



The Leading Global Society for
Healthcare Technology Professionals

Boston Area Chapter Newsletter

July 2002

Volume XII, Number 2

President's Message



Vacations for me have always been typically American. I drove my family for long distances to visit hot and humid amusement parks or to spend time marching through stuffy museums in crowded cities. My last trip however, was quite different; I visited Hawaii with my wife. It was the most relaxing and inspiring 10 days in memory, and it almost ruined my life. The beaches of Hawaii are no place to reflect upon the

choices you've made from birth. Everything is so beautiful and resplendent that it is impossible to think of anything mundane and practical. The local folk are mostly tanned and attractive, with a solid and enviable physique that comes from surfing almost as often as most of us drive to work. In fact, I am almost positive that the ranks of surfers bobbing offshore swelled each day around quitting time; evidence that even when you work for a living in Hawaii, you can pause on the way home and enjoy the astounding natural beauty and resources. **It makes you ask why you don't live there.** There I sat, pale, and a little paunchy (despite a few weeks of 'preparatory exercise'), and realized that this place was not abstract, that real people lived here, and for that matter, so could I if I had the drive, desire, and bravery to turn my life upside down.

Alas, the time came to return home. The 14 hour flight provided a gradual shift through both time zones and reality, and the drive through Boston to the suburbs cemented the feeling that my time in paradise was over. The first couple of days back at work were truly awful. The stark contrast between my endless commitments and the memories of carefree days drove me to dream of unlikely scenarios for changing my life. Perhaps I could make guitars in northern Vermont and sell them via the Internet. Is it a fair trade to give up a career in Boston for a service job in Hawaii? Could I bring myself to give up 20 years of effort and start again? I wasn't quite at the level of panic, but I was quite despondent and worried about long-term contentment. Had this vacation ruined my life?

I eventually reacclimated, and it really didn't take too long. The key was to hold onto just enough of the wonder and wanderlust from the vacation to realize that you really do have choices in life, and with planning, hard work, and time, you can usually move towards the kind of existence you desire.

In my last President's letter I described a sequence of events that lead to my conscious choice to volunteer with ISPE. That choice was made over several years. After Hawaii, I found I had to make that choice again, but in a matter of days. For me, it was still a great decision. This Chapter's Board of Directors and key volunteers are a fun, talented, and dedicated group. I emphatically thank them for working with me to make the Chapter hugely successful in programs, social events, and service to our members. We made some progress in our improvement objectives, and have rededicated ourselves to continuing the journey to a Chapter of excellence, and most important, wide member involvement. I invite anyone reading this to investigate options for increased involvement in the Chapter. You may find it rewarding on many fronts.

To be honest, in the past we have done a poor job of utilizing volunteers. We simply didn't have the committee infrastructure and business processes in place to easily incorporate and utilize new people. We think we've solved that problem. We have identified seven committees that will be the driving force behind the Chapter's activities next season. In late summer you will be receiving an e-mail describing the goals and plans of these committees, as well as listing of specific ways in which you could contribute. I invite you to contact the committee chairpersons and discuss these opportunities. Please read the article in this newsletter for more information.

I still have a bit of the glow from Hawaii, and I'm trying to use it to work on a five-year plan that ends with something different than today. I don't know what that end is, but I think that just spending the time in contemplation might be worth it. As for my next vacation, I think I'll go back to the forced marches with kids and clan that I'm used to. At least when that's over, you're actually glad to get back to work..... 

André Walker

The Season Ended on a High Note with Two Great Programs

The 2001/2002 program year was a tremendous success. The programs have featured excellent speakers and been well attended.

Furthermore, dozens of attendees have taken advantage of the introductory offer to join ISPE and become members of the Boston Chapter. The last two programs this year were held at the Radisson Hotel in Cambridge.

The April program, "How I Tamed the Validation Tiger: Validation Case Studies," was a huge success. This was the best-attended program

of the year resulting in standing room only for some of the 165 people who turned out to hear the three speakers. Ed Winnett, Validation Manager at Biogen, began the program with an overview of the Biogen validation system. He used Biogen's recent Large Scale Biologics facility in RTP, NC as a case study. Mr. Winnett reviewed the project goals and timeline and explained how contract resources were used to streamline the validation process.

The second speaker, John Hyde, President of JM Hyde Consulting, presented a case

study on the cleaning validation of a large-scale manufacturing facility. He used several examples to show the problems that occur when the validation scope is not properly defined and planned. There were numerous lessons to be learned from this case study. As usual, John gave an excellent, informative presentation.

