



# 2024 Fall Allotrope Connect

**Dates:** Tuesday, Nov 19 – Wednesday, Nov 20, 2024

**Location:** Boston Long Wharf Marriott  
296 State St  
Boston, MA 02109  
USA



**Updated Details:** <https://www.allotrope.org/2024-fall-allotrope-connect>

The Allotrope Connect Workshop brings together Allotrope members and the broader Chemical & Pharmaceutical/Life Sciences scientific community to revolutionize and discuss the way we acquire, share and gain insights from scientific data within organizations by improving standardization of data and its interpretation across the analytical laboratory and manufacturing operations.

With 70 data models, and growing, Allotrope is leading the way in data standardization, thereby allowing quicker access to insights within data.





## Day 1: Tuesday, Nov-19-2024

- 8:00-9:00**    **Breakfast & Registration**
- 9:00-9:15**    **Welcome**  
(Janet Cheetham, Chair Allotrope Foundation)
- 9:15-9:45**    **Opening Keynote by Thermo Fisher:**  
**Working Together for Shared Success: The Thermo Fisher View of Digital Ecosystem**  
(Richard Milne, Thermo Fisher Scientific)
- 9:45-10:30**    **Electronic Laboratory Notebook (ELN) Data Archiving Enabled by ASM Format**  
(Sreeni Yetukuri, Christian Del Valle, Merck and Co, Inc and Spencer Gardiner, ZONTAL)
- 10:30-10:45**    **Morning Break**
- 10:45-11:15**    **Discoverable Data and the Ontologies That Facilitate Them**  
(Kirsten Gesenberg, Biovia)
- 11:15-12:15**    **Discussion: Shaping the Future of ELNs: How Allotrope Can Drive Digital Lab Integration to Enhance ELN Effectiveness**  
(Moderator: Vinny Antonucci, Allotrope Foundation Community)
- 12:15-1:00**    **Lunch**
- 1:00-1:30**    **ASM Connectors for Automating Instrument Data Capture & Analytics**  
(Nick Floeck and Milton Yu, Benchling)
- 1:30-2:00**    **Converting any data to Allotrope via a Validation approach**  
(Nathan Clark, Ganymede)
- 2:00-2:30**    **How Agilent will use Allotrope Data Format to improve Laboratory Efficiency?**  
(Tony Kappen, Agilent)
- 2:30-3:00**    **Enabling Automated End-to-End Chromatographic Data Workflows and Accelerated Data Insights with the Allotrope Simple Model (ASM) Vendor-Neutral Data Format**  
(Chris Siegler, Merck and Co., Inc)
- 3:00-3:15**    **Break**
- 3:15-3:45**    **Demonstration: ADF and ASM with OpenChrom**  
(Matthias Mailänder, Lablicate)
- 3:45-4:15**    **Advancing Data Standardization with Open Source Converters**  
**The Allotropy Open-Source Library for Instrument Data Conversion into ASM**  
(Vinny Antonucci, Merck and Nick Floeck, Nathan Stender, Benchling)
- 4:15-5:00**    **Data Standards for AI/ML: Data for Machine Learning Models**  
(Kashef Qaadri, Bio-Rad)
- 5:00-5:15**    **Allotrope Working Groups, Release and Product Update**  
(Ben Woolford-Lim, Allotrope Product Team)
- 5:15-5:30**    **Closing remarks, day one & next day**  
(Vinny Antonucci, Vice Chair Allotrope Foundation)
- 5:30-7:00**    **Open Reception**



