

PRISME Forum BUSINESS AND TECHNICAL MEETINGS

Japan Group

PRISME Forum Chair:

Dan Chapman

Head, IT Early Solutions Information Management, UCB

May 11-15, 2020 Online

PRISME Forum Business Meeting Board of Directors

Dan Chapman

Chair, *PRISME Forum;* Head, IT Early Solutions Information Management, *UCB*



Dan Chapman, PhD, is part of the leadership team within Informatics at UCB with responsibility for Software Development and Architecture and Therapeutic Informatics (UK). Dan has 15 years' experience working within the Pharmaceutical industry in a variety of roles.

After completing a PhD in Chemistry at Warwick University, Dan transitioned to informatics during post-doctoral research at Cambridge University as part of the CLIC consortium.

Dan joined AstraZeneca in 1997 and worked on a variety of global projects before joining UCB in his present role in 2005. Since then, Dan has driven several projects to revolutionize the informatics platform within UCB and is currently actively involved in promoting Data Science across UCB.

Christian Baber

Head, Scientific Informatics, Takeda



Christian Baber, PhD, is a chemist by training and holds undergraduate and PhD degrees in computational chemistry with a focus on AI techniques to assess the synthetic accessibility of de novo design compounds.

Christian continued this work with a postdoctoral fellowship on the automated

design of targeted combinatorial libraries at the Department of Knowledge Engineering, Osaka University, Japan before moving into industry as a computational chemist and cheminformatician.

Christian has a wide breadth of experience across companies ranging from startups to Pfizer and diverse therapeutic areas with a focus on early stage lead identification and screening. Christian has been with Shire between 2015 and 2019 and is currently the Head of Scientific Informatics at Takeda.

Prior to Shire, Christian was the Head of Cheminformatics and Compound Management and Data Steward at Cubist Pharmaceuticals where, amongst other things, his team was responsible for automation, high-throughput screening, scientific programing and the corporate scientific database.

Alastair Binnie

Vice President, R&D IT, Bristol-Myers Squibb



Alastair Binnie is Head of Information Technology for Research & Development at Bristol-Myers Squibb. In this role he is accountable for planning and delivering all aspects of IT's value proposition to BMS R&D, which includes digital platforms supporting discovery, preclinical, translational medicine, elopment, regulatory sciences,

clinical development, regulatory sciences, pharmacovigilance, and medical affairs. His mission is to enable R&D by providing the right tools and the right data, to the right scientists, at the right time.

He joined BMS in 1999 as the leader of the Discovery Automation team in Wallingford, Connecticut, and progressed through a range of leadership roles in research technology and IT, assuming his current role in 2015. From 1994-99 he led the Discovery Technologies group at Glaxo Wellcome R&D in the UK. Prior to joining the pharmaceutical industry, Alastair worked as a design engineer in the space industry, developing instrumentation for microgravity research for the European Space Agency.

He is a current or recent Board member of global life-science technology industry groups, including PRISME, the Society of Laboratory Automation and Screening, and the Pistoia Innovation Alliance. He represents BMS on the New Jersey Technology Council.

Alastair grew up in Scotland. He has degrees in mechanical engineering, design engineering and industrial design from Brunel University, Imperial College of Science and Technology, and the Royal College of Art.

Martin Erkens

Head, pRED Informatics, F. Hoffmann-La Roche



Martin Erkens, PhD, leads the Pharma Research and Early Development Informatics organization (pREDi) of Roche. Data science supporting drug projects as well as Research and Early Development workflow solutions are among the key contributions of his organization.

He was responsible for supporting multiple mergers and acquisitions, imple-menting a wide range of diverse solution including a digital media environment for early development, a research imaging data warehouse, a efficient data review tool for early clinical studies and a LIMS for the omics labs.