The final speaker was Brian Graeff, Senior Director of Quality Assurance at AstraZenica. Mr. Graeff's presentation, "Challenges of Validating

Continued on page 5.

Lexigen's Campus 2002 is Nearing Completion



Only 17 months after the start of construction work, Lexigen's new research and development campus in Billerica, Massachusetts is nearing its completion.

Merck acquired Lexigen Pharmaceuticals Corporation in 1999 as part of its strategy to establish its own research and development organization in North America. Lexigen's focus of research is oncology, specifically 'immunocytokines.' Immunocytokines are specialized genetically-engineered proteins that improve the ability of the immune system to attack cancer cells. The development of Lexigen's products is coordinated by EMD Pharmaceuticals Inc. in Durham, North Carolina. EMD is responsible for all of Merck's pharmaceutical activities in North America. This includes the development, manufacturing and sales of future oncology products originating in Merck's product pipeline, including those from Lexigen. With these innovative oncology products, Merck expects to become a global market leader in the biological treatment of cancer.

Founded in 1992, Lexigen presently employs about 65 people. EMD has an additional 28 employees located in the Boston area, who are involved in development and clinical manufacturing. Currently both groups are located in a leased building in Lexington. This location allows for close proximity to Harvard, MIT, the Longwood/Harvard Medical area and many other colleges and universities in the Boston area that provide a very fruitful environment for cooperation of industry and academia. Founded in 1992, Lexigen presently employs about 65 people. EMD has an additional 28 employees located in the Boston area, who are involved in development and clinical manufacturing. Currently both groups are located in a leased building in Lexington, Massachusetts in the

'Route 128 corridor' of high-technology and biotechnology companies around Boston. This location allows for close proximity to Harvard, MIT, the Longwood/Harvard Medical Area and many other colleges and universities in the Boston Area that provide a very fruitful environment for cooperation of industry and academia.

As expansion was not feasible at the current building, a new location for a research and development campus was purchased in 1999 in Billerica, Massachusetts. Jason Walsh, Director of Operations and Administration at Lexigen, was deeply involved in identifying and acquiring the property with an area of 47 acres, which is located in a very beautiful and wooded suburban area, only 5 miles away from the current location. There are two buildings that are currently under construction: the R&D building for Lexigen's research activities and the Protein Production Laboratory (PPL) for clinical manufacturing. Furthermore the campus-style master plan allows for an additional 235,000 ft. of research, development and light manufacturing buildings in the future.

The new 57,600 ft. R&D building includes biological labs, an animal facility, offices, meeting and communication areas. It will accommodate up to 120 employees total and allows for future growth. One of the focal points of the R&D building is the atrium in the entrance area that allows a lot of light to enter the building. This ensures natural light at every workspace, something that is required in Germany, but not common in the USA. Dr. Stephen Gillies, President of Lexigen, is convinced: "This state-of-the-art research building in this beautiful campus setting will help Lexigen to attract world-class researchers from academia and industry." The functional design will provide a better work environment

and encourage a higher quality of research. The existing space has become too tight and the building constraints compromise the quality of research. In the new building, Lexigen's researchers will develop new drugs that will help to secure and expand the product pipeline with innovative biologicals focusing on treating patients with cancer types that have not been curable before.

Merck has decided to establish a pilot plant for manufacturing of clinical material. These materials will be used for testing new cancer drugs in clinical studies. Merck's goal is to in-source what is currently external production and to establish and expand in-house manufacturing expertise. The Protein Production Lab with an area of 24,300 ft. and includes two separate clean room production suites. The core of this plant consists of two cell culture bioreactors, which produce the proteins from mammalian cells. The next production steps include a series of purification and polishing steps ensuring a high purity and quality of the product. The final oncology drug will leave the plant as bulk material. Colleagues at Merck Darmstadt in Germany or Merck Semoy in France will perform the final fill of the product. William Jacobsen, Director of the Protein Production Laboratory said "The number of products produced in the plant in one year is strongly dependent on the productivity of the cell lines and the patient dosage." The plant will meet FDA and EU requirements so the products can be used for clinical trials in both Europe and North America.

