughout a career spent taking the most advanced techniques in machine-learning and social network analysis and applying them to data-rich fields such as the pharmaceutical industry, that professor's words still ring true.

But it was perhaps the toss of a coin that set him on the path of applied mathematical techniques.

When Dr. Holmes was about to leave Oxford University and start his Ph.D. at a research laboratory operated by the Central Electricity Generating Board, he visited the laboratory and was shown an astonishing range of projects: everything from supercomputing on a recently acquired Cray to designing the Tokamak fusion reactor to the latest in acid rain mitigation technologies. Asked which projects interested him, he responded that he would love to contribute to the laser interferometry work. He found all the projects fascinating, aside from one on oil combustion, which naturally was the project he inherited. It wasn't until after Dr. Holmes had completed his thesis that his supervisor confessed that he and the laser interferometer expert both had budget for a research student. Both wanted Dr. Holmes and rather than consult with the student for his opinion, the two professors decided to resolve the impasse in the only gentlemanly way — through a coin toss. As it turns out the oil combustion research required some particularly tricky math to interpret the results of the experiments. This experience gave Dr. Holmes a taste for applied mathematical techniques, which he has subsequently spent his career pursuing. PV

Marco VAN DOEVEREN

A Lens Into the Clinical Process

Pharma clients consider Marco van Doeveren a key in advancing their technological strategy in clinical trials and commercialization.

Getting Personal with MARCO VAN DOEVEREN

FAMILY: Wife; two children

HOBBIES: Travel; cooking; photography

READING LIST: True crime, history, and biographies

FAVORITE BOOK: Night by Elie Wiesel

FAVORITE MOVIE: Silence of the Lambs

BUCKET LIST: Professional photographer

FAVORITE SMARTPHONE APP: Pandora

INSPIRED BY: His grandfather, a hardworking, honest, and pragmatic man

LIFE LESSONS: Perception is reality

MOST UNUSUAL PLACE VISITED: Kafue National Park, Zambia

UNDER THE CLOAK OF INVISIBILITY: Spend a day in the White House

TIME TRAVEL: To 1888 London to solve the Jack the Ripper case

Today's advanced computer applications that automate data capture, management, and reporting (EDC/CDMS) have the potential to bring midsize and emerging drug development organizations the same efficiencies and savings their larger counterparts experience.

Five years ago Medidata Solutions, one of the leaders in the clinical technology industry, turned to Marco van Doeveren to build a dedicated mid-market services team that could meet the special challenges of smaller enterprises. With his deep understanding of the clinical process, obsessive attention to detail, and a big dash of creativity, Mr. van Doeveren has assembled a nimble group of experts who are focused on fashioning the right approach for each customer to deliver a quality clinical trial.

Pharma clients consider him a key expert in advancing their technological strategy in clinical trials and commercialization.

He and his Medidata teammates have been instrumental in implementing Rave, an enterprisewide clinical data management system, into the academic research arena, including the Mayo Clinic, which was not without its challenges. Mr. van Doeveren's innovative ideas and engaging demeanor were crucial to the success of the project and building strong relationship between the organizations. He led the team through its own internal transformations to ensure that the services provided to Mayo not only met the needs of Mayo, but helped position the clinic for large-scale success.

An avid photographer with a habit of always looking for a new perspective, Mr. van Doeveren credits his varied past experiences and career in the industry with his ability to meet the unique challenge of each customer.

While earning his degree at Erasmus University in Rotterdam, the Netherlands, he specialized in organizational development, later completing his MBA and beginning his career in customer service. Following a passion in life sciences, he transitioned into the industry in 1997 as head of customer service for the Benelux countries — the Netherlands, Belgium, and Luxembourg — for Boston Scientific Europe, where he developed his perspectives on improving clinical research processes.

In 2003, three years after relocating to the United States, Mr. van Doeveren joined the clinical side of Boston Scientific, where he drilled down on processes across clinical system implementations and process development around EDC, safety event processing, coding and investigator site management.

Later at Medidata, he found a home: a place where advanced technology could streamline and create visibility into the trial process at any size organization. PV