

# SCPD '01: CONCURRENT PRODUCT DEVELOPMENT EXCELLENCE



6<sup>th</sup> Annual Worldwide Conference of the  
Society of Concurrent Product Development  
June 6 and 7, 2001  
Boston University Corporate Education Center  
Tyngsboro, Massachusetts

Co-sponsored by the Boston Chapter, Society of Concurrent Product Development (formerly SOCE) and Massachusetts Biotechnology Council. Other organizational partners are the Boston Area Semiconductor Equipment (BASE) Council and IEEE Engineering Management Society.

Wednesday, June 6:  
PRE-CONFERENCE SEMINARS

- Implementing Integrated Product Development - The Holistic Approach
- Using CPD to Maximize Profits and Gain Corporate-Wide Buy-in
- Product Design for Disassembly and Environment

Thursday, June 7:  
SELECTED PAPERS IN 3 TRACKS



## About SCPD

The Society of Concurrent Product Development (formerly Society of Concurrent Engineering) is an international organization dedicated to assisting product developers and companies satisfy their customers through quality products that are delivered faster and at lower cost. Founded in 1992, SCPD has a three-fold mission:

- Disseminate knowledge, concepts, and practices for concurrent engineering and integrated product development.
- Provide a forum for sharing ideas among professionals in all product development disciplines.
- Expand the Body of Knowledge for concurrent engineering and integrated Product development with emphasis on practical approaches.

## Why attend the conference

Concurrent new product development, at first only exploited by leading-edge organizations and early adopters, has in recent years achieved a plateau of maturity and widespread use. Now the industry is poised at the edge of another quantum leap in effectiveness. Emerging techniques, collaborative methods, and Internet/intranet-based implementation tools push performance boundaries that were not so long ago considered unattainable. Organizations and developers who fail to familiarize themselves with these advances, while their competitors adopt them, are destined to lose in the marketplace.

New this year is a special Track specifically tailored to the needs of those engaged in drug discovery and development of products based on biotechnology. Despite ever-increasing R&D spending, the productivity of the drug discovery process has not improved during the past ten years. In response, pharmaceutical and biotechnology market leaders are beginning to adapt both proven and emerging concurrent and integrated product development best-practices, to deliver more new products to market in less time.

## Who should attend

The Conference is an indispensable source of new ideas and techniques for individuals and teams with responsibility for new product success in competitive markets. This includes general management, product planning and marketing, R&D, engineering, manufacturing, operations, finance, and quality. Concurrent product development techniques have consistently provided sustainable competitive advantages to a broad variety of industries, including semiconductor devices, electronic products, software, automated process equipment, medical products, military equipment, consumer products, pharmaceuticals, and biotechnology.

SEMINAR A

SEMINAR B

SEMINAR C

**Implementing Integrated Product Development - The Holistic Approach**

This session is intended to help engineering managers implement a more rigorous approach to the practice of Engineering Management. We do this by outlining an Integrated Product Development methodology to achieve the following objectives:

- Meet program cost targets.
- Reduce total program costs.
- Meet program milestones.
- Reduce time to market.
- Reduce engineering change following design freeze

We will bring a special focus to issues around implementing IPD. These range from how to implement cross-functional teams and consensus decision making, to how to identify managers who are out to sabotage your efforts to introduce IPD. We will place emphasis on balancing all domains of change, especially the political one, in an integrated enterprise.

**YOUR INSTRUCTOR:**

**Stephen Armstrong** is uniquely qualified to lead this seminar. He is a fully apprenticed tool designer/tool maker, Professional Engineer, and Certified Management Consultant. He has headed AMGI, a Toronto based consulting practice for seven years. He has led many of the world's leading aerospace companies to successfully implement IPD. His clients include British Aerospace Military, deHavilland Aircraft, Lockheed Martin, Bombardier Aerospace, Messier-Dowty Aerospace, McDonnell Douglas, and many non-Aerospace companies.