Approximately 30 employees including cell cultivation, purification, facilities, receiving, quality control and quality assurance personnel will work in the plant. Currently the clinical material is supplied externally by contract manufacturers. As there is a worldwide shortage of contract manufacturing capacity, it is in Merck's interest to bring this activity in-house for being more flexible and cost effective. Dr. Richard Schoenfeld, Vice President Supply Chain Management of EMD, states "Having this in-house capacity and knowledge will enable EMD and Merck to rapidly make the transition from research to clinical manufacturing, which is crucial for the successful development and launch of a new product."

Since Lexigen and EMD do not have their own in-house engineering capacity, the necessary engineering support and project management is being provided by several technical departments from Merck, Darmstadt. Architectural design, engineering and construction management is being performed by local companies – Ellenzweig Associates, PFI, and Linbeck / Kennedy & Rossi, respectively. "This is crucial for a successful project, as only local experts and companies have

Continued on page 8.

Donovan Engineering
1/4 page ad
p/u feb. 02 pg. 5

Boston Chapter 2002 Product Show Update

The Boston Chapter of ISPE is pleased to announce its 2002 Product Show. The Show is scheduled for Thursday, November 14, 2002 and will be held at the Newton Marriott. Due to the overwhelming success of last year's Show we have negotiated some additional amenities for our attendees:

- 150 spaces of dedicated parking for **attendees** of the show; the Marriott will provide personnel to manage access of this roped area within the main Hotel lot.
- A shuttle van running continuously from the Marriott to Laselle College (1 Mile) for off-site parking of **exhibitors**, and as overflow should the need arise.
- A commitment by the hotel to have all employees park off -site during the Show.

We anticipate that these changes should make it easy for all to take part in this event.

The Boston Chapter looks forward to another great event and is considering expanding the programs/ exhibitions at this time. An announcement to our membership and interested parties will be forthcoming.

We will begin taking registrations in July and provide our vendors with the opportunity to register early and/or consider premium booth space. And to remain consistent with the past Product Shows, we plan on having a number of informative seminars and great food service.

We look forward to presenting a great opportunity to see new technology, attend informative seminars and network with your industry peers.

Anyone interested in being a volunteer on the Trade Show Committee should contact Jim Grunwald at jgrunwald@spec-eng.com. 

Fluid Solutions
1/2 Page
(p/u feb. 02 pg. 6)

MA Olson
Full Page
p/u feb. 02 pg. 4



MARK A. SITCOSKE

High Purity New England, Inc. tel. 401.247.1144
11 Ridgewood Road fax 401.245.1114
Barrington, RI 02806 mark@highpurityne.com
www.highpurityne.com

Valicor

1/8 page

(p/u feb. 02 pg. 10)

Oakley Spec Services, Inc.

Bus Card

pull feb. 02 pg. 3

The Season Ended...

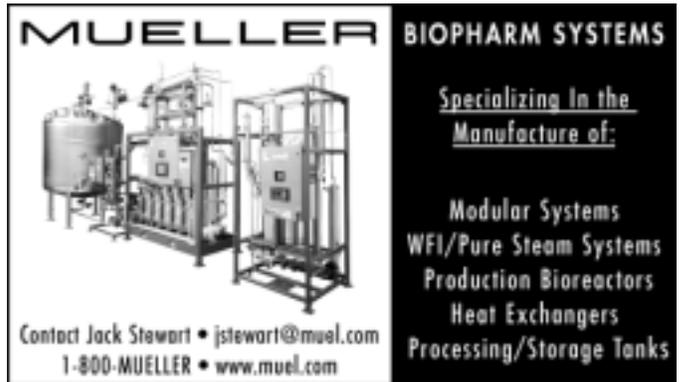
Continued from page 1.

Aseptic Processes,” reviewed the requirement for aseptic filling operations, using the AstraZenica facility in Westborough to demonstrate numerous examples. This proved to be a nice complement to the areas discussed by the other two presenters. The presentation covered both validation and general compliance issues.

The May program, “Your Communication Style: How to Develop Trust and Credibility by Honing Your Skills,” was the latest in our series of experimental meetings. Over the past two years the Boston Chapter has reserved the May meeting to try something new. This year’s plan was to hold a non-technical meeting. Our presenter, Susanne Bates of Bates Communications, Inc., gave a very interesting presentation, providing useful information to help technical professionals learn how to communicate better. These very important skills typically are not part of an engineering or scientific curriculum. Those in attendance found the information presented to be very useful. We also celebrated a successful program year with an extended networking reception at this meeting.