## Day 2: Wednesday, Nov-20-2024

- 8:00-9:00**     **Breakfast & Registration**
- 9:00-9:15**     **Opening remarks, day two**  
(Vinny Antonucci, Vice Chair Allotrope Foundation)
- 9:15-9:45**     **Keynote by Thermo Fisher: Navigating Data Challenges and the Pace of Change**  
(Ryan Snyder, Thermo Fisher Scientific)
- 9:45-10:15**    **Digital Science: Scaling from Pilot to Production Through Orchestrated Collaboration**  
(Bill Goodman, Thermo Fisher Scientific)
- 10:15-10:30**   **Morning Break**
- 10:30-11:00**   **Instrument Integration to Knowledge Graph Development journey - To enable seamless flow of data in Laboratory Space with Allotrope**  
(Sai Guttikonda, Merck and Co., Inc)
- 11:00-11:30**   **Transforming Lab Connectivity to Leverage Data Value**  
(David Levy, Scitara)
- 11:30-12:00**   **Streamlining Analytical Method Validation for ICH Compliance with ASM, eCTD Submissions, GAMP5 Qualification, and Standardized Data Integration**  
(Dr. Susanne Bauerschmidt, PharmaLex GmbH)
- 12:00-12:30**   **From Electronic Document to Executable Method: USP's Journey to Digitalizing the USP NF**  
(Dr. Christof Gaenzler, ZONTAL and Kyle Larsen, USP)
- 12:30-1:15**     **Lunch**
- 1:15-1:45**     **Allotrope Simplified Model Automatic Creation**  
(Taylor Janoe, Jon Adams, Mark Spears, Virscidian)
- 1:45-2:15**     **Ardia Platform: an open ecosystem for chromatography and mass spectrometry**  
(Stephane Houel, Thermo Fisher Scientific)
- 2:15-2:30**     **Break**
- 2:30-4:15**     **Partnering to Create an Open Ecosystem for Innovations:**  
- Move to Allotrope Business Model 3.0  
- Allotrope Technology Strategy  
- Targeted Allotrope Collaborations, including recorded Pistoia Alliance message  
(Moderated by Janet Cheetham, Chair Allotrope Foundation, and Allotrope Product Team)
- 4:15-4:30**     **Closing remarks & next steps**  
(Janet Cheetham, Chair Allotrope Foundation)



## Day 1 Presentations, Discussions and Demonstrations

9:00-9:15

**Welcome**

**(Janet Cheetham, Chair Allotrope Foundation)**

- **Janet Cheetham**; Chair of Allotrope Foundation

9:15-9:45

**Opening Keynote by Thermo Fisher:**

**Working Together for Shared Success: The Thermo Fisher View of Digital Ecosystem  
(Richard Milne, Thermo Fisher Scientific)**

The Lab of the Future requires coordination and alignment between users, vendors, regulators, and scientists. The need to have an orchestrated workflows in a heterogeneous laboratory environment with automation and scale, will enhance the scientific experience. Will you join Thermo Fisher on the journey to realize an industry changing ecosystem?

- **Richard Milne**; VP and GM, Digital Scientific Solutions  
Richard Milne is the Vice President and General Manager of Digital Science Solutions at Thermo Fisher. He has worked in the laboratory Enterprise software space for 10 years with experience in Strategy and Vision setting, Product Management, Market Development and New Product Introduction. Prior to taking up his role as General Manager, Richard was responsible for the launch and development of the Global eCommerce Channel for Thermo Fisher, with responsibility for thermofisher.com and fishersci.com.

9:45-10:30

**Electronic Laboratory Notebook (ELN) Data Archiving Enabled by ASM Format.**

**(Sreeni Yetukuri, Christian Del Valle, Merck and Co, Inc and Spencer Gardiner, ZONTAL)**

The electronic notebook (ELN) has been the centerpiece of digital experiment documentation for over 20 years, but many of these initial technology products have become dated and are being replaced by more modern, cloud-based solutions. This presents a tremendous opportunity to reimagine the modern ELN in terms of how data are captured, consistently contextualized and structured, and consumed in increasingly data-centric ecosystems with increasingly and data-savvy scientists. Additionally, it creates an important responsibility to archive the many years and terabytes of legacy data contained in the outgoing ELN in ways that meet intellectual property and compliance obligations, as well as ensure the data are preserved in a FAIR (Findable, Accessible, Interoperable, and Reusable) manner such that they continue to add value to future analytics, modeling, and predictive workflows. This presentation will describe a collaboration to develop a draft ASM model for structuring ELN data, which was subsequently applied in the ZONTAL platform to create a solution to archive >30 TB of heterogeneous legacy ELN data into a consistent and simplified representation. This draft ELN ASM model to support archiving use cases is currently being used as the basis to develop the Allotrope ASM model which is targeted for release next quarter.