**Using CPD to Maximize Profits and Gain Corporate-wide Buy-in**

*Note: This seminar is intended for participants who are already familiar with the basics of Concurrent Engineering ("CE") and its implementation within the product development ["engineering"] community.*

Have you been called before the CEO or the Board to explain/justify your engineering process and your company's investments in new products? Want to know how to survive this scenario? Learn the "five minute" sales pitch (financial model) that can compellingly, clearly, and graphically explain and convince others of:

- why we do product development,
- why everyone in the entire organization is responsible for. and invested in, doing it well, and
- why it pays to do it much better.

Gain buy-in from the most hardened cynics. Each topic will be illuminated by the guiding light of Concurrent Product Development — or IPD, or Concurrent Engineering, call-it-what-you-will — i.e., getting all the stakeholders involved, with shared ownership, throughout the product lifecycle. We'll explore a lot of compelling and timely questions. And we'll come away with a few answers!

**YOUR INSTRUCTOR:**

**Bob Neel** is an industry-leading expert and the Principal of **Product Development Process Consulting**. He has twenty-five years of experience creating new products for high-tech and consumer-products manufacturers. He is a publisher and frequent lecturer at technical seminars, offers workshops on state-of-the-art design processes, and provides customized process assessments and improvement projects. Before becoming a consultant Bob was Engineering Productivity Manager for Hewlett-Packard Company.

**Product Design for Disassembly and Environment**

Trends in public opinion and increased legislation concerning the environmental effects of the manufacture, use, and disposition of products, have led to the need for more emphasis on potential environmental impacts during product design and development. One approach to the environmental evaluation of products is to undertake a life cycle analysis (LCA). This involves a cradle-to-grave analysis of the product, during which an inventory is determined of all of the inputs and emissions with known environmental effects of concern. This seminar will outline the following:

- Approaches to the environmental analysis of products
- Evaluation of products for end-of-life disposition and disassembly
- Application of design decision support tools for disassembly and environment

The presentation will include the results of case studies on products from different industries.

**YOUR INSTRUCTOR:**

**Dr. Winston Knight** is Professor in and Chairman of the Industrial and Manufacturing Engineering Department, University of Rhode Island, and Vice President of Boothroyd Dewhurst, Inc. He has specialized in research on various aspects of manufacturing engineering, including machine-tool vibrations and noise, group technology, CAD/CAM, with particular reference to metal forming dies, design for manufacture and product design for recycling and the environment.



# Conference Agenda

WEDNESDAY, JUNE 6

PRE-CONFERENCE SEMINARS / WORKSHOPS

12:30 P.M. Networking, sandwiches, and soda

1:30 P.M.  
  
(break  
from 3:00 -  
3:30)

**Seminar A**  
*IMPLEMENTING INTEGRATED  
PRODUCT DEVELOPMENT:  
THE HOLISTIC APPROACH*  
**Instructor:** Steven Armstrong  
Armstrong Management Group,  
Inc., Toronto, Canada

**Seminar B**  
*ENGINEERING MAXIMUM PROFITS:  
HOW CE IMPACTS THE PRODUCT  
LIFECYCLE FINANCIAL MODEL*  
**Instructor:** Bob Neel  
Product Development Process  
Consulting, Seattle, WA

**Seminar C**  
*PRODUCT DESIGN FOR  
DISASSEMBLY AND  
ENVIRONMENT*  
**Instructor:** Winston Knight  
Boothroyd Dewhurst, Inc.  
Wakefield, RI

5:00 P.M. Reception for all Conference attendees

6:45 P.M. End of pre-Conference program

THURSDAY, JUNE 7

KEYNOTE ADDRESSES AND SELECTED PAPERS

7:00 A.M. Registration, breakfast, and exhibits

8:00 A.M. Welcome

8:20 A.M. **Keynote 1**  
*BEYOND FASTER-BETTER-CHEAPER: POSITIONING FOR GROWTH* Jay Mastaj, Vice President, EMC

9:20 A.M. **Keynote 2**  
*CONCURRENT ENGINEERING MATURITY* Joan Cullinane CE Manager, Sun Microsystems