Prior to becoming head of pREDi, Martin ran various IT teams in the clinical space and was responsible to implement global systems for drug project and portfolio planning, global sales reporting, electronic data capture of clinical trials (the first large cloud system at Roche), clinical imaging and a system environment for the internal clinical Phase I unit.

During this time he also led a program establishing a complete new blue print of the system landscape supporting clinical development resulting in an investment program over 5 years and 100+ mUSD investment.

Martin received his PhD in Mathematics (stability theory) from the Albert Ludwigs University in Freiburg. He also holds two degrees in Mathematics and Physics ("Diplom" and "Staatsexamen") from the same university.

Andreas Friese

Head, R&D-IT Early Development, Pharma-Research, *Bayer*



Andreas Friese, MS, started his professional career as a software developer in 1987 at Schering AG, Berlin, Germany. From the beginning, he focused on IT solutions that addressed specific needs of the Research organization. Over the years, he held various positions as system analyst and project manager – all with focus on

Research specific systems or projects.

In 1999, Mr. Friese moved to Richmond, CA, USA as an IT Business Partner for the Medicinal Chemistry department of Berlex Biosciences. During the merger of Schering AG with Bayer AG, he returned to Germany.

Based in Wuppertal, he is Director of Research-IT Early Development for Bayer.

Olivier Gien

Vice President, Global Head, Medical IT, Sanofi



Olivier Gien, PhD, served as PRISME Forum's Chair between 2014-2018.

He is a chemical engineer by training and holds a PhD in Organic Chemistry. His PhD work focused on leveraging Artificial Intelligence technologies and retrosynthetic analysis to build a system helping chemists in the design of synthetic routes.

Olivier started his career in the Exploratory Unit of Sanofi's Hungarian affiliate in Budapest then took charge of Information Systems for Industrial Chemical development at Sanofi's Sisteron site. He then led Global Discovery Research Information Systems at Sanofi-Synthelabo, then Sanofi-Aventis in Montpellier, before taking on the role of Global Head, R&D IT in 2010, Global Head, Clinical IT in 2015 and then Global Head, Medical IT in 2017.

Lars Greiffenberg

Director R&D Information Research, Library Sciences & Academic Partnerships, *AbbVie*



Lars Greiffenberg, PhD, MS, holds a MS in Biology and a PhD in Microbiology and has more than 15 years of experience in the field of integrated R&D IT solutions and translational informatics. He held different R&D IT management positions at Aventis Pharma and Sanofi-Aventis in Frankfurt before relocating to the Sanofi

site in Toulouse, France where he was Global Head of Solution Center Translational Medicine with responsibility to manage and lead a global program to enable translational science at Sanofi. In 2014 he joined AbbVie in Ludwigshafen (Germany) as director of R&D IT and Translational Informatics. In this role he is heading business IT support covering data and solutions from early discovery up to Medical Affairs. In 2017 he extended his responsibilities including now global Library Sciences at AbbVie.

He is driven by the ambition to transform the way we access, consume and leverage literature in the future. He recently established a team at AbbVie, dedicated to use modern methods and algorithms to extract and visualize mechanistic disease information from literature content. In 2018 he further enlarged his area of responsibility to incorporate the Academic Partnerships Organization which is leveraging an AbbVie-Campus at the University of Illinois Urbana-Champaign.

Lars is active in several pre-competitive organizations including IMI, PRISME Forum, Pistoia Alliance and EIT-health.

Tomoyuki Matsunaga

Head, Research Management Systems, Research IT, *Takeda*



Tomoyuki Matsunaga is Head of Research Management Systems in Global Information Technology at Takeda Pharmaceutical Company. His role is to lead any strategic IT operations for common management processes and workflows of research activities in conjunction with other functional research IT groups, such as

Discovery, Preclinical and Translational Sciences. He is also the site IT manager at Shonan Research Center in Japan.

