May 24-25, 2023

Hosted by AstraZeneca
Gothenburg, Sweden

By invitation only

PRISME Forum
Spring 2023
Technical Meeting

Al in Pharma R&D: from Concept to Value

Al in Pharma R&D: from Concept to Value

The term "Artificial Intelligence" is ubiquitous in popular media today, driven by advances in algorithms, commoditization of computing power, and availability of large data sets. Depending on the perspective of the writer, AI can be portrayed as a force for transformational good or an existential threat, or both at the same time.

As technologists in biopharma R&D, we have the job of seeing past the hype and realizing the value. We know that AI is the single most compelling area of innovation in our industry, promising to transform all aspects of R&D, create new scientific insights, drive productivity, and improve patient outcomes. It's an exciting opportunity for us all.

However: we also know that AI is not magic. We have to embrace the potential but still be skeptical of the claims of marketers, consultants, journalists (and even CEOs). We have been talking about the potential of AI for a long time. In 2019, pre-Covid, many of us felt that we were at peak AI-hype. Now in 2023, we have spent money, seen successful demonstrations and interesting collaborations (and some conspicuous failures) but AI has not yet met its potential to transform our business. We can stage intriguing AI proofs of concept with carefully controlled experiments and well-behaved data sets, but that doesn't mean the technology has the maturity to displace traditional techniques. To get sustainable and scalable value from AI in our highly complex ecosystem requires painstaking work by deep experts, long-term investment, and enterprise-level sponsorship.

In this PRISME Forum Technical Meeting, we will discuss how the biopharma R&D industry can move beyond intriguing AI concepts to the realization of sustainable and scalable value. Technical specialists from biopharma, tech, consulting and academia will address questions such as:

- What are the best examples of AI currently adding practical value to real use cases in Biopharma R&D?
- It's all about the data: have we learnt to design our experiments and studies to create Alfriendly data sets? How can data architecture support both Al use cases and operational functions? Is data curation still the real bottleneck? Can we collaborate as an to create industry-wide FAIR data sets for Al use cases?
- What does "ethical AI" mean in the pharma R&D context, and how relevant is it in Research and in Development?
- Talent strategy: what's the right mix of recruiting pharma-naive AI specialists vs. upskilling our existing talent? How do we compete with tech companies to hire talent?
- What can PRISME members do to share best practices that accelerate the delivery of value, and ultimately drive patient benefit?

PRISME Forum Spring 2023 Technical Meeting Advisory Committee

- Christian Baber, Head of Scientific & Pharmaceutical Data, Informatics & Systems, Janssen
- Sonia Banerjee, Global Business Domain Architect for R&D and PDM, Gilead Sciences
- John Cornelius, Head of Global R&D IT, Seqirus a CSL company
- Piyush Dham, Director- Solution Architecture and Tech Enablement, Otsuka
- Kristen Ferrara, Global Head of Scientific Informatics, R&D-Data, Digital, and Technology, Takeda
- Hongmei Huang, Vice President Development Science Informatics, Genentech
- Scott Oloff, SVP of Data & Analytics, Roche
- Michael Sullivan, Executive Director, IT for Clinical Development, BMS
- PRISME Forum Operations Team

PRISME Forum Spring 2023 Technical Meeting

Al in Pharma R&D: from Concept to Value PROGRAM

All sessions will be held at AstraZeneca unless otherwise noted. All times are CEST.