10:10 A.M. Network break, refreshments, and exhibits

**TRACK 1**  
**MANAGING THE CE  
PROCESS**

**TRACK 2**  
**EMERGING CAPABILITIES**

**TRACK 3**  
**CONCURRENT PRODUCT  
DEVELOPMENT FOR DRUG  
DISCOVERY**

10:40 A.M. **Session 1A**  
*ENGINEERING FROM THE RIGHT  
SIDE OF THE BRAIN*

**Session 2A**  
*LEADING VIRTUAL TEAMS IS  
NOT NATURAL*

**Session 3A**  
*UTILIZING A STRATEGIC  
PROJECT OFFICE FOR  
DEVELOPMENT*

11:30 A.M. **Session 1B**  
*ECONOMIC VALUE OF  
EMOTIONAL INTELLIGENCE*

**Session 2B**  
*THE VIRTUAL ENTERPRISE:  
MORE THAN A GOOD IDEA*

**Session 3B**  
*LATEST DEVELOPMENTS IN  
RAPID DRUG DISCOVERY*

12:20 P.M. Buffet lunch, Presentation: SCPD BODY OF KNOWLEDGE, and exhibits

2:00 P.M. **Session 1C**  
*METRICS FOR CONCURRENT  
DEVELOPMENT AT RAYTHEON*

**Session 2C**  
*WEB-BASED CONCURRENCY  
IN NEW PRODUCT  
DEVELOPMENT*

**Session 3C**  
*TRANSITION FROM HIGH  
THROUGHPUT SCREENING TO  
HIGH THROUGHPUT BIOLOGY*

2:50 P.M. Network break, refreshments, and exhibits

3:20 P.M. **Session 1D**  
*AXIOMATIC DESIGN AND  
CONCURRENT ENGINEERING*

**Session 2D**  
*CPD USING A PRODUCT  
DEVELOPMENT PORTAL*

**Session 3D**  
*MAKING THE TRANSITION FROM  
AN R&D COMPANY TO AN  
OPERATIONAL COMPANY*

4:10 P.M. **Session 1E**  
*BUSINESS CLASSICS: ROLE OF  
OUTSTANDING PRODUCTS IN  
MANAGING PRODUCT FAMILIES*

**Session 2E**  
*CONCURRENCY AND SYSTEM  
DEVELOPMENT DYNAMICS*

**Session 3E**  
*IDENTIFYING TRADITIONAL Vs.  
WEB-ENABLED PROCESSES*

5:00 P.M. Closing reception

**SCPD ' 01: CONCURRENT PRODUCT DEVELOPMENT EXCELLENCE - KEYNOTE SPEAKERS**

**Jay Mastaj** is Vice President of EDM Engineering at EMC Corporation. He has over 17 years experience in software and hardware development.

**Joan Cullinane** is Sr. Concurrent Engineering Manager, Volume Products Engineering - World Wide Operations, at Sun Microsystems, Inc.

## Session 1A

### ENGINEERING FROM THE RIGHT SIDE OF THE BRAIN

*J. Douglas Field, Vice President of Product Development, DEKA Research & Development Company*

Most product development organizations know the importance of successfully integrating upstream development activities with those of downstream activities, like manufacturing. The emphasis on Concurrent Engineering over the past decade has addressed this integration. However, many companies have excelled at delivering new products quickly while struggling with the challenge of internally creating discontinuous, innovative products that drive long-term growth. As a result, many companies depend on outside sources for their most important fuel, new products. Is it really possible to integrate the fundamentally opposed people and activities of creation (making new things) and execution (focusing, narrowing, and delivering)? There are very few examples of companies that consistently do both well. Mr. Field's presentation will present approaches for integrating the people, processes, and techniques required to create with those required to execute, including how to specify your product, how to organize your team, and when to make decisions.