Tomo started his career in Central Research of Pfizer Japan in 1991 as a research scientist. After 5 years in Natural Product Screening department, he moved to Research IT group in the company and worked on various projects of global discovery research information systems. He joined Takeda in 2008 as an Associate Director in Research IT and took the current position in 2014. He obtained his MBA from Kenichi Ohmae Graduate School of Business and MSc, Medical Sciences from University of Tsukuba.

Mike Montello

SVP R&D IT, GlaxoSmithKline



Mike Montello joined GSK in August 2018 as SVP, R&D Tech and is responsible for transforming the R&D Tech capability and platform. Mike partners with the R&D leadership team to focus technology resources to enable a step change in R&D science and performance, HCP and patient centric solutions, and simplification of

processes and tools. He is accelerating the integration of the next wave of innovative technologies and agility while maintaining compliance and quality across R&D systems.

Previously Mike was VP, Divisional CIO (Quintiles), and Global Head of R&D Information Technology for IQVIA, responsible for strategy and innovation initiatives that help R&D Solutions stakeholders accelerate clinical development, leverage evidence for protocol design and planning, improve operational execution, quality, patient safety, and investigator performance.

Prior to joining IQVIA in 2015, Mike led R&D Information Technology at Shire Pharmaceuticals, a global rare diseases biotech. As a member of Shire's Information Technology leadership team, Mike led IT integration of multiple biotech acquisitions and led HCP and patient centric technology initiatives and strategic roadmap across R&D.

Prior to Shire, Mike worked at Accenture for 12 years as a management consultant and outsourcing leader in Health and Life Sciences practices.

In addition to his industry role at IQVIA, he delivered innovative data and technology driven solutions for 6 of the top global Pharmaceutical and Healthcare companies including Pfizer, Merck, BMS, Biogen, Daiichi-Sankyo, and United Health Group. Mike holds a bachelor's degree in Mechanical Engineering from the Pennsylvania State University.

Scott Oloff

Executive Director, IT R&D and Medicine Enablement, *Boehringer-Ingelheim*



Scott Oloff, PhD, started his career as a Computational Chemist in Research where he worked for both Biogen and Boehringer Ingelheim.

His primary expertise was building and using machine learning algorithms for potency/ADMET predictions, docking, and research project support. In 2008 he took a position in Research IT within Boehringer Ingelheim overseeing data analytics and mining technologies.

Over time he has expanded into a number of IT R&D roles where he now oversees all technologies that are shared across the Research, Development, and Medicine business areas (Analytics, Chemistry tools, ELN's, Lab technologies, LIMS, Document Management tools, etc.).

Scott holds a bachelor's degree in Chemical Engineering from Clemson University and a PhD in Pharmacology from the University of North Carolina.

Errol Sandler

VP, Board Secretary/Treasurer, PRISME Forum



Errol Sandler, PhD, worked in the information technology industry for 30 years.

His career focused on R&D computing problems in the life sciences as well as leadership and technical expertise for R&D computing in the pharmaceutical industry.

He led teams to provide information technology support at several Pfizer Global research and development sites in the United States and the United Kingdom.

Dr. Sandler received his PhD in Physics and Astronomy from the University of Missouri-Columbia.

Susie Stephens

Senior Director, Analytics & Master Data Architecture, *Pfizer*



Susie Stephens, PhD, is a strategic leader in the pharmaceutical industry with over two decades of experience in informatics, science and technology. She is currently Senior Director, Analytics and Master Data Architecture at Pfizer.

Prior to that she was Head of In Silico Immunology at Johnson & Johnson for the Immunology Therapeutic Area.

She has also worked at Oracle and Sun Microsystems where she had roles spanning pre-sales, product management and business development.

Susie has a PhD in Physiology; post-doctoral experience in Molecular Biology; and is an alumnus of Harvard Business School. She has over 20 peer reviewed papers and has presented at many industry conferences on data, advance analytics, precision medicine, and innovation. Susie is the founding Chair of the PRISME Forum.