WEDNESDAY, May 24, 2023			
18:30	Group Reception at Radisson Blu Scandinavia Gothenburg (Atrium, ground floor)		
	THURSDAY, May 25, 2023		
08:00	Gather in the Radisson Blu Scandinavia Hotel for	departure to the meeting venue (please have picture ID)	
08:20	Check-in and showcase setup		
08:45	Welcome Notes & Introductions	Dan Chapman, Chair, <i>PRISME Forum</i> Amrik Mahal, Global IT Head for Research, <i>AstraZeneca</i> Alastair Binnie, Executive Director, <i>PRISME Forum</i>	
	SESSION I Al: Concept to Value in Research	Chair: Amrik Mahal, Global IT Head for Research, AstraZeneca	
09:00	How Can Artificial Intelligence Impact on Therapeutic Antibody Research?	James Snowden, Data & Analytics Lead, NBE Platform, UCB	
9:20	Deep Learning Transformer Language Models in the Life Sciences from Predictive to Generative Models Communicative Data: Uncovering the Language	Mark Griffiths, Principal Data Scientist	
	of Data and Transforming it into Predictive Narratives	Mehmed Sariyildiz, Data Scientist for Al and NLP, <i>AbbVie</i>	
09:45	Coffee Break		
10:15	Keynote: Integration of R&D IT & Chemistry to Accelerate Drug Discovery	Werngard Czechtizky, Executive Director, Head Medicinal Chemistry, Respiratory and Immunology, AstraZeneca	
10:50	Panel Discussion	Moderator: Amrik Mahal, Global IT Head for Research, AstraZeneca Panelists: Mark Griffiths, Principal Data Scientist Mehmed Sariyildiz, Data Scientist for Al and NLP, AbbVie James Snowden, Data & Analytics Lead, NBE Platform, UCB Susie Stephens, Corporate Vice President, Data Management and Informatics in Research & Early Development, Novo Nordisk	
	SESSION II A Showcase	Chair: Kristen Ferrara, Head of Scientific Informatics-R&D Data, Digital, and Technology, <i>Takeda</i>	
11:20	Showcase (three 15-minute rotations – before lunch and four 15-minute rotations after lunch)		
11:20	Introduction	Chair	
S 1	Delivering Value with Artificial Intelligence Today	Panikos Christofi, Director of Product Management, <i>Saama</i> Aamir Jaka, Vice President, Life Science Strategy, <i>Saama</i>	
S2	From AI to Impact: How Knowledge Graphs and Large Language Models are Accelerating Drug Discovery	Artur Saudabayev, Co-Founder/CTO, Causaly	
S 3	Application of AI/ML for Insights Generation from Clinical Data	Mike Tarselli, CSKO, Tetrascience	
S4	Pistoia NLP Use Case Data Project	Birthe Neilsen, Project Manager, Pistoia Alliance	
S 5	Need for Speed: Automated Ligand Design and Al-assisted Synthesis Planning in Action	Georg Mogk, Principal Expert Applied Mathematics and Machine Learning, <i>Bayer</i>	
S6	IMOMICS - Holistic Analysis of Imaging Data Applied in Interventional and Epidemiological Studies Including UK Biobank	Lars Johansson, CSO/Co-founder, Antaros Medical Johannes Hulthe, CEO/Co-founder, Antaros Medical	

S7	Albus Home: Contactless Multi-sensor Device that Guarantees Nocturnal Symptom Monitoring without any Patient Burden	Jose Sanchez, CTO, Albus Health	
12:15	Lunch		
	SESSION II B Showcase	Chair: Kristen Ferrara, Head of Scientific Informatics-R&D Data, Digital, and Technology, <i>Takeda</i>	
13:15	Showcase Session Continues (remaining four 15-minute rotations)		
14:15	Break		
	SESSION III Al: Concept to Value in Development	Chair: Mike Sullivan, Executive Director, Clinical Development IT, <i>Bristol Myers Squibb</i>	
14:30	Introduction	Chair	
14:35	Unlocking the Power of Data: Empowering AstraZeneca to Maximize the Value of Data and Al	Ian Dix, Head of Enterprise Data & Al Services, AstraZeneca	
15:05	Linguist: Scalable and Flexible NLP Framework	Nikola Milosevic, Senior Computational Scientist, Bayer	
15:30	Enhancing Healthcare Processes with AI: Transforming Medical Coding for Improved Accuracy and Efficiency	Christoph Berns, Head of Machine Learning Engineering DS MAPV & R&D, Bayer	
15:45	Application of AI/ML for insights generation from clinical data	Joerg Degen, Global Head Early Development Informatics, Roche	
16:00	Concept to Value in R&D AI at AZ	Hebe Middlemiss, Director, Al Product, AstraZeneca	
16:15	Break		
16:30	Panel Discussion	Moderator: Sonia Banerjee, Global Leader - Architecture, Portfolio and Quality Systems, <i>Gilead</i> Panelists: Christoph Berns, Head of Machine Learning Engineering DS MAPV & R&D, Bayer Joerg Degen, Global Head Early Development Informatics, Roche Ian Dix, Head of Enterprise Data & Al Services, Astra Zeneca Hebe Middlemiss, Director, Al Product, AstraZeneca Nikola Milosevic, Data Science Manager, Bayer	
	SESSION IV Meeting Summary	Chair: Alastair Binnie, Executive Director, PRISME Forum	
17:00	Meeting Summary		
17:15	Return to the Radisson Blu Scandinavia	Peturn to the Radisson Blu Scandinavia	
18:30	nformal Group reception/dinner (Norda Restaurant)		

Sonia Banerjee, MS



<u>Sonia Banerjee</u> is a Senior Director in Gilead Sciences responsible for Portfolio Architecture and Quality Systems in their Research to Release IT. In her role she is responsible for developing the Next Generation Data and Digital strategy and Roadmaps for the Research, Development, Manufacturing's and Supply Chain functions.