Doug Field is Vice President of Product Development for a new program at DEKA Research and Development. His experience at DEKA also includes overall technical leadership of the iBOT (a revolutionary mobility device for the disabled). He is experienced in the techniques of world-class concurrent development, including cross-functional team leadership, QFD, Design of Experiments, Computer-Aided Design/Analysis, and industrial design and visualization. Doug earned a BS in Mechanical Engineering from Purdue University, and an MS in Mechanical Engineering and MS in Management at the MIT School of Engineering, and Sloan School of Management.

## Session 1B

### THE ECONOMIC VALUE OF EMOTIONAL INTELLIGENCE

*Jeffrey Davis, CEO and Founder of MAGE, LLC*

Technical skills and knowledge are no longer enough for managing complex business organizations. Emotional Intelligence is the critical element for managing change effectively in this economy. Companies must use this concept to hire and develop managers who can lead through a combination of personal awareness and interpersonal expertise.

**Jeffrey Davis** is CEO and founder of MAGE, LLC, in Chestnut Hill, Mass.

## Session 1C

### METRICS FOR CONCURRENT DEVELOPMENT AT RAYTHEON

*Edward Verryt, Manager of Surface Radars and Growth Programs, Roger Hinman, Manager of Surface Radar Commonality, and Catherine Tedesco, MIT Leaders for Manufacturing Fellow, Raytheon Company.*

Although many commercial companies introduced concurrent engineering into their development process in the early '90s, many defense contractors did not venture into this terrain until later in the decade. The nature of defense contractors' complex products with lengthy design cycles introduces additional challenges into the collaborative engineering process. One challenge faced by Raytheon's Surface Radar Group was the identification and development of relevant, consistent, metrics to measure the effectiveness of their evolving concurrent engineering process. Metrics need to be readily, quickly, and regularly measured. They need to encourage value-added activities from process participants, and provide insight into the actions that are necessary to improve individual processes. This presentation describes how Raytheon's Surface

Radar Group identified concurrent engineering effectiveness metrics and is using the metrics to support the goals of their concurrent engineering initiative.

**Ed Verryt** is a Senior Manager of Surface Radar Operations at Raytheon. He has 25 years experience in the manufacture and production of complex integrated defense electronics systems incorporating radar, missile, fire control and communications major end items. Ed manages the activities and resources required for seamless Transition to Production (TTP) of new product lines. He received a Masters in Business Administration with a concentration in operations from the University of Massachusetts, Lowell, in 1988 and a Masters of Science in Electrical Engineering with a concentration in Radar Systems from Northeastern University in 1977. Ed also received a Bachelors of Science in Electrical Engineering from the University of Massachusetts, Dartmouth, in 1975.

**Roger Hinman** is currently coordinating Concurrent Engineering efforts on new Surface Radar programs. Roger has 25 years of professional experience in manufacturing operations, quality control and program management. He has worked on numerous military communication and phased array radar programs.

**Catherine Tedesco** is a Leaders for Manufacturing Fellow at the Massachusetts Institute of Technology. She will be graduating in June of 2001 with a Masters of Science in Management from the Sloan School of Management and a Masters of Science in Ocean Systems Management from MIT's School of Engineering. She also received a Bachelors of Science in Naval Architecture and Marine Engineering from Webb Institute of Naval Architecture in 1994.. Catherine is a member of SOCE, the Society of Naval Architecture and Marine Engineering (SNAME) and the American Society of Navel Engineers (ASNE).



## TRACK 1 - MANAGING THE PRODUCT DEVELOPMENT PROCESS (continued)

### Session 1D AXIOMATIC DESIGN AND CONCURRENT ENGINEERING

*Derrick Tate, Axiomatic Design Software, and Jason D. Hintersteiner, Silicon Valley Group, Inc., Lithography Systems.*

Axiomatic design is a general method for decision making in engineering design that provides a foundation for concurrent engineering. Concurrent engineering teams need a common design process, discipline-independent representations of designs, and general criteria for decision making.

The use of axiomatic design to facilitate concurrent engineering addresses several of the recognized challenges: finding a common vocabulary, removing functional silos, and properly allocating project team responsibilities. This paper will focus on several areas from the SCPD Body of Knowledge: Platform & Architecture, Product Management, and Requirements Capture.