John CM Wise

Program Coordinator, PRISME Forum



John Wise, MA, is the Program Coordinator for the PRISME Forum and is also a consultant at the Pistoia Alliance with responsibilities that include business development and member relations. He specializes in the coordination of precompetitive collaborations in life science R&D IT and has had a long-time

commitment to encouraging pharma to use expert, thirdparty, cost-effective, regulatory-compliant, secure, hosted information services.

Previously, Mr. Wise has held Informatics leadership roles in a variety of organizations including the University of London,

Sandoz, the Imperial Cancer Research Fund (now CRUK), Roche, Ipsen and Daiichi Sankyo.

He has also worked in the technology supply side of the industry. In these roles, he has gained direct hands-on experience writing analytical software, teaching computation, delivering IT services, and providing computer-based services to the discovery, non-clinical development, clinical development, and regulatory affairs domains of the life-science industry.

PRISME Forum Statement of Compliance

"All meetings, working groups and communications will be open to all Members and any records thereof will be non-confidential and available for inspection by any Member. The Members acknowledge that discussing any commercially sensitive topics, including costs, volumes, inventories, sales level methods, channels of distribution, access to future products, markets, current or future prices, profitability, *contract pricing or trading terms* is prohibited. The Members of PRISME will strictly comply with all laws relevant to their activities, including US state and federal anti-trust laws and European competition laws."

Company Updates

CONTENT

One of the key activities of the PRISME Forum meetings is the "Company Updates." These updates allow members to identify common key themes from across our companies such as:

- industry trends
- common business drivers
- challenges
- IT initiatives
- areas of investment, and
- opportunities for pre-competitive collaboration.

Members often include in their company updates the following kinds of information:

- 1. High-level company overview with emphasis on R&D priorities and key business drivers of R&D IT strategy, practice and emerging trends
- 2. R&D IT/Informatics organization overview with emphasis on key IT/informatics areas of focus for strategy, implementation and process improvement
- Any useful benchmarking data (e.g. R&D IT/Informatics expenditure as a percentage of the R&D budget, R&D IT skills portfolio/skills gaps)
- 4. And most IMPORTANTLY anything else a member would like to share or get advice about

It is important to note that the spirit of company updates is pre-competitive, collaborative and is informal. As such, no formal minutes for these discussions are produced or published. The PRISME Forum is very aware of its responsibilities to avoid any perception of anti-competitive practices. As such the PRISME Forum conducts all of its activities in conformance with all international, U.S. federal and state antitrust laws.

STRUCTURE

For the company updates, the PRISME Forum members will be divided into several subgroups. Each subgroup will have a captain to host and facilitate the discussion. PRISME Forum members will provide their company updates within the subgroups. *(90 minutes)*

PRISME Forum members will summarize the key points. (30 minutes)

Group captains will use a template (see below) to submit the key points for a plenary presentation and discussion.

The plenary session of Thursday will allow group captains to present their group's key points and up to three (3) "hot topics" proposed for the Fall 2020 Technical Meeting. *(75 minutes)*

1. Company Update (Group Captain Name: *
2. Please list your Co	mpany Update group participants: *
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4. List R&D IT/Inform	atics activities with emphasis on key IT/informatics areas of focus for strategy, implementation and process improvemen
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5. Useful benchmarki	ng data (e.g. Percentage of R&D IT/Informatics budget spent on innovation, R&D IT skills portfolio/skill gaps): *
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	ng data (e.g. Percentage of R&D IT/Informatics budget spent on innovation, R&D IT skills portfolio/skill gaps): *
6. Anything else with	special reference to new challenges or successes in the past six months:
5. Anything else with	special reference to new challenges or successes in the past six months:
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3. Anything else with 3. Anything else with 4. Anything else with 5. Your three "HOT Tr (Any comments to clarify "HOT TOPIC" 1	special reference to new challenges or successes in the past six months:
8. Anything else with 7. Your three "HOT To (Any comments to clerity "HOT TOPIC" 1 "HOT TOPIC" 2	special reference to new challenges or successes in the past six months:

Program – Japan Time

MONDAY, May 11, 2020

10:00 COMPANY UPDATES

11:30 Break

11:45 GROUP SUMMARY

12:15 End of day for the Japan group

12:15 Japan Group Captain uses template to prepare key points

13:00 Japan Group Captain submits survey on key points for PRISME Forum Chair's review

16:00 Japan Group Captain conference call with PRISME Forum Chair

THURSDAY, May 14, 2020 (Note: Sessions will be recorded)

23:00 GROUP CAPTAINS' UPDATES

0:15	Break		
0:30	COMPANY UPDATE REVIEW, SUMMARY AND SELECTION OF "HOT TOPICS"	Dan Chapman, Chair, <i>PRISME Forum</i> ; Head, IT Early Solutions Information Management, <i>UCB</i>	
1:00	Break		
1:15	BUSINESS MEETING ACTIVITIES	Dan Chapman, Chair, <i>PRISME Forum</i> ; Head, IT Early Solutions Information Management, <i>UCB</i> Errol Sandler, Treasurer/Board Secretary, <i>PRISME Forum</i> John Wise, Program Coordinator, <i>PRISME Forum</i>	

1:45 *End of Business Meeting*

FRIDAY, May 15, 2020 (Note: Sessions will be recorded)			
23:00	Technical Meeting Introduction	Lars Greiffenberg, Technical Meeting Chair, <i>PRISME Forum;</i> Director R&D Information Research, Library Sciences & Academic Partnerships, <i>AbbVie</i>	
23:15	PRESENTATION – Business Need of RWD Utilization	Howard Jacob , Vice President and Head of Genomic Research, <i>AbbVie</i>	
24:00	PRESENTATION – RWD Platform Architecture & Technologies	Mark Buswell, Vice President of Research Solutions, R&D Tech, GSK Chuck Smith, VP, Data Strategy, GSK	
0:45	Q&A		
1:00	Break		
1:15	PANEL DISCUSSION	Alastair Binnie, VP, R&D IT, <i>BMS</i> Phil Hajduk, VP, Information Research, <i>AbbVie</i> Hongmei Huang, Sr Director, Head of Informatics, Dev. Sciences, <i>Genentech</i> Amrik Mahal, Global IT Head for Early Science, <i>AZ</i>	
2:00	POSTER SESSION		
	Technology Enablers to Improve Efficacy and Efficiency	Jordi Gago , Global Sr Principal Business Analyst, <i>Boehringer</i> <i>Ingelheim</i>	
	Fast Time to Value The Importance of Data Mapping and the Knowledge Generation Pipeline	Richard Wendell, CEO, telic	
	Data & Analytics use case	Jonathan Peachey, COO/Head of Client Services, Phesi	
	Going from Real World to Real Evidence	Matt Wilson, CEO & Founder, uMED	
3:00	Q&A		
3:15	Closing Notes	Dan Chapman, Chair, <i>PRISME Forum</i> ; Head, IT Early Solutions Information Management, <i>UCB</i>	

BIOS and ABSTRACTS

Howard J. Jacob, PhD



Dr. Howard Jacob is the Vice President and Head of Genomic Research at AbbVie, one of the world's largest independent biotech companies. Howard Jacob, Ph.D., joined AbbVie in January 2018. A leader in the genetics and genomics field, he has published more than 250 peer-reviewed articles in his academic career, focusing on the genetic mapping of complex diseases and building genomic resources and tools to better understand the functional impact of genetic variation. Howard earned his Ph.D. at the University of Iowa and then did a post-doc with Eric Lander and Victor Dzau at MIT, Harvard and Stanford.