- **Sreeni Yetukuri**; Associate Director, Merck & Co., Inc  
Sreeni has over 25 years of experience at Merck, primarily within the MRL (Merck Research Laboratories) division. As the technical owner of the Electronic Lab Notebook (ELN) for more than a decade, Sreeni has played a pivotal role in advancing laboratory technologies. Currently,



he is leading efforts in ELN data archival, ensuring efficient data management and compliance within the organization.

- **Spencer Gardiner**; Data Scientist, ZONTAL

Spencer based in Provo, Utah. He works for ZONTAL as a Data Scientist and is pursuing a PhD in Computer Science at Brigham Young University. In his free time he enjoys snowboarding and hiking with his family.

**10:45-11:15 Discoverable Data and the Ontologies That Facilitate Them  
(Kirsten Gesenberg, Biovia)**

Is it possible to create one ontology to describe any laboratory procedure (and related objects) from early research to Tech transfer? In this talk we will discuss the complexities and challenges of this approach from the perspective of a Laboratory Software vendor.

- **Kirsten Gesenberg**; R&D Portfolio Management Director, BIOVIA Laboratory  
Kirsten Gesenberg is the Portfolio lead for the BIOVIA Laboratory suite of products. She has been with Dassault Systems for 18 years, first in Professional Services, implementing BIOVIA Workbook across the pharmaceutical industry and now leading the Product Management organization in the Laboratory and ELN space. Kirsten is passionate about shining a light on dark data while keeping the BIOVIA applications user-focused and intuitive.

**11:15-12:15 Discussion: Shaping the Future of ELNs: How Allotrope Can Drive Digital Lab Integration to Enhance ELN Effectiveness  
(Moderator: Vinny Antonucci, Allotrope Foundation Community)**

- **Vinny Antonucci**; Vice Chair Allotrope Foundation

**1:00-1:30 ASM Connectors for Automating Instrument Data Capture & Analytics  
(Nick Floeck and Milton Yu, Benchling)**

In this session, Benchling will provide an overview of how Allotrope data models are being used by customers to automate instrument data capture, analytics & AI/ML to accelerate wet & dry lab workflows.

- **Nick Floeck**; Head of Automation & Analytics  
Nick Floeck is head of product management for Benchling Automation & Analytics. He has over products & services 15 years experience developing & bringing to market SaaS data management, analytics & AI/ML

**1:30-2:00 Converting any data to Allotrope via a Validation approach  
(Nathan Clark, Ganymede)**

Ganymede implements the Allotrope Simple Models (ASM) as a series of Validators built in the framework Pandera to test if a schema conforms to ASM. This allows rapid and flexible mapping of any dataset into Allotrope and easy enrichment. More generally, we believe that a flexible approach that treats data standards as an exercise of mapping data into a format, rather than locking data to that format, allows for capturing the full richness of multimodal lab data.



- **Nathan Clark**; Founder & CEO

Nathan Clark is the founder and CEO of Ganymede, the modern data platform and cloud infrastructure for science.

**2:00-2:30**

### **How Agilent will use Allotrope Data Format to improve Laboratory Efficiency?**

**(Tony Kappen, Agilent)**

Scientific organizations want to increase their laboratory productivity by digitalizing all aspects of the laboratory and facilitating the use of AI/ML. The Digital Labs Innovations Team at Agilent will present our ongoing activities to help customers to achieve this goal. Whether the laboratory is operated by humans or robots, Agilent believes that an Open Data Ecosystem with a high level of automation is the key to achieving this goal. Technology Neutral Formats (TNFs) for enhancing data portability are critical to success. Agilent will present case studies where our customers are already benefiting using ASM for data portability. Agilent will go through how the organization uses an opensource framework for orchestration, instrument abstraction, instrument control, and data management.

- **Tony Kappen**; Solutions Manager - Data working for the Digital Lab Innovations Team at Agilent Technologies

Tony Kappen is a Solutions Manager - Data working for the Digital Lab Innovations Team at Agilent Technologies. He has more than 10 years of experience in the tech industry. Tony started his career as a software engineer and is currently overseeing product strategy and solution implementation at Agilent.