Recent industrial applications illustrate use of axiomatic design to reduce development time, improve product performance, and efficiently troubleshoot and test. Axiomatic design provides a foundation for implementing concurrent engineering.

This presentation describes the characteristics of the theory that make it especially suitable for addressing this need. Several examples will be given from diverse industries, and the experiences of one company in particular are explained in greater detail.

**Derrick Tate** is Manager of Applications Engineering at Axiomatic Software, INC. He has studied prominent approaches to design in America and Europe and applied these ideas to design tasks in many fields: robotics, software, product design, corporate strategy, and manufacturing processes. Currently, he is responsible for the training and consulting in the use of Acclaro™ software at Axiomatic Design Software, Inc. He has a Bachelor's of Science in Mechanical Engineering from Rice University and an S.M. and Ph.D. in Mechanical Engineering from M.I.T.

**Jason D. Hintersteiner** is a Principal Engineer at SVG Lithography Systems, Inc. His responsibilities include engineering task management for new development programs and existing field issues, as well as coordinating the implementation of Axiomatic Design throughout the engineering organization. He received a Bachelor of Science and Master of Science in Mechanical Engineering at the Massachusetts Institute of Technology.



### Session 1E BUSINESS CLASSICS: THE ROLE OF OUTSTANDING PRODUCTS IN MANAGING PRODUCT FAMILIES

*Susan Walsh Sanderson, Lally School of Management, Rensselaer Polytechnic Institute*

In an ideal world, each design would achieve dramatic market success and play an important role in the company's overall competitive strategy. A number of firms have demonstrated the ability to produce a steady stream of commercially memorable products, "business classics". The significance of these products extends beyond the substantial sales volumes they generate. They help to define innovation trajectories and anchor the development of product families. In this session, you will learn approaches to generating outstanding designs and the role they play in the success of product families.

**Susan Walsh Sanderson** is Associate Professor of the Department of Managerial Policy and Organization at Rensselaer Polytechnic Institute. Dr Sanderson is author of several articles on innovation and new product development, and author of a book with Mustafa (Vic) Uzumeri, *Managing Product Families*, Irwin/McGraw-Hill, 1997. She has developed numerous interactive learning case studies and simulations (with Arthur Sanderson) to teach design and manufacturing concepts by exposing students to tradeoffs inherent in new product development. She won the 1995 Boeing Outstanding Educator Award and Hesburg Award Team (for Educational Innovation). She received her B.A. 1970, M.A. 1972 from the Department of Sociology at the University Pittsburgh and her Ph.D. 1980 from Department of Sociology and Center for Latin American Studies at University of Pittsburgh.



## TRACK 2 - EMERGING CAPABILITIES

### Session 2A

#### LEADING VIRTUAL TEAMS IS NOT NATURAL

*Ron Lasser and Scott Elliott, Principals, Product Development Consulting, Inc.*

Product development teams are much more geographically dispersed now than in years past, so many managers find themselves leading virtual teams. These managers, in the absence of forethought or training, attempt to lead their teams in much the same way as they did when their teams were collocated. Team frustration arising from discontinuities, disruptions, and delays often results in products that are late to market, that miss the mark on customer fulfillment, and that are difficult to manufacture.

In this paper, we discuss the five most common mistakes made in building and managing a remote, collaborative team, and how alert managers can detect the warning signals and mold the team into a high-performance and high morale product development engine.

**Ron Lasser's** areas of expertise are in remote collaborative product development, strategic product direction and portfolio planning, alignment of product development organizations, and project management and troubleshooting. Ron holds Ph.D., Master of Science and Bachelor of Science degrees in mechanical engineering from Carnegie-Mellon University. He is a member of Sigma Xi, a research society for learning and science, The American Society of Mechanical Engineers (ASME), and The Institute of Electrical and Electronics Engineers (IEEE).

**Scott Elliott's** areas of concentration include remote collaborative product development, business strategy alignment, supply chain management, and world-class manufacturing and R&D management. During his thirty-year engineering and management career in the electronics industry, he has published numerous papers in the fields of R&D and manufacturing management and technology. He holds two patents and is the author or co-author of over 35 publications on technology and management. Dr. Elliott holds Bachelor of Science, Master of Science, and Ph.D. degrees in Electrical Engineering from the University of California (Berkeley and Santa Barbara).

### Session 2B

#### THE VIRTUAL ENTERPRISE - MORE THAN A GOOD IDEA

*George Van Ness, President and Chief Operations Officer, Business Engine Software.*

The emergence of Web-based collaboration and productivity applications will empower project managers to efficiently manage both internal and external processes and resources, and subsequently expand their practices, increase revenue and improve profitability. This paper will discuss the processes, technical support and necessary training associated with implementing and maintaining these applications.

**George Van Ness** is a seasoned executive in both the consulting and software industries. He is leading the company's efforts to link buyers and sellers of professional services in a net marketplace. Prior to joining the company, Van Ness held the roles of Senior Vice President of American Operations and Senior Vice President of Product Development responsible for sales consulting for EXE Technologies.



### KEYNOTE PRESENTATION 1: Beyond Faster-Better-Cheaper: Positioning for Growth

This presentation looks at the challenges that arose as one organization transitioned from “chaos” to “relatively predictable” and now pursues the path to “scalable”. After exploring this endeavor into concurrent engineering, the presenter will suggest something that may be more valuable than any specific method or tool.

**Jay Mastaj** is Vice President of EDM Engineering at EMC Corporation. He manages over 200 software development professionals who build enterprise-level backup and recovery solutions. He has over 17 years experience in software and hardware development. Jay's background includes extensive management experience in the areas of enterprise networking, client/server architecture, PBX engineering and Internet applications development. Prior to working at EMC, he held senior-level management positions at Opus Telecom, Banyan Systems, and Digital Equipment Corporation where he successfully managed major organizational transitions. He holds a Bachelor's degree in Computer Information Systems and a degree in Management from Bentley College.

### Session 2C

#### WEB-BASED CONCURRENCY IN NEW PRODUCT DEVELOPMENT

*Rachel Happe, Manager of Product Marketing, Integrated Development Enterprise, Inc.*

Web-based software solutions are enabling a new wave of functional concurrency in product development. By incorporating the concept of structured development processes (i.e., phase or stage gate processes), empowering cross-functional core teams, and by integrating key development functions such as portfolio management, project management, and resource management, a subset of these solutions is promising to significantly change the landscape for product development. At the same time, they hold the possibility of rendering concurrency in product development a de facto standard methodology rather than a subject of continuing debate, fragmented implementation and modest advances. A case study will highlight some of the issues facing both solution providers and solution adopters at this long-awaited nexus of market need and technology rollout.

**Rachel Happe** is responsible for product marketing at IDE. She is charged with communicating the value of IDE's products, segmenting and analyzing the market, and evaluating competitive products. Rachel previously held the position of Manager of Product Innovation, working to develop new concepts for products and functionality.

### Session 2D

#### CONCURRENT PRODUCT DEVELOPMENT USING A PRODUCT DEVELOPMENT PORTAL

*Alan Hecht, Mesa Systems International*

Sophisticated product development environments contain multiple tools and platforms, with geographically dispersed teams using complex development processes. This presentation describes web-based solutions for such environments. We describe the benefits of tool integration, process reuse and compliance, and collaboration, for all project stakeholders. A demonstration of the web environment will be provided.

**Alan Hecht** provided crucial leadership in the engineering, marketing, and support departments at Cadre Technologies before co-founding Mesa. He has authored or co-authored more than 25 software engineering-related papers. Mr. Hecht holds a B.S. with honors in Computer Science from Brown University, a Masters in Computer Science from the University of California, Berkeley, and an M.B.A. with honors from Bryant College.



