

Pharmaceutical Knowledge Management for Accelerated R&D

New York

December 4-6, 2002



Facilitate the knowledge infrastructure and collaboration that maximizes ROI.

"Leverage collaborative

KNOWLEDGE distribution

to ensure

intelligent

drug discovery and design."

Participation from Premier Industry Leaders:

David Balaban, Informatics
Signature BioScience

Nigel R A Beeley, Vice President and Chief Chemical Officer
Arena Pharmaceuticals, Inc.

David J. Eiben, Project Manager, Collaborative Systems and Technology
Boehringer Ingelheim

Dan Greenwood, Associate Director Knowledge Management
Boehringer Ingelheim

Susan Hanley, Practice Executive
Dell/Plural Professional Services

Andrea Hornett, Associate Professor
The Pennsylvania State University

Joe Horvath, Director, Knowledge Management
Millennium Pharmaceuticals

Bradford Kirkman-Liff, Professor, College of Business
Arizona State University

Karen Lyons, Community Consulting Services Lead,
Knowledge Integration Resources
BMS

Rich Lysakowski, Executive Director
Collaborative Electronic Notebook Systems Association

Mara Matsumara, Manager, Library and Information Services
Cell Genesys

Victor Newman, Chief Learning Officer
Pfizer Research University

Hitomi Ohkawa, Research Leader, Information Architecture Group,
Bioinformatics/Genomics/Genetics Section
Roche Discovery Technologies

Mark Osborne, Senior Manager
Millennium Pharmaceuticals

Ulo Palm, MD, MBA, Director Clinical Data Management Strategies
Shering-Plough Research Institute

Josh Plaskoff, Head of Knowledge Management
Eli Lilly

Cheryl Schairer, Manager, Library Services
Vertex Pharmaceuticals

Steven Sorenson, Ph.D., Head of Knowledge Management Systems, DI&A
Aventis Pharmaceuticals, Inc.

Roman Z. Sterzycki, Ph.D., Senior Manager, R&D Process,
Discovery Chemistry
BMS

Bob Sweet, Director of R&D
Eli Lilly

Susan Ward, Executive Vice President
Infinity Pharmaceuticals

Molly Wasserman, Cheminformatics Specialist
Infinity Pharmaceuticals

Harvey L. Wiener, Ph.D., Associate Director, Knowledge Integration Resources
BMS

Advisory Board:

Michael J. Burtha, Executive Director, J&J WW Knowledge Networking
J&J Knowledge Networking Group
J&J Knowledge Networking WW Program

Charles Jaffe, Director of Medical Informatics
AstraZeneca

Sangtae Kim, Vice President and Information Officer
Eli Lilly

Victor Newman, Chief Learning Officer
Pfizer Research University

Associate Sponsor:



Wednesday, December 4, 2002

Day One Conference Sessions

7:45 a.m.

Registration and Continental Breakfast

8:30 a.m.

Chairperson's Opening Remarks

Josh Plaskoff, Head of Knowledge Management

Eli Lilly

8:45 a.m.

Taking a Grassroots Approach Toward Knowledge Management to Decrease R&D Time and Costs

- Rooting out misconceptions of knowledge management
- Why it is important to have a grassroots approach?
- Conducting a knowledge audit
 - Social network analysis (tacit knowledge)
 - Content audit/analysis (explicit knowledge)
 - Infrastructure
 - Channels
 - Portals
 - Leadership
- Deciding what knowledge is to be managed
- Create or reorganize; devise and execute a knowledge system agenda
- Establish realistic timelines and objectives against knowledge systems to create performance metrics
- Promoting knowledge systems collaboration within R&D
- Will the appropriate knowledge system and distribution save million's in R&D?

Hitomi Ohkawa, Research Leader, Information Architecture Group, Bioinformatics/Genomics/Genetics Section Roche Discovery Technologies

9:30 a.m.

Knowledge Management Fueled Productivity in R&D

- R&D productivity drives companies to success
- How can knowledge management influence productivity?
- How do chief scientists revere knowledge management in terms of productivity?
- Creating metric's to account for knowledge management's impact on R&D
- Competitiveness of new drug development
 - Apply content management/knowledge facilitation
 - Capture previous knowledge drug developments

Joe Horvath, Director, Knowledge Management Millennium Pharmaceuticals

10:15 a.m.

Refreshment Break

10:45 a.m.

GPCRs and Knowledge Management from a User's Perspective

- G-Protein Coupled Receptors (GPCRs): the most abundant class of pharmaceutical targets in the human genome
- Sources of data in Arena's R&D
 - Data mining of the human genome
 - Functional genomics
 - High throughput screening technology
 - Chemical structures and Structure-Activity Relationships (SARs)
 - An example: the receptor for Niacin
- A fully integrated, in-house, research database
 - Gene sequences, protein sequences, genomic distributions and in situ hybridisation data
 - Screening data
 - Chemical structures and searching
 - Pre-screening results for practical use

Nigel R A Beeley, Vice President and Chief Chemical Officer Arena Pharmaceuticals, Inc.

11:30 p.m.

Integration of Knowledge Transfer and Learning

- Organizational behavior and change
- Common practice
 - Immediate gratification
 - Ultimate feedback information
 - Measuring performance
 - Valuing what has been completed
 - Creating higher lead compounds
- Current use of technology within knowledge learning
- Usage and application of knowledge

Andrea Hornett, Associate Professor The Pennsylvania State University

12:15 p.m.

Luncheon for All Delegates and Speakers

1:30 p.m.

Panel Discussion

Designing and Developing Taxonomies for Enhanced R&D

- Creating a classification system within your R&D platforms
- Uncovering unique knowledge elements within different R&D taxonomies
- Identifying synergies amongst R&D taxonomies and beyond
 - Unique data environments
 - Similar knowledge channels
 - Knowledge seeking attributes
 - Portal potential
 - Corporate environment
- Designing knowledge infrastructure and application for specific taxonomies
- Building in flexibility to leverage synergies and collaboration
- Tracking for effective knowledge cycle/updates per taxonomy
- Employee access requirements and privacy
- Applying different levels of access according to personnel and data sensitivity

Moderator:

Josh Plaskoff, Head of Knowledge Management Eli Lilly

Panelists:

Hitomi Ohkawa, Research Leader, Information Architecture Group, Bioinformatics/Genomics/Genetics Section Roche Discovery Technologies

Ian Hersey, Senior Vice President, Corporate Development and Strategy Inxight

2:30 p.m.

Refreshment Break

3:00 p.m.

Examining the Role of Data Management within a Knowledge Management Infrastructure

- IT department's perspective on examining knowledge distribution and impact
- Investigating knowledge deployment requirements
 - Legacy system
 - Partnering for knowledge deployment
 - Coordinator/leader
- Data capture, collaboration and enhancement
 - Video
 - Computer systems
 - Portals
 - Meetings
 - Lab notes
- Warehousing data
 - Storage techniques
 - Library is imperative
 - Capacity planning
 - Length of time data is stored
 - Contingency planning

Bob Sweet, Director of R&D Eli Lilly

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3:45 p.m.

Supporting Collaborative Learning in Research and Development

This presentation will describe the social and technological approaches to supporting research and development teams and communities of practice at Bristol-Myers Squibb.

Authors:

**Karen Lyons, Community Consulting Services Lead,
Knowledge Integration Resources
BMS**

**Roman Z. Sterzycki, Ph.D., Senior Manager, R&D Process,
Discovery Chemistry
BMS**

**Harvey L. Wiener, Ph.D., Associate Director,
Knowledge Integration Resources
BMS**

Presented by:

Karen Lyons and Harvey L. Wiener, Ph.D.

4:30 p.m.

Panel Discussion

Debating the Role of Corporate Knowledge Management Leadership within Pharmaceutical R&D Departments

Corporate approaches to knowledge management within pharmaceutical R&D departments vary from company to company. The one factor that must remain consistent is the role that corporate management leaders hold in general. R&D design is always competing with the intense time to market process. Therefore it is imperative that R&D departments collect and manage knowledge in a manner that enhances communication and the collaboration of information to accelerate the R&D process. This panel will bring together knowledge management R&D experts to explore the different knowledge management approaches, implementation techniques in R&D, in addition to personal successes and failures in R&D departments.

Moderator:

**Josh Plaskoff, Head of Knowledge Management
Eli Lilly**

Panelists:

**Joe Horvath, Director, Knowledge Management
Millennium Pharmaceuticals**

**Roman Z. Sterzycki, Ph.D., Senior Manager, R&D Process,
Discovery Chemistry
BMS**

**Susan Ward, Executive Vice President
Infinity Pharmaceuticals**

5:30 p.m.

End of Day One and Closing Remarks

Thursday, December 5, 2002

Day Two Conference Sessions

7:00 a.m.

Registration and Continental Breakfast

7:30 a.m.

Chairperson's Opening Remarks

**Victor Newman, Chief Learning Officer
Pfizer Research University**

7:45 a.m.

Capturing Human Knowledge Verses Data and Information

- Can human knowledge be captured?
- Capturing relevant data
- Distinguishing between knowledge and data
- Battling value changes
 - Technology
 - Environment
 - Regulatory environment
 - New discoveries
 - Prophesies
- Convincing knowledge holders to share

**Mark Osborne, Senior Manager
Millennium Pharmaceuticals**

8:30 a.m.

Just Say "No" to Knowledge Management Projects

- Focusing on knowledge imperatives
 - Managing existing knowledge
 - Leveraging faster than the competition and integrating that into your process
 - Creating new forms of knowledge that delivers new market value
- "Identifying the knowledge needed to win"

**Victor Newman, Chief Learning Officer
Pfizer Research University**

9:15 a.m.

Optimizing Use of Both Tacit Knowledge and Explicit Knowledge

- Examining explicit knowledge
 - Documentation of procedures
 - Documentation of clinical data
- Managing explicit knowledge
 - Managed through intranets
 - Document management systems
 - Information management systems
 - Multimedia content management
- Reviewing tacit knowledge
 - Information that is stored within ones knowledge base
 - Initial drivers such as experience and intuition that is being concealed
- Assessing tacit knowledge
 - Requiring documentation of knowledge
 - Placing value and time relevance on tacit knowledge
 - Transferring knowledge onto database
 - Establishing a reliable contact
- Disseminating information throughout the pharmaceutical network

**Mara Matsumara, Manager, Library and Information Services
Cell Genesys**

10:00 a.m.

Refreshment Break

10:30 a.m.

Leveraging Enterprise Expertise: Implementing a System for Capturing Tacit Knowledge and ROI

True business value can be demonstrated by leveraging technology to connect your employees to other people in the organization, to leverage the tacit knowledge that drives innovation and breakthroughs. This case study focuses on a global pharmaceutical organization that successfully implemented and demonstrated ROI for expertise automation technology. The session addresses the types of expertise automation technologies and how they work, how to ensure and facilitate user adoption, as well as critical factors for implementation success and lessons learned.

**Susan S. Hanley, Practice Executive
Dell/Plural Professional Services**

**Steven Sorensen, Ph.D., Head of Knowledge Management Systems,
DI&A**

Aventis Pharmaceuticals, Inc.

11:15 a.m.

Overcoming Cultural Uncertainties with R&D Knowledge Sharing

- Constant pressure for new drug developments
 - Creates anonymity between internal staff
 - Increases competitive edge between staff
 - Insecurities about having sufficient data to support a hypothesis
- Ongoing belief that knowledge is power; must have trusting perception of staff
- Improved technologies push scientists to move toward knowledge management usage
 - Greater amounts of data provides insight to R&D
- Embedding a common taxonomy to create ongoing participation
 - Leveraging knowledge against or for experimental benefit
- Providing benefits for contributing to knowledge management notes
 - Bonus plan
 - Name recognition
 - Recognized as expert in industry
 - Performance reviews

**Josh Plaskoff, Head of Knowledge Management
Eli Lilly**

12:00 p.m.

Luncheon for All Delegates and Sponsors

1:15 p.m.

Panel Discussion

Integrating a R&D Computing Environment: Road to eR&D

With the intense competitive time to market pressures having integrated computing environment to support fast business decisions is critical to R&D success. Using latest technologies such as web services and approaches such as eLab notebooks, expertise management etc. allows experts to collaboratively capture, analyze, and apply the data critical to advancing product design and development. This panel will include knowledge management and computing experts, who will share a variety of data integration approaches used by top pharmaceutical companies.

Moderator:

**Roman Z. Sterzycki, Ph.D., Senior Manager of R&D Process,
Discovery Chemistry
BMS**

Panelists:

**Cheryl Schairer, Manager, Library Services
Vertex Pharmaceuticals**

**Molly Wasserman, Cheminformatics Specialist
Infinity Pharmaceuticals**

**Rich Lysakowski, Executive Director
Collaborative Electronic Notebook Systems Association
Ulo Palm, MD, MBA, Director Clinical Data Management Strategies
Shering-Plough Research Institute**

2:15 p.m.

Refreshment Break

2:45 p.m.

**Exploring How Portal Technology in R&D Can Facilitate
Speed to Market**

- Forecasting trends within portal technology
- Re-engineering the knowledge process
- Sharing knowledge; creating functionality, alerting and indexing of information
- Leveraging values; importance of management supporting creativity
- Mapping of most recent knowledge; process must start over and maintain consistency

**Dan Greenwood, Associate Director Knowledge Management
Boehringer Ingelheim**

**David J. Eiben, Project Manager, Collaborative Systems
and Technology
Boehringer Ingelheim**

3:30 p.m.

**Optimizing Knowledge Tools Within R&D to Maximize
the Discovery and Development Pipeline**

- Recognizing knowledge interactions between IT and drug discovery
- Potential in eR&D for a competitive advantage throughout the pipeline and into market
- Achieving IT drivers within discovery research
- Comparing tool perspective's versus integrated system perspectives
- Benchmarking knowledge management enhanced pre-clinical research

**David Balaban, Informatics
Signature BioScience**

4:15 p.m.

Panel Discussion

Creating a M&A Knowledge Management System

- Would your KM system survive a merger or acquisition?
- Is knowledge management funding worth the cost if M&A is in the companies business plans
- Identifying synergies for the knowledge continuum across universal R&D platforms
 - Regardless of size
 - Regardless of budget
 - Regardless of location
 - Regardless of number of facilities

- Ensuring infrastructure and portal technologies are flexible enough to withstand drastic changes
- Ensure knowledge management R&D structure and plans are detailed and documented to add value in light of merger

Moderator:

**Chairperson, Victor Newman, Chief Learning Officer
Pfizer Research University**

Panelists:

**Susan Ward, Executive Vice President
Infinity Pharmaceuticals**

**Mara Matsumara, Manager, Library and Information Services
Cell Genesys**

5:15 p.m.

End of Day Two Remarks

Friday, December 6, 2002

Day Three Post Conference Workshop

8:00 a.m.

Registration and Continental Breakfast

8:45 a.m.

Chairperson's Opening Remarks

**Ulo Palm, MD, MBA, Director Clinical Data Management Strategies
Shering-Plough Research Institute**

9:00 a.m.

**Implementing Corporate Knowledge Portals, IT Capability
and Measuring Return on Investment**

This will be a dynamic workshop- the content will be modified "live" during the conference to reflect issues and concerns raised throughout the first two days. The preliminary topics are:

- The "real" issues for pharma
 - Low productivity/escalating costs
 - Research culture
 - Food and drug administration regulations
 - Electronic laboratory notebooks, laboratory information systems and 21 CFR Part 11
 - Patient data privacy, confidentiality, security and HIPAA
 - Integrating with data mining/knowledge discovery through data
- How are "real" pharmaceutical R&D issues facilitated with knowledge portals?
- Implementation of corporate knowledge portals
 - Sponsorship and leadership
 - Strategy, vision and value system
 - Incentives and measurements
 - Responsive training and coaching
 - Critical communication
 - Organization
 - Process
 - Technology
- Measuring return on investment
 - Why develop metrics for knowledge management
 - What do you measure and when?
 - Measuring inputs
 - Measuring process
 - Measuring outputs
 - Measuring outcomes
 - A balanced scorecard for measuring KM

**Bradford Kirkman-Liff, Professor, College of Business
Arizona State University**

12:00 p.m.

End of Workshop and Conference Program

(There will be a 30 minute networking break at 10:30 a.m.)

Business Opportunities:

A limited amount of exhibition space is available at the conference. A variety of sponsorship opportunities covering luncheon, evening functions, and documentation also exist. For further details, contact Michael Robinson, General Manager at 312 894 6375 or michaelr@marcusevansch.com.