**2:30-3:00**

### **Enabling Automated End-to-End Chromatographic Data Workflows and Accelerated Data Insights with the Allotrope Simple Model (ASM) Vendor-Neutral Data Format**

**(Chris Siegler, Merck and Co., Inc)**

Today's life sciences R&D laboratory generates vast amounts of diverse data that is acquired with heterogeneous hardware and software solutions supplied by various vendors. The drive towards lab digitization and cloud has made it possible to store these data relatively easily and inexpensively. However, the heterogeneity in vendor data formats and the need to aggregate data from multiple source locations (instrument PCs, fileshares, databases, etc.) makes creating data pipelines to move the data to the cloud challenging. The inconsistent quality of data (context and structure) makes it difficult for scientists to find, access, connect, and consume the data throughout its lifecycle which limits the value of the data. As a result, many scientists today spend significant amounts of time manually transferring and curating data for routine daily uses and as input into advanced modeling and prediction workflows. To address this important problem that extends the timeline to make critical data insights in the life sciences, a vendor-agnostic data standard format called the Allotrope Simple Model (ASM) was applied to an end-to-end laboratory workflow centered around chromatographic data analysis as an example. The ASM format structures chromatographic data from any vendor's software in a standardized JSON format that leverages standardized ontologies to create consistent context. This presentation will demonstrate how ASM standardization of chromatographic data simplifies and improves the scalability of operational activities (data movement, data transformation, data storage, and data integration) and creates transformative opportunities for more on demand data consumption (visualizations, dashboards, secondary data processing, and feed AI/ML pipelines).





- **W. Christopher Siegler;** Product Manager in the Data Movement and Storage product within MRL IT

Chris joined Merck in 2023 as a product manager in the Data Movement and Storage product within MRL IT. In his role, he is responsible for Merck's global chromatography data systems and SDMS tools and leads the team who is implementing the enterprise data harmonization and standardization platforms and consumption pipelines for more efficient end-to-end workflows. After receiving his Ph.D. in Analytical Chemistry from Prof. Robert Synovec's group at the University of Washington in 2011, Chris worked for 12 years at Dow Chemical where he developed novel analytical chromatography solutions to support manufacturing and research and development needs and led a modernization of Dow R&D to a global Cloud-based CDS architecture

### 3:15-3:45 **Demonstration: ADF and ASM with OpenChrom (Matthias Mailänder, Lablicate)**

OpenChrom is the flagship product of Lablicate GmbH providing data analysis workflows ranging from chromatography, spectrometry and even molecular biology. A commercial plugin allows importing and exporting ADF and ASM files, as well as generic editors that can visualize any Allotrope data format. With OpenChrom's capability of supporting numerous proprietary vendor formats, this opens up the path for many instruments that have yet native support for Allotrope formats.

- **Matthias Mailänder;** Software Engineer at Lablicate GmbH. Matthias Mailänder is a food chemist who works as a software engineer at Lablicate GmbH in Hamburg working on OpenChrom a multi-vendor chromatography data system. He is a strong advocate of Open Source software and FAIR data.

### 3:45-4:15 **Advancing Data Standardization: The Allotropy Open-Source Library for Instrument Data Conversion into ASM (Vinny Antonucci, Merck & Co., Inc and Nick Floeck, Nathan Stender, Benchling)**

Developed by Benchling, the Allotropy open-source library streamlines the conversion of instrument data into the Allotrope Simple Model (ASM) by transforming text and Excel outputs into JSON formats compatible with the ASM schema. Merck opens this presentation, emphasizing the significance of open-source tools like Allotropy in promoting data standardization and interoperability. Benchling follows with a demonstration of the library's connectors, illustrating both the impact and ease of community contributions to support seamless data integration across laboratories.