Throughout his career, Dr. Jacob has been a pioneer in translating research into the healthcare ecosystem, bringing genomic medicine to patients in need of answers. In 2009, Dr. Jacob and his team at the Medical College of Wisconsin were the first to use genomic sequencing to save a patient's (Nicholas Volker) life. Nicholas' story was highlighted in a Pulitzer Prize winning series in the Milwaukee Journal Sentinel.

Prior to his role at AbbVie, Dr. Jacob served as the Executive Vice President for Genomic Medicine, Chief Genomics Medicine Officer and Faculty Investigator at the HudsonAlpha Institute for Biotechnology. Jacob led the whole genome sequencing core for the NIH-funded Undiagnosed Disease Network and led the clinical teams at the world's first standalone genomic medicine clinic, as well as a whole genome clinical sequencing lab. Prior to his role there, Howard was the founding director of the Human and Molecular Genetics Center at Medical College of Wisconsin, which grew from two to a team of 30 faculty members. He has also founded four companies and participated on the advisory boards for numerous academic and commercial organizations.

Dr. Jacob's passion for improving the lives of critically ill patients has been the catalyst for his determination to bring whole genome sequencing into the clinical setting to affect patient care, and in his new role to discover therapeutic solutions for some of the most difficult diseases.

Business Need of RWD Utilization

Large data sets from real world data sets (Claims data, Electronic health records, Pharmacy records, etc.) combined with large population cohorts (some at Nation-scale) with whole genome sequencing and other Omics have entered the Pharma space. I will discuss how we are leveraging these "data resources" at AbbVie to inform new targets, predict likelihood of success, and begin to understand the biology in humans at molecular level.

Mark Buswell, PhD, MBA



Dr. Mark Buswell is the VP of Research Solutions in R& D Tech, GSK. He has accountability for all pre-clinical Tech solutions supporting R&D from target sciences, through discovery and development, and finally to clinical trial supply. He joined GSK in 2002 and has held roles in R&D and manufacturing in process development and engineering, innovation and sustainability, and more recently moved into the R&D Tech function.

He has a PhD in Chemical Engineering from University of Cambridge and an MBA from Cranfield University. His interests include pharma R&D information technologies, synthesis of APIs using novel methods, novel formulation technologies, fermentation technologies, advanced analytical

technologies and automation. He is a chartered Chemical Engineer, a Fellow of the Institute of Chemical Engineering, a Fellow of the Royal Academy of Engineering and a Board Director of the Pistoia Alliance.

Chuck Smith



Chuck Smith is the VP, R&D Data Platform & Solutions at GlaxoSmithKline and is responsible for building strategic organizational capabilities, platforms, data assets and processes that leverage data in support of R&D.

Prior to GSK, Chuck was responsible for the Data Analytics team at Samsung Electronics America where he focused on establishing analytical capabilities to support decision making for Marketing, Product Development, Customer Loyalty, Customer Service, eCommerce and Retail Sales.

Chuck also spent seventeen years with IBM as an executive consultant and Partner in Business Analytics and Optimization. During that time, he helped to establish the business analytics competency, led dozens of data and analytical engagement teams and was responsible for the delivery of numerous innovative Data solutions.

RWS Platform Architecture & Technologies

PANELISTS

Alastair Binnie



Alastair Binnie is Head of Information Technology for Research & Development at Bristol-Myers Squibb. In this role he is accountable for planning and delivering all aspects of IT's value proposition to BMS R&D, which includes digital platforms supporting discovery, preclinical, translational medicine, clinical development, regulatory sciences, pharmacovigilance, and medical affairs. His mission is to enable R&D by providing the right tools and the right data, to the right scientists, at the right time. He is currently kept quite busy with the challenge of leading one of the industry's largest integration of digital capabilities for R&D.

He joined BMS in 1999 as the leader of the Discovery Automation team in Wallingford, Connecticut, and progressed through a range of leadership roles in research technology and IT, assuming his current role in 2015. From 1994-99 he led the Discovery Technologies group at Glaxo Wellcome R&D in the UK. Prior to joining the pharmaceutical industry, Alastair worked as a design engineer in the space industry, developing instrumentation for microgravity research for the European Space Agency.