Over her 25 year career Sonia has held multiple leaderships roles, enabling business capabilities for Biopharmaceutical and High Tech Industries. Sonia has also been active across the industry, leading workgroups at industry forums such as Parenteral Drug Association (PDA) and BioPhorum contributing to industry standards.

Sonia holds a bachelor's degree in mathematics and Graduate Diploma in Systems Management. She is PMP and Sigma Black belt certified and also holds certifications from MIT Sloan School of Management and Rutgers in Emerging Technologies (Big Data, IoT, ML, AI) for Business.

Christoph Berns, PhD



regulatory landscapes.

Christoph Berns is an experienced professional with a strong background in Data Science and Machine Learning. Currently serving as Head of Machine Learning Engineering for IT-Pharma Decision Science at Bayer, he has also held prominent positions at consulting companies such as KPMG, where he successfully led Data Science and Data Engineering initiatives in regulated industries such as Pharma and Banking.

With a PhD in Theoretical Physics, Christoph Berns brings a strong background in quantitative and ML approaches to his work. He applied his experience in research and now focuses on the E2E Machine Learning development and operations process, with a keen understanding of

Prior to joining Bayer, Christoph Berns headed the Data Science & Data Engineering department for a consulting company which focuses on data-driven solutions (Areto consulting), where he shaped his skills in driving cross-functional teams towards achieving impactful results by leveraging AI & ML to improve business processes.

In summary, Christoph Berns possesses a unique combination of technical knowledge in ML methodology and (cloud) solution architecture, as well as a deep understanding of processes, governance and leadership required for successfully applying ML in production and regulated settings.

Alastair Binnie



Alastair Binnie is Executive Director at PRISME Forum. He has recently retired from Bristol-Myers Squibb where he was Head of Information Technology for Research & Development. In this role he was 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 was 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.

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 represented 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.

Dan Chapman, PhD



<u>Dan Chapman</u> is part of the leadership team within Informatics at UCB with responsibility for Software Development and Architecture and Therapeutic Informatics (UK).

Dr. Chapman has 15 years' experience working within the pharmaceutical industry in a variety of roles.

After completing a PhD in Chemistry at Warwick University, he transitioned to informatics during post-doctoral research at Cambridge University as part of the CLIC consortium. Dr. Chapman joined AstraZeneca in 1997 and worked on a variety of global projects before joining UCB in his present role in 2005.

Since then, he has driven several projects to revolutionize the informatics platform within UCB and is currently actively involved in promoting Data Science across UCB.

Panikos Christophi



<u>Panikos Christophi</u> is Director of Product at Saama with a focus on crossfunctional R&D initiatives. He has always sought to act as an ambassador to multiple disciplines, combining clinical, business and technical expertise within the umbrella of clinical trials. Some topics of interest for Panikos are clinical data standardization, eClinical ecosystems, clinical data management technology, patient engagement and decentralized trials.

He started in the clinical space in 2009 as a clinical database developer combining a self-taught passion for informatics with an educational background in biosciences (human genetics). After a time in software development, he transitioned to business analysis for a large CRO in a role

focusing on clinical integrations and later on technical consultancy. This role allowed exposure to a large set of clinical systems, clinical standards and working practices across the industry. It was here that Panikos developed an interest in clinical data standardization and how technology can support clinical and operational roles. From there he moved to a product management role within the eCOA space where he further cultivated an interest in the use of connected devices within the clinical space and later transitioned to a DCT provider to support the evolution of hybrid and decentralised trials through his work with connected devices and data Platforms. Currently, Panikos is working to support and advance the use of Al within the clinical trials industry as part of Saama's industry leading team and technology.