- **Vinny Antonucci;** Technology Product Line Lead at Merck & Co. Vinny has over 30 years experience at Merck & Co. as a scientific, regulatory, and technology product leader and with multiple pre-competitive consortia, all with a single goal to foster collaboration across interfaces that help drive science. Vinny is also the current Vice Chair of Allotrope Foundation.
- **Nick Floeck;** Head of Automation & Analytics at Benchling Nick Floeck is head of product management for Benchling Automation & Analytics. He has over 15 years experience developing & bringing to market SaaS data management, analytics & AI/ML products & services.
- **Nathan Stender;** Architect - Automation & analytics at Benchling



Nathan Stender is a software engineer at Benchling, overseeing the development of Benchling Connect and the allotropy project. He has 9 years of industry experience (Google, Cruise, Benchling), specializing in high-throughput data pipelines. Outside of work Nate spends his time hiking with his wife and dog, playing board games, and doing endless home improvement projects.

**4:15-5:00 Data Standards for AI/ML: Data for Machine Learning Models  
(Kashef Qaadri, Bio-Rad)**

This interactive discussion will explore the importance of data standards and the process of making data machine-ready for AI/ML models. We will address key needs such as data quality, consistency, and accessibility, along with challenges in managing both structured and unstructured data and overseeing egress.

- **Kashef Qaadri**; Director, Global Marketing – Software  
Kashef Qaadri is a biologist turned bioinformatician. He currently works at Bio-Rad Laboratories, where he leads Software Strategy. As an experienced executive, Qaadri has held multiple leadership roles in business development, commercial operations, strategic planning, and product development at several bioinformatics companies including QIAGEN's Ingenuity Systems, Biomatters, One Codex, and Benchling. He studied Molecular Genetics and Healthcare Management. Qaadri enjoys tennis, running, and being a self-proclaimed coffee aficionado. Host of BioRad.io Podcast, focusing on Research Informatics.

**5:00-5:15 Allotrope Working Groups, Release and Product Update  
(Ben Woolford-Lim, Allotrope Product Team)**

This update presents the latest activity and developments across the Allotrope Working Groups (Modeling, Chromatography, Mass Spectrometry, Plate Reader, Flow Cytometry and ELN), highlights key releases, the supporting DevOps infrastructure to streamline the ontology and development lifecycle, and provides updates on product enhancements.

- **Ben Woolford-Lim**; Senior Developer at Allotrope Foundation, Allotrope Product Team.  
Ben is a technical expert in all things Allotrope, from the original Allotrope Data Format APIs, to the Allotrope Foundation Ontologies, and the current generation of Allotrope Simple Model schemas and patterns. He joined the Foundation as Senior Developer in 2020, working with Allotrope prior to that as a GSK representative since 2016. His expertise is in software engineering and semantics, with a background in math, physics, and computer science.

**5:15-5:30 Closing remarks, day one & next day  
(Vinny Antonucci, Vice Chair Allotrope Foundation)**

- **Vinny Antonucci**; Vice Chair Allotrope Foundation





## Day 2 Presentations, Discussions and Demonstrations

- 9:00-9:15**      **Opening remarks, day two**  
**(Vinny Antonucci, Vice Chair Allotrope Foundation)**
- **Vinny Antonucci**; Vice Chair Allotrope Foundation
- 9:15-9:45**      **Keynote by ThermoFisher: Navigating Data Challenges and the Pace of Change**  
**(Ryan Snyder, ThermoFisher Scientific)**
- Navigating data challenges and the rapid pace of change is a common thread impacting both Thermo Fisher Scientific and their customers. Thermo Fisher is uniquely positioned to build the connected platforms that will make up the lab of the future and mitigate many of the challenges labs are facing today. Together, vendors, industry, regulators, and users can tackle some of science's largest problems.
- **Ryan Snyder**; Senior Vice President and Chief Information Officer  
Ryan has led Information Technology and Digital for Thermo Fisher Scientific since 2019. Prior to becoming CIO, he served as Vice President, IT, for our customer channels and pharmaceutical services businesses. He also led IT for enterprise efforts in quality and regulatory. Ryan joined Thermo Fisher in 2014 through the acquisition of Life Technologies, where he served in several IT leadership roles including leading commercial, eBusiness and digital IT teams. Passionate about the intersection of IT, digital innovation and science, Ryan leads a global team supporting Thermo Fisher's mission to enable our customers to make the world healthier, cleaner and safer.
- 9:45-10:15**      **Digital Science: Scaling from Pilot to Production Through Orchestrated Collaboration**  
**(Bill Goodman, ThermoFisher Scientific)**
- In this presentation we will explore the how Thermo Fisher Scientific is leveraging platform components and collaboration to realize value in digital transformation initiatives. This session will discuss the importance of broad collaboration across user personas and vendors. Attendees will gain insights into best practices for fostering innovation, maintaining alignment with strategic goals, and leveraging collaboration to enhance productivity and drive scientific advancements.
- **Bill Goodman**; Senior Director, Product Management, Digital Science  
William Goodman is a seasoned product management executive with extensive experience in leading teams and driving strategic visions in the across scientifically focused industries. Currently serving as Senior Director of Product Management at Thermo Fisher Scientific, he oversees product management, data science, and solutions engineering teams, focusing on LIMS and cloud platforms.
- 10:30-11:00**      **Instrument Integration to Knowledge Graph Development journey - To enable seamless flow of data in Laboratory Space with Allotrope**  
**(Sai Guttikonda, Merck and Co., Inc)**
- Instrument integration is a crucial step in streamlining the operability of laboratory spaces, enhancing their efficiency, and promoting a seamless flow of data. This present talk titled "Instrument Integration to Knowledge Graph Development journey - To enable seamless flow



of data in Laboratory Space with Allotrope," guides through the journey of instrument integration to the development of knowledge graphs, focusing primarily on the role of Allotrope, a standardized data framework in the scientific lab space.

- **Sai Guttikonda;** Sr. Splst , Technical Product Management, DI Lab

Sai Guttikonda is Sr. Specialist at Merck for the past 3+ years, He has used his expertise to manage complex integrations and testing and deployment of digital solutions in Laboratory Space while ensuring regulatory compliance with industry standards. Sai holds a Master of Applied Science in Industrial Life Science from Missouri Western State University and a Bachelor of Science in Microbiology, Genetics, and Chemistry.

**11:00-11:30 Transforming Lab Connectivity to Leverage Data Value  
(David Levy, Scitara)**

This presentation will explore a strategy to unlock the potential and value of data that is scalable building on a commercial connectivity framework. The role of ASM will be discussed in the process of data value extraction. We will also discuss the impact of AI as a positively disruptive tool for the lab.

- **David Levy;** VP Strategy, Scitara

Dave has 30 years of product and global account management experience at Waters, NuGenesis, CambridgeSoft and PerkinElmer. He has introduced several game-changing products to market. Companies continue to struggle extracting real value from data at scale.

**11:30-12:00 Streamlining Analytical Method Validation for ICH Compliance with ASM, eCTD Submissions, GAMP5 Qualification, and Standardized Data Integration  
(Dr. Susanne Bauerschmidt, PharmaLex GmbH)**

Analytical method development is an important aspect of CMC activities, and the validation of the measurement system is a regulatory requirement. Pre-qualification can be used during development to ensure the performance metrics are optimized. PharmaLex has developed statistical methods that evaluate whether analytical methods are fit for their intended purpose, e.g., confirming that parameters of drug products fall within their specification range. A qualified validation report in line with ICH Q2(R2) is automatically created and can directly be used for submission purposes under the eCTD format. We have created a platform that enables evaluating such data in a GAMP5 qualified environment. Further, having a standardized format such as the one provided by Allotrope Foundation ensures that this approach can be used across different measurement systems and different laboratories. One of the challenges is retrieving data from diverse sources in an appropriate format. We will demonstrate, how we envision integration with data from internal sources through the ASM format.

- **Dr. Susanne Bauerschmidt;** Head of Scientific Data Insights

Dr. Susanne Bauerschmidt is Head of Scientific Data Insights at Pharmalex. She holds a PhD in chemistry and has over 20 years' experience in R&D informatics projects in the pharmaceutical and life science industry.

**12:00-12:30 From Electronic Document to Executable Method: USP's Journey to Digitalizing the USP NF  
(Dr. Christof Gaenzler, ZONTAL and Kyle Larsen, USP)**

USP Monographs represent the most comprehensive source of global medicine quality standards, outlining methods for evaluating identity, strength, purity, and performance. In



alignment with its digital transformation strategy, USP is utilizing ZONTAL's natural language processing capabilities to convert these monographs into executable digital formats. This initiative integrates with ZONTAL's Methods Hub, facilitating the seamless exchange of analytical methods and results across various chromatography data systems. ZONTAL generates and stores methods in ASM format, thereby transforming traditional paper documents into actionable digital instructions. And it transmits these methods to instruments and collects results, consolidating all data within a FAIR and vendor-neutral platform.

- **Dr. Christof Gaenzler;** PreSales and Product Marketing ZONTAL

Dr. Gaenzler holds a Doctorate in Molecular Biology from the University of Heidelberg and contributed to the development of the first HPV vaccines during his time at the German Cancer Center. Outside of academia Dr. Gaenzler served as Senior Consultant and PreSales Manager at TIBCO Spotfire, and as Senior Principal Product Marketing Manager Biology at PerkinElmer Informatics. Currently, Dr. Gaenzler brings his expertise to ZONTAL as the Director of PreSales and Product Marketing.

- **Kyle Larsen;** Senior Product Manager, Digital & Innovation, Translational Informatics  
Kyle Larsen is currently a Senior Product Manager within USP's Digital and Innovation Team. He has over 30 years of industry experience, having spent over 25 years as a key part of the Waters Global Informatics Team. In that role, he was responsible for strategic consulting and decision-making activities with many global pharmaceutical companies. Since joining USP, he has been working to enable Compendial Content in the digital space. In his spare time, Kyle enjoys travel and SCUBA diving.

1:15-1:45

### **Allotrope Simplified Model Automatic Creation (Taylor Janoe, Jon Adams, Mark Spears, Virscidian)**

Going from raw instrument data to the allotrope simplified model can be a challenge. We want to present how we were able to not only take the original data and create an output but also keep it in the context of a given workflow in an automated fashion.

- **Taylor Janoe;** Software Engineer

Taylor Janoe is a developer who works with integrating our services with customers and other vendors.

- **Jon Adams;** Developer for Sample Management Services

Jon Adams is the primary developer for Sample Management Services

- **Mark Spears;** Senior Scientist

Mark Spears is a senior scientist with a PhD in analytical chemistry

1:45-2:15

### **Ardia Platform: an open ecosystem for chromatography and mass spectrometry (Stephane Houel, Thermo Fisher Scientific)**

The Ardia Platform is an advanced software solution designed to meet the evolving needs of scientists performing chromatography and mass spectrometry analysis. Utilizing the latest advancements in software architecture and technology, Ardia offers core applications including a data explorer, data viewer, and an instrument management application, all designed to streamline and enhance the analytical workflow and laboratory management activities. These allow users to gain valuable insights into instrument utilization and optimize their workflows. Additionally, Ardia is dedicated to fostering an open platform where API development plays a crucial role in the platform's overall evolution. This journey has begun with the successful



integration of Skyline. The development of a robust data catalog and a rich metadata ecosystem is currently in progress, adhering to FAIR data principles.

- **Stephane Houel**; Senior Manager, Product Management, Chromatography and Mass Spectrometry Division

Stephane Houel currently serves as a Senior Manager in Product Management for the Chromatography and Mass Spectrometry Division at Thermo Fisher Scientific. With a comprehensive background and robust expertise in mass spectrometry, product management, and biopharmaceutical applications, Stephane has made significant contributions to the field.

**2:30-4:15**

**Partnering to Create an Open Ecosystem for Innovations:**

- **Move to Allotrope Business Model 3.0**
  - **Allotrope Technology Strategy**
  - **Targeted Allotrope Collaborations, including recorded Pistoia Alliance message**
- (Moderated by Janet Cheetham, Chair Allotrope Foundation, and Allotrope Product Team)**

- **Janet Cheetham**; Chair of Allotrope Foundation.

**4:15-4:30**

**Closing remarks & next steps**

**(Janet Cheetham, Chair Allotrope Foundation)**

- **Janet Cheetham**; Chair of Allotrope Foundation