He is a current or recent Board member of global life-science technology industry groups, including PRISME, the Society of Laboratory Automation and Screening, and the Pistoia Innovation Alliance. He represents BMS on the New Jersey Technology Council.

Alastair has degrees in mechanical engineering, design engineering and industrial design from Brunel University, Imperial College of Science and Technology, and the Royal College of Art.

Phil Hajduk



Phil Hajduk is Vice President, R&D Information Research for AbbVie. He was appointed to his current role in January 2016. He was appointed to AbbVie's Scientific Governing Board in January 2019.

Phil joined the Discovery organization in 1993 and has since had a significant impact on our science and technology platforms. He spearheaded the early development and application of SAR by NMR and played a key role in the development and integration of diverse technologies to enable and expedite drug discovery, including cheminformatics, high-throughput screening, and data analytics. Beginning in 2013, Phil led our Platform Informatics and Knowledge Management

(PIKM) group, where he built a team that has delivered a vast repertoire of scientific informatic tools that are empowering AbbVie scientists with the knowledge required to discover compelling targets, identify optimal drugs, and improve patient health. In January 2016 Phil was appointed Vice President of Information Research – an integrated organization that will deliver IT platform solutions across all R&D business areas and drive new capabilities to enable better decisions, faster, on our targets, drugs, and patients.

Hongmei Huang, PhD



Hongmei Huang is the Head of Development Sciences Informatics at Roche Genentech. In this role, she is responsible for the strategic leadership around data management, informatics systems and analytics platforms for translational research and development functions. She serves on the leadership team driving the Roche wide effort to make data FAIR across R&D.

Dr. Huang is an accomplished scientific and informatics leader with 25 years of experience in the Pharmaceutical Industry. She started her career as a Research Investigator at Bristol-Myers Squibb and transitioned into Informatics over the course of her career, with leadership roles in various companies including Novartis and Johnson & Johnson.

She received her B.S. from Beijing University, M.S. from University of Michigan, and Ph.D. in Bioorganic Chemistry from The Scripps Research Institute.

Amrik Mahal, PhD



Amrik Mahal is Head of Information Technology for Research at AstraZeneca. In this role he is accountable for developing and driving the IT strategy, partnering with R&D senior leaders and delivery all IT projects, services and capabilities to support target identification, drug discovery and preclinical. Though based in the UK he is currently on secondment in Gothenburg where is the Head of IT – Sweden.

Dr. Mahal is an accomplished scientific and informatics leader with 25 years of experience in the Pharmaceutical Industry. He started his career as a chemist at Glaxo Wellcome, Oxford

Asymmetry, Evotec and has held numerous IT leadership roles in AstraZeneca in both Research and Clinical Development.

POSTER PRESENTERS

Jordi Gago



Jordi Gago currently serves as Global Senior Principal Business Analyst at Boehringer Ingelheim, based in Sant Cugat (Barcelona).

He previously served as Lean Manager in Eurofins (Food lab) and as Business Analytics Manager at Beam Suntory (Spirits). His main purpose is the scoping projects for human pharma and animal health divisions, where we can deploy technologies into business processes to improve efficiency and reduce non value-added activities allowing to focus more on the data analysis and decision making. In the same way, evolve new processes to get a better data and understanding of the market impact of our products.

Technology Enablers to Prove Efficacy and Efficiency

As part of the digitalization process within pharmaceuticals, one of the key aspects is to understand what data one can make use of and how to handle it.

With the latest frameworks released by the main regulatory bodies (FDA, EMA, etc.) focusing on RWD as evidence generators within the clinical trials and product development, we are going to use the time during the presentation to run over the main data strategies and key concepts to implement technology and big data to resolve some problem statements.

There are multiple initiatives and companies in the market space working on Real World Data. We are just going to mention some use cases to understand how IT and technology can enable a better decision making, such as how to improve patient recruitment, integrate better healthcare data in CTs, become more digital with the patient interaction, etc. In other words, digital might change the marketing optics, from a product to a customer/patient centric view.

Technology is playing a key role and it is important to create the necessary synergies between our business and the IT experts. We are going to show how to include the Information Systems properly in the equation.

Jonathan Peachey



Jonathan Peachey, Phesi COO, is an industry leader delivering business and IT transformation across pharma R&D.

He has over 25 years' experience with specific expertise in Clinical Development, Clinical Operations and Outsourcing.

Jonathan's demonstrated capabilities span strategy, business and IT management, performance improvement and solution design through to implementation. Prior to joining Phesi as the COO, Jonathan was a Board Director at Kinapse and IBM's European Pharma R&D consulting lead.

Jonathan worked as a Program Leader at GSK, BMS and Pfizer. He holds a first-class honors degree and an Advanced Strategy diploma from Saïd Business School, Oxford University.

Data & Analytics Use Case

Richard Wendell, MA



Richard Wendell is the Founder and CEO of tellic LLC, which helps top pharmaceutical companies use data science technologies to improve R&D productivity with natural language process and knowledge graph technologies. He is also a Founding Board Member of MIT's International Society for Chief Data Officers (ISCDO) where he helped pioneer the global community of senior data executives.

Prior to tellic, Richard spent two and one-half years as the Chief Data Officer for TE Connectivity (TEL), the \$14B global electronics manufacturer. At TE Connectivity, he was tasked with leading the data strategy, creating the global data team and executing the company's move into big data

and advanced analytics.

Richard implemented analytics technologies that enabled a 360^o view across millions of customers purchasing billions of products, resulting in substantial financial improvements.

Before TE Connectivity, Richard was Vice President, Global Strategy & Business Development at American Express, where he led the company's move into analytics-driven business models.

Richard holds an MA in Decision Technologies from the Tepper School at Carnegie Mellon and an undergraduate degree in Philosophy and Mathematics, summa cum laude, from Brandeis University.

Fast Time to Value... The Importance of Data Mapping and the Knowledge Generation Pipeline

One approach to transforming R&D with data technologies is to design systems that accelerate the workflows of researchers engaged in reverse translation. Such an approach entails harmonizing and connecting internal data, including RCT re-analysis datasets through to RWD. There is also the need to access external data including scientific publications and indeed GWAS repositories. Such data integration activities need to accommodate a variety of data formats from structured to unstructured.

tellic's journey in addressing these biomedical-specific challenges resulted in an approach that accomplished the above by optimizing (1) data curation that links graph triples with search results and source documents, (2) a federated data architecture in the form of a 'hybrid index' that aggregates knowledge in a NoSQL/graph database, architected to a searchplatform database, for fast text retrieval and links back to source servers, and (3) a UX design aligned with researcher workflows that enable broad insight generation across diverse biomedical data sources, with drill-down capabilities to source documents.

Matt Wilson, MD



Dr. Matt Wilson is the CEO of the London based healthtech company uMed. By background he is an NHS Anaesthetist, Royal Marine doctor, and academic.

uMed represents a new era for real world evidence. Leveraging its global network of healthcare providers uMed automates the targeted engagement of patients, and access to linked real-time electronic health record data. This enables uMed to go beyond case finding or database studies; unlocking capability for sponsors to conduct prospective research at fraction of the cost and time taken by traditional CROs.

Going from Real World to Real Evidence

This presentation will provide an overview of the current paradigm in real world evidence where aggregated data is being used in an expanding spectrum of use cases through retrospective database analyses. We review the FDAs opinion on these use cases, including where this evidence may be submissible in lieu of RCTs. Then finally explore the future where real-world data can be meaningfully incorporated into prospective studies to achieve radical efficiency, whilst preserving the academic rigor needed to assess clinical efficacy.