Werngard Czechtizky, PhD



Werngard Czechtizky is Head of Medicinal Chemistry for Respiratory & Immunology at AstraZeneca. She has a track record of delivery of clinical candidates and lead compounds across several therapeutic areas (CV, Diabetes, Pain, CNS, Respiratory, Immunology). She implemented state of the art technologies into Medicinal Chemistry, e.g.ML/AI methods, New Modalities, automated synthesis and integrated physchem & eADME profiling workflows. Werngard serves on diverse scientific advisory boards and is co-/author of ca 90 publications and patents.

She has studied at the Technical University of Graz, Austria, received a PhD from ETH Zürich and a postdoctoral training at Harvard University. Before

joining AZ in 2017, she has been working at Aventis, then Sanofi at Frankfurt, Germany.

Joerg Degen, PhD



Joerg Degen is Global Head Early Development Informatics at Roche. He is an energetic leader driving data and analytics (D&A) in Pharma research and early development. Joerg has 10 years of experience as Data Science Lead and line manager of D&A Leads delivering impacts for portfolio projects. He is responsible for evolving strategic D&A capabilities across the organization and track record of delivering sustainable end-to-end solutions.

Joerg also has 15 years of experience in matrix leadership and line management across cultures and geographies. He is recognized for creative leadership and outstanding communication skills.

Joerg has an MSc in Chemistry and a PhD in Computer Science.

Ian Dix, PhD



lan Dix is Head of Enterprise Data Office and Data Services with Data and Al leadership experience across Research, Development, Finance, Commercial Strategy, Medical Affairs, HR, Legal, Compliance and M&A; 24 years of Pharmaceutical D&A experience (17 years in R&D, 7 years in Enabling, 2 years in Enterprise IT) building on 8 years of academic research experience (PhD in Virology). Ian leads a global team of over 200 data professionals providing Data Platform Services (Cataloguing, Master data, Data Management, Data Operations, Search, Knowledge graphs) and currently mobilizing an EDO capability spanning Data Governance and Information Architecture. Their mission is to transform how we deliver and support Data

delivery and compliance across all of AZ through the acceleration, consolidation and democratization of common services.

Previous to this role he led multiple enterprise D&A strategies for AZ, including the business cases for Finance, Digital Health, R&D's Data Foundation and supporting the 'Growth Through Innovation' Data Strategy for AZ. He also has a proven reputation building public private partnerships in the UK (EBI) and within Europe (IMI), having led multiple international, cross-pharma collaborations and partnerships in data and analytics.

Kristen Ferrara



Kristen Ferrara is currently Global Head of Scientific Informatics; R&D-Data, Digital, and Technology at Takeda. She has been with Takeda Pharmaceuticals for 20+ years at the Cambridge, Mass site.

During her tenure at Takeda she has traversed both the scientific and IT communities. Initially trained in Neurobiology, she engaged in the early 2000's boom of robotic automation in the labs and then followed the data into informatics.

In recent years, Kristen's leadership has been called upon to drive an R&D Transformation followed quickly by an R&D Integration which included

Merger & Acquisition responsibilities across the core global IT organization at Takeda.

Currently she is responsible for leading the global Scientific Informatics group at Takeda. The scientific Informatics team is partnering with the global Research and Pharmaceutical Science organizations on a data and digital transformation, driving for Labs of the Future, and digitaling R&D.

Mark Griffiths, PhD



<u>Mark Griffiths</u> holds a BSc(hons) and a PhD in Biochemistry and has more than 30 years of experience in the pharmaceutical industry, ranging from discovery and development to the clinical space. His experience ranges from statistical analysis and analytics to bioinformatics, Computational Biology, CPPM and AI.

Mark currently holds the position of Principle Data Scientist in the Global RAIDERS team at AbbVie which is charged with empowering the whole development and discovery pipeline with Al and related approaches.

Johanness Hulthe, MD, PhD, MBA



<u>Johannes Hulthe</u> is the CEO and Co-Founder of Antaros Medical. He is a physician/scientist, pharmaceutical executive with a business degree and more than 16 years' experience in the pharmaceutical industry, coupled with a proven track record in drug development and its interfaces with commercial and drug discovery.

Johannes has expertise and experience in all stages of R&D, from conception of ideas and target identification/validation, pre-clinical development, translational medicine and biomarker development, early clinical development and proof of concept as well as late clinical development, regulatory approval and life cycle management.