In retrospect, the past program season was a great success, thanks to the hard work of the Program Committee, the excellent quality of the presentations, and the participation of all those who attended meetings. Hopefully next season will be even more successful. Please watch for a Boston Chapter survey to be sent out this summer. This is your chance to provide input into the future activities of the Chapter. 🌐

Joe Musiak, Boston Chapter Vice President

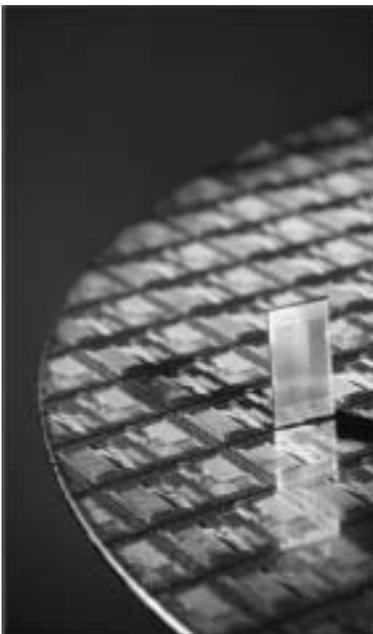


MUELLER BIOPHARM SYSTEMS

Specializing In the Manufacture of:

- Modular Systems
- WFI/Pure Steam Systems
- Production Bioreactors
- Heat Exchangers
- Processing/Storage Tanks

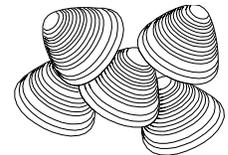
Contact Jack Stewart • jstewart@muol.com
1-800-MUELLER • www.muell.com



Program Management
Design/Build
Construction Management

Erland
Advanced Technology

83 Second Avenue | Burlington, MA | 01803
t: 781.272.9440 | f: 781.272.0601
www.erland.com | e: cvaciliou@erland.com



**ISPE Boston Chapter
End of Summer Social
Lobster & Clam Bake
See back page!**

SAVE THESE DATES!

2002-2003 Boston Chapter Program Season

End of Summer Social Thursday September 19, 2002

October Program A Wednesday October 2, 2002

October Program B Tuesday October 29, 2002

Annual Product Show Thursday November 14, 2002

Annual Holiday Social Event Thursday December 12, 2002

January Program Thursday January 9, 2003

February Program Tuesday February 25, 2003

April Program Thursday April 10, 2003

May Program Thursday May 1, 2003

Other important dates to save

Interphex (NYC) March 31, 2003 – April 2, 2003

Sign-on to Planning Committees

The Board of Directors has defined seven (7) committees that will be the foundation and driving force behind the Chapter's activities in the coming season.

Committee	Chair
Advisory Board	Paul Smock
Student Affairs	Andre Walker
Programs	Vice President elect & Niall Johnson
Communications	David Novak
Membership	James Polando
Product Show	Jim Grunwald
Social Events	Tim Crowley

Watch for an email this summer outlining the roles, responsibilities, and possible objectives for the coming year. The email will list contact information for you to sign up for committees of interest to you.

This is a new method of soliciting greater involvement from our membership. We realized that we needed a better system for identifying and managing volunteers and hope that this committee structure will be a solid improvement. 🌐

KMI
 1/8 page
 (p/u feb. 02 pg. 10)

**2002 ISPE
ANNUAL MEETING**



November 3-7, 2002
Wyndham Palace Resort and Spa
Lake Buena Vista, FL

Achieving Performance Excellence: "A Focus on the Future...
Managing Change, Challenge, and Applying Innovation"

FEATURING

Workshops • Plenary Session • Executive, Facilities, and Scientific Series • Discussion Forum Roundtables • Seminars • Clinical Trial Materials Forum • Career Center • Student Poster Competition • Networking • Table Top Exhibits and Sponsorships

New England EPA Drafts RO Water Discharge Permit

A recent press release from The New England EPA may be of interest to ISPE members. "The Director of the Office of Ecosystem Protection, Environmental Protection Agency-New England (EPA-NE), is issuing Notice of Draft National Pollutant Discharge Elimination System (NPDES) general permits for reject water from reverse osmosis units to certain waters of the State of Massachusetts. These draft NPDES general permits establish Notice of Intent (NOI) requirements, effluent limitations, standards, prohibitions, and management practices for reverse osmosis reject water."