### Session 2E

#### CONCURRENCY AND SYSTEM DEVELOPMENT DYNAMICS

*Chris Heye, Vice President of Product Management, Jitita Software Corporation.*

This paper reviews common scheduling and estimating practices in the field of project management. Most project managers today continue to rely on the critical path method (CPM) or closely related disciplines such as PERT, Monte Carlo, or critical chain, to plan for their projects. While these approaches have been implemented and improved for decades, they fall short in some important areas. One critical shortcoming is their inability to model adequately the trade-offs between serial and concurrent project task execution. The paper concludes by showing how the systems dynamics method (pioneered by Jay Forrester at MIT) can better evaluate the pros and cons of concurrent project management.

**Dr. Chris Heye** is Vice President of Product Management at Jitita Software Corporation, in Cambridge, MA. His company develops simulation modeling and project management software for a wide range of applications. Chris has extensive training and consulting experience in the fields of dynamic modeling, economic analysis, and project management.



### KEYNOTE PRESENTATION 2: Concurrent Engineering Maturity

The Concurrent Engineering model has been evolving over the past two years at Sun Microsystems. Learn how it has enabled volume products to meet/beat specific fulfillment goals set forth by World Wide Operations, throughout a product's life cycle, as well as delivering on the competitive technical attributes described in the value proposition established by the Business Units.

**Joan Cullinane** is Senior Concurrent Engineering Manager, Volume Products Engineering - World Wide Operations, at Sun Microsystems, Inc. Joan has been developing and managing the Concurrent Engineering staff, co-resident with the design and development teams in Burlington, MA, and leading the Workgroup Server Operations Engineering team. Her educational background includes a Bachelor of Science and Masters of Science in Mechanical Engineering from Northeastern University as well as a MBA from the Whittemore School of Business and Economics at the University of New Hampshire.

**Session 3A**  
**MOVING TOWARDS AN ENTERPRISE-WIDE  
INTEGRATED PRODUCT DEVELOPMENT  
ORGANIZATION UTILIZING A STRATEGIC PROJECT  
OFFICE**

*Lydia A. Harris, C.P.M., Manager, R&D Program Management, Millennium Pharmaceuticals, Inc*

This session will explore the Project Management methodologies, templates, processes, organizational structure, rewards, systems, and integration necessary to achieve an Enterprise Wide Integrated Development Organization with the result of moving product through the pipeline focusing on product leadership, improved productivity, organizational leadership, and creating value for the corporation.

**Session 3B**  
**SURPRISE GUEST SPEAKER !**

Learn how one of the country's most respected pharmaceutical companies has improved new product development effectiveness by adopting CPD techniques. SCPD '01 represents the first disclosure of this material.

**Session 3C**  
**IMPROVEMENTS IN DRUG DISCOVERY PRODUCT  
DEVELOPMENT: AN APPROACH TO TRANSITION  
FROM HIGH THROUGHPUT SCREENING TO HIGH  
THROUGHPUT BIOLOGY**

*Mark T. Roskey, Marketing Director, Applied Biosystems, HTS group*

In this session you will learn about new technology and information solutions to understand the logic of biology and accelerate the pace of discovery.



**Session 3D**  
**OPERATIONAL READINESS – MAKING THE  
TRANSITION FROM AN R&D TO AN OPERATIONAL  
COMPANY**

*Gary Pisano, PRTM and Harvard Business School, and F. William Helming, Director, Life Sciences, PRTM*  
PRTM has observed, with several recent clients, and in recent US press coverage, that biotechnology companies are experiencing extraordinary difficulties in scaling up their manufacturing and supply chain capabilities to commercial scale. Many have simply underestimated the time and complexity of the manufacturing, regulatory, and quality challenges to be met. For example, the time to build, license, and bring on-line a new biologics manufacturing facility can take four-five years. This learning curve has proven very steep, and mistakes are very expensive in terms of cost and schedule overruns and regulatory approval delays. As a result of such delays, several very promising companies have missed critical windows of opportunity and been severely punished in the capital markets.

**Session 3E**  
**IDENTIFYING TRADITIONAL R&D Vs. WEB-ENABLED  
PROCESSES**

*Jan W. F. Wasley, Ph.D., Vice President of Business Development and Director of Chemistry, Neurogen Corporation*

New technology is constantly being developed to enhance Research and Development in the ongoing search for improved pharmaceuticals. Identify the pros and cons of traditional R&D processes while outlining ways to integrate them into a web-based system. Hear from one company that has successfully combined proven traditional processes with new technology and how it will impact the future of R&D. Learn how this company developed its own technology and integrated the web into its traditional drug discovery processes. This presentation will discuss some web-based developments, particularly in the area of disease and clinical design modeling, that are occurring in the pharmaceutical field and their likely impact on future drug discovery and development.

This session will enable you to:

- Identify a new approach to proven traditional methods
- Integrate new web-enabled processes with successful existing procedures
- Move from face-to face collaboration to Internet-based knowledge sharing.



# SCPD '01: CONCURRENT PRODUCT DEVELOPMENT EXCELLENCE

Thursday, June 7, 2001

With three Pre-Conference Seminars on Wednesday, June 6

Boston University Corporate Education Center  
72 Tyng Road, Tyngsboro, Massachusetts

Registration Fees are payable in advance.  
Please mark the applicable boxes below:

## Conference sessions - Thursday, June 7

<input type="checkbox"/> Individual registration			
	<input type="checkbox"/> SCPD Member**	<input type="checkbox"/> Non-member	<input type="checkbox"/> Student
<input type="checkbox"/> Registered by by May 15, 2001	\$255	\$335	\$110
<input type="checkbox"/> Registered after May 15	\$280	\$360	\$125
<input type="checkbox"/> Per person, 4 or more registered from the same Company			
<input type="checkbox"/> Registered 1 by May 15, 200	\$230	\$310	\$100
<input type="checkbox"/> Registered after May 15	\$255	\$335	\$115
<input type="checkbox"/> YES, I WISH TO ALSO REGISTER FOR A JUNE 6 SEMINAR			
Seminar:	<input type="checkbox"/> A	\$100	\$100
	<input type="checkbox"/> B		\$50
	<input type="checkbox"/> C		
<input type="checkbox"/> YES <input type="checkbox"/> NO	I will attend the "icebreaker" reception on Wednesday (June 6, at 5:00 P.M. to 6:30 P.M.)		

\*\* Formerly SOCE. For non SCPD members, registration includes a free 1-yr membership. Members of BASE Council, IEEE, and Mass Biotechnology Council qualify for SCPD Member rates.

### Payment method:

Check, \$ \_\_\_\_\_ (Payable to SCPD - Boston chapter)  
 Visa       MasterCard      Amount \$ \_\_\_\_\_

Name on card: \_\_\_\_\_

Card number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_      Signature: \_\_\_\_\_

Mailing address: \_\_\_\_\_  
\_\_\_\_\_

Company affiliation: \_\_\_\_\_

e-mail: \_\_\_\_\_ @ \_\_\_\_\_

Mail to: SCPD PO Box 4 Boston, MA 02456-0004  
Payment must accompany the registration form for you to be registered. Upon receipt of your payment, you will receive a confirmation letter or e-mail directions to the Conference site. Substitutions are permitted if you register but are unable to attend. No refunds after May 15, 2001.



## DIRECTIONS

### From the South

Follow US Highway Route 3 heading north and take exit 34 (Westford Road, Tyngsboro). Bear right at the exit and continue nine-tenths of a mile to the traffic light (Merrimack River is ahead, a farm stand is on the right). Turn right onto Route 3A and drive about one mile. Just after the old cemetery, turn right onto Tyng Road. Boston University Corporate Education Center is one-tenth of a mile on the right.

### From the North

Follow US Highway Route 3 heading south, and take exit 34 (Westford Road, Tyngsboro). Bear left at the exit (toward Tyngsboro) and go under the bridge. Continue on this road to the traffic light (Merrimack river is ahead, a farm stand is on the right). Turn right onto Route 3A and drive about one mile. Just after the old cemetery, turn right onto Tyng Road. Boston University Corporate Education Center is one-tenth of a mile on the right.