He has a strong scientific background in the areas of atherosclerosis, dyslipidemia, metabolism, diabetes and imaging with more than 80 papers published in peer-reviewed journals. His specialties include Translational Medicine, large clinical outcome studies, atherosclerosis, diabetes, and dyslipidemia.

Aamir Jaka



<u>Aamir Jaka</u> is Vice President of Saama's Life Science Strategy and Solutions team which is focused on solving challenges in the life science space using Saama technologies.

Aamir has over 20 years of experience in technology, consulting and software organizations working to solve complex business challenges with technology-enabled, data-driven business insights.

He joined Saama as part of the company's 2019 merger with Comprehend Systems, Inc., where he led the Professional Services and Customer Success

teams. Prior to Comprehend, Aamir was Director, Professional Services–Business Intelligence & Integration at Workday.

Lars Johansson



Lars Johansson is Chief Scientific Officer at Antaros Medical and a PhD in translational imaging and Associate Professor of Radiology from Uppsala University, Sweden. He has published several book chapters and over 170 peer reviewed articles in the field of Imaging with a focus on Cardiorenal and Metabolic imaging and has over 25 years background from medical and pharma industry.

Before founding Antaros Medical in 2014, he held several positions and in the end as Senior Principal Scientist at AstraZeneca, leading clinical imaging activities in the Cardiorenal and Metabolism field between 2004-2014. In

parallel to this he held a position as senior lecturer at Uppsala University being PI and co-PI on several grans from EASD, JDRF, NIH and EU. Lars Johansson is currently in his role at Antaros Medical involved in five EU consortia in the field of imaging in Non-Alcoholic Statohepatitis (NASH), Chronic Kidney Disease (CKD) and Imaging of Immune Cells and overseeing the imaging part in over 30 ongoing clinical imaging trials.

Amrik Mahal



<u>Dr. Amrik Mahal</u> is the Global 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. He is currently on secondment in Gothenburg where he is the also Head of IT – Sweden, a member of the Site Leadership Team and works with the AZ Bioventure Incubator Hub.

Dr. Mahal is a versatile leader working on the intersection of life sciences and technology to serve the unmet needs of patients. Extensive experience in building and leading diverse and engaged teams to support pharmaceutical R&D. Multiple years of experience working in pharmaceutical research (Glaxo

Wellcome, Oxford Asymmetry, Evotec) and academic career in the life sciences. Experienced global leader with proven ability to identify strategic initiatives, align stakeholders, scaling innovation and deliver solutions on time and on budget.

Respected thought leader and speaker at national and international conferences and sits on Pharmaceutical R&D Information Systems Management Executive (PRISME) Forum the de facto R&D IT leadership group of the global biopharmaceutical industry.

Hebe Middlemiss, MS



Hebe Middlemiss leads the R&D AI strategy at AstraZeneca. She previously led the Knowledge Graph department at Benevolent AI and has experience at other biotech startups including Huma. She has a background in Epidemiology and Data Science. She has multiple years' experience in developing long term strategies, maturing complex products and platforms, leading multiple teams, and line management.

Hebe holds a Master's degree from Imperial College London and an undergraduate degree from Oxford University focusing on public health, neuroscience research, and epidemiology.

Nikola Milosevic, PhD



<u>Nikola Milosevic</u> has BSc and MSc degrees in computer science from the University of Belgrade and PhD degree in computer science (in natural language processing) from the University of Manchester, where his PhD was co-founded by AstraZeneca. After finishing 2 postdocs, he joined Bayer Pharma R&D in 2020.

He is currently Data Science Manager and his work focuses on building systems for natural language processing, training NLP models for entity identification, relationship extraction and lately he spearheads internal efforts in large language models. He is quite engaged with open-source communities,

as he was OWASP local chapter and project leaders, and most of his research can be found as open source. His research interests include biomedical named entity recognition, summarization, coding, fact checking, and question answering.

Georg Mogk, PhD



<u>Georg Mogk</u> is Principal Expert Applied Mathematics at Bayer AG in Leverkusen, Germany.

He is a Senior Bayer Science Fellow. Georg has worked in the chemical and pharmaceutical industry (Hoechst AG, Covestro, Bayer) for over 25 years in various roles. His current work focuses on the application of machine learning and statistics in chemical research.

Georg holds a PhD in Mathematics from the University of Giessen.

Birthe Nielsen, PhD



<u>Birthe Nielsen</u> is working with the <u>Pistoia Alliance</u>, where she manages precompetitive collaborations within Life Science R&D.

She has an MSc in Biotechnology from Aalborg University (Denmark), an industry-funded PhD (GSK) from Portsmouth University (UK), and 14 years of experience at University of Greenwich (UK) working in the field of Analytical Sciences.

Birthe is based in London, UK.

Jose Sanchez



<u>Jose Sanchez</u> is CTO at Albus Health and an experienced technology leader with a track record in growing digital ventures, including medical devices with international reach, disrupting autonomous vehicles and AI/ML powered global e-commerce platforms.

Mehmed Sariyildiz



<u>Mehmed Sariyildiz</u> is a data scientist with experience in the pharmaceutical industry. He specializes in information extraction, data analysis, and forecasting.

Mehmed has worked on a range of projects, including extracting information from clinical trial documentation, identifying adverse events, evaluating post-dose reactions, and developing forecasts for clinical supply and demand, shipments, enrolment, and sales. He also has expertise in question-answering and semantic search, providing scientists with relevant information from literature.

Mehmed's expertise in language modeling has enabled him to contribute to a novel approach in the discovery of new molecules. He is enthusiastic about leveraging language models to foster innovation in the pharmaceutical industry.

Artur Saudabayev, MS



<u>Artur Saudabayev</u> is the Co-Founder & CTO of <u>Causaly</u>, a leading AI life sciences company. With a background in computer science, machine learning, and bioinformatics, he has architected the core AI technologies since the company's foundation in 2018.

Before Causaly, Artur worked for 7 years in academia on machine learning applications for vision and language problems in Robotics.

He holds a Master's degree in computer science from the University of Edinburgh and a Bachelor's degree from the University of Dublin.

James Snowden



<u>James Snowden</u> is Data & Analytics Lead, NBE Platform (Senior Principal Scientist) at UCB, a dedicated, hard-working individual with 20 years industrial experience at the interface of antibody therapeutic research and Data Science. James has a deep understanding of both domains and how they should interface to deliver world class therapeutic with a proven track record in this area.

James holds a MRes degree in bioinformatics from the University of York.

Susie Stephens, PhD



<u>Susie Stephens</u> is a strategic leader in the pharmaceutical industry with over two decades of experience in informatics, science, and technology. She is currently Corporate Vice President at Novo Nordisk for Data Management and Informatics in Research & Early Development.

Prior to that she was at Pfizer where she had roles as Head of Data & Analytics Architecture across the enterprise, and Senior Director, R&D IT for Oncology and Vaccines.

She has also worked for Johnson & Johson where she was responsible for exploratory data analysis from disease understanding to Phase IV in the immunology therapeutic area. She has also worked at Oracle and Sun Microsystems where she had roles spanning pre-sales, product management and market segment management.

Susie has a PhD in Physiology; post-doctoral experience in Molecular Biology; and is an alumnus of Harvard Business School. Susie has over 20 peer reviewed papers and has presented at many industry conferences on data, advanced analytics, precision medicine, and innovation. She has Chaired two World Wide Web Consortium (W3C) Interest Groups on semantic technologies and was the founding Chair of the PRISME Forum (a pre-competitive consortium for leaders in R&D IT).

Michael Tarselli, PhD, MBA



Chief Scientific & Knowledge Officer of TetraScience, Mike Tarselli, explores the Tetra Scientific Data Cloud™ through knowledge capture, GxP compliance, and use case research. Previously, Mike was the Scientific Director for SLAS, a global professional society dedicated to lab automation and an Associate Director at Novartis building an external scientific collaboration platform.

Mike received his PhD from UNC Chapel Hill, completed postdoctoral work at Scripps Research, and his MBA through Quantic School of Business & Technology.

Mike Sullivan



<u>Mike Sullivan</u> is an Information Technology Executive with more than 25 years of experience with global, multi-national companies. Mike is a seasoned leader with a deep understanding of how technology adds value across the drug development life cycle and a strong track record of building crossfunctional teams to deliver strategic capabilities across complex ecosystems.

Mike is currently responsible for driving the strategic partnership between IT and Global Development Operations at Bristol Myers Squibb. Mike earned his MBA from Northeastern University with a dual concentration in High Technology and Innovations Entrepreneurship and a Bachelor of Science in Information Systems Analysis & Development from Drexel University.