Please see the EPA web site for details http://www.epa.gov/region01/npdes/the_permit.pdf 🌐

Industrial Analytical Svcs
 1/8 page ad
 (p/u feb. 02 pg. 12)

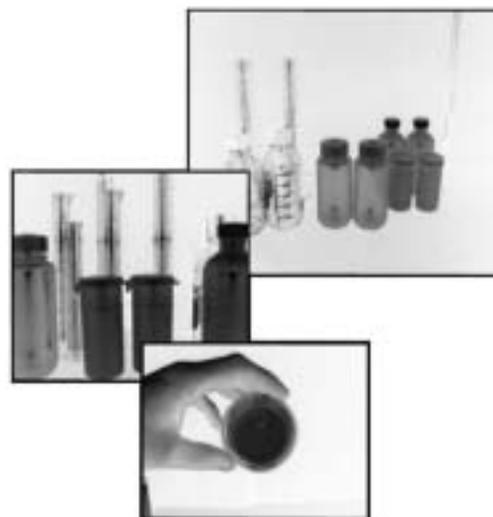
M.A. Selmon
 1/8 page ad
 (p/u feb. 02 pg. 12)
**please shrink to business card size*

Commissioning Agents
 1/8 page ad
 (p/u feb. 02 pg. 12)

Masy Systems
Full Page
p/u feb. 02 pg. 2

Servicing the Water Testing Needs of the Pharmaceutical and Biopharmaceutical Industries

- ○ **Feed Water Profiling**
 - EPA Potability Analysis
 - Standard Analysis
- ○ **Validation Water Analysis (USP 25/WFI)**
 - Conductivity - All Stages
 - Endotoxin Testing
 - Microbiological Analysis
 - Total Organic Carbon (TOC)
- ○ **On-Site Analytical Testing**
 - High Volume Microbiological Testing
 - On-Line TOC Analysis



Innovative Process Solutions , Inc.
Half Page
p/u feb. 02 pg. 3

Lexigen...

Continued from page 2.

the knowledge of the local situation and requirements," said Jörg Wiese, Project Manager from T-INVEST in Darmstadt, who has been in Boston since October 1999. As the highly specialized PPL requires a lot of input and oversight, Dr. Dirk Böhm, also from T-INVEST, joined the project as a technical project manager and has been working in Boston since September 2001. He is also involved in the conceptual design and planning for a commercial biotechnology manufacturing plant. Therefore Dr. Harald Benk T-INVEST provides additional support for factory acceptance tests, commissioning and validation.

The architectural design and engineering for this project began in November 1999. In late October 2000 the construction started with earthwork and site preparation. Foundations for the two buildings were started in April 2002. According to Tom Comeau, Vice President at Linbeck / Kennedy & Rossi, "In order to meet Lexigen's production schedule the project team created a fast-track, phased approach to the project which allowed some construction activities to take place before completion of the design. This approach condensed the construction duration to allow Lexigen to occupy the PPL building and proceed with validation in order to meet their production needs." The pilot plant

received a Certificate of Occupancy (CofO) in April 2002 and the R&D building received a CofO in May 2002. The commissioning and validation of the various systems and process equipment are estimated to be completed by the end of July 2002.

The total investment is currently estimated at \$53.7 M, the amount that had been approved by the executive board. Along with the construction costs for both buildings and equipment, this amount also includes the costs for the land purchase and for the infrastructure of the entire site. As land in the Boston area is scarce, securing a suitable property for Merck is definitely an investment for the future. Investigation of the costs of retrofitting an existing building to fulfill the functions needed, led to the decision to invest in the two new buildings and sufficient land to enable future growths. The new campus will provide the work environment to expand the pipeline of new oncology products and the expertise in clinical manufacturing. Through this project Merck will be one step closer to a successful launch of its own biological oncology product. A fast transfer from research to manufacturing will be essential for Merck to realize its goal to become a global market leader in the biological treatment of cancer. 



WE BUILD RELATIONSHIPS

Teambuild® works because it puts the emphasis on relationships... and not just those with clients. We also maintain solid, long-lasting relationships with the best contractors in each field of the industry, to bring you measurable value in every phase of the job.

Linbeck / Kennedy & Rossi, creating measurable value for our clients in the satisfaction of their building needs.

Linbeck / Kennedy & Rossi

We call it Teambuild®. Put simply, Teambuild® is a philosophy of doing the job right, in every detail, every step of the way. Together with our financial strength, technology and experience, Teambuild® assures our clients of the very highest construction standards in every project we undertake.

LINBECK / KENNEDY & ROSSI

ONE MAGUIRE ROAD • LEXINGTON, MA 02421 • TEL 781.372.1100 • WWW.LINBECKKENROSS.COM

GMP Labeling
1/8 page ad
(p/u feb. 02 pg. 12)

Sterility Testing
Microbial Limits
Preservative Effectiveness
Water and LAL Testing
Bioburden and Identification

Tel (978) 263-2624
Fax (978) 263-2784
Email mia@ma.earthnet.com

Microbiology
Research
Associates, Inc.

33 Nagog Park • Acton, MA 01720
Specialists in Microbiology Consulting, Contamination Control, Validation and Research
Visit our Web Site: www.mia-bact.com

SEAR-BROWN

ARCHITECTURE
ENGINEERING
PLANNING
CONSTRUCTION ADMINISTRATION

R&D Facilities
Fill & Finish
Pharmaceutical Chemicals
Biotechnology
Commissioning
Pilot Plants
Packaging & Warehousing

Offices nationwide
800.724.4131 www.searbrown.com

New Members

Henry Abernathy, Sheply, Bulfinch,
Richardson & Abbott
Mert Aktar, ETEX Corp
Thomas Albanese, Hyaluron Inc
Jose Alvarado, JE Merit Constructors Inc
Joel Alvarez, WYETH Biopharma
Heather Amon, UMMS-MBL
Mark Atkinson, Watson-Marlow Inc
Benny Auyeung, Eisai Research Institute
Rabia Ballica, Millipore Corp
Steven Baranow, Valsource Inc
Brett Belongia, Millipore Corp
Viviane Berry, High Purity New England
Matthew Birmingham, KMI/PAREXEL Inc
Dianne Bojar, WYETH BioPharma
Joseph Burke, Baumann Inc
Patricia Butts, cGMP Systems Inc
Christopher Calandra, Innovative Technology
Inc
Kevin Cash, Northeastern University
Jeffrey Champman, Valsource Inc
Marie Chung, Alkermes
Enzo Conte, CTBR
Josh Cook, WYETH Genetics Institute
Scott Corbin
Lisa Crossley, Dyax Corp
Kenneth Deardon, Millipore Corp
Jacob DeVries, Wyeth BioPharma
Daniel DiLeonardo, Integrated Builders
Brian Duffy, Massachusetts Biologic Labs
James Dunn, Stryker Biotech
Karmel Dutt, Dow Biopharmaceuticals
David Ekstrom, Bematek Systems Inc
Brian Feloney, WYETH Biopharma
Paul Flanders, Siemens
James Flowers, Northeastern University
Alison Fogel, Valstaff
George Forde, Rockwell Automation
Daniel Ghidoni, The Baker Co Inc
Emily Gilbreath, JM Hyde Consulting
James Greeley, FESTO Corp
Robert Green, Wyeth-Ayerst
Jonathan Hall, Andover Controls Corp
Scott Hamilton, Rockwell Automation
Lisa Hewitt, NxStage Medical
Christopher Hill, Kinetics
David Hinkel, Millennium Pharmaceutica
Robert Houtz, NuGenesis Technologies
Jack Hunter, Andover Controls Corp
Mark Itterman, Millennium Pharmaceuticals
Sabrina James, WYETH Genetics Institute
Sunitha Kandula, Acambis
Timothy Korwan, Biopure Corp
Faith Labarge, Acambis
Trevor LaBarge, Millipore Corp
Dale Langefels, Tenergy Water
Kevin Lear, Process Facilities Inc
Julie Liese, Wyeth
Lex Lim, BioMetrics Inc

Timothy Long, Lonza Biologics Inc
NormaJean Longval, Andover Controls Corp
Andrew Lorenc, Stryker Biotech
Nicholas Loy, Product Resources Inc
Kathryn Manz, Biopure Corp
Frank Mark, cGMP Validation LLC
Janice Marotto, Genetics Institute Inc
Chris Masiello, Masy Systems Inc
Robert Matell, Martell Associates
Virginia Matta, Alkermes
Tim McCormick, Andover Controls Corp
Patrick McKenna, Praecis Pharmaceuticals
Jennifer McTeague, JM Hyde Consulting
Joseph Milanese, Regeneron Pharmaceuticals
Inc
Jay Miller, Valsource Inc
Carl Mitscherich, Biogen Inc
Olga Mollin, Lonza Biologics Inc
Bob Moriarty, Methuen Construction
Michael Morin, Neill and Gunter Inc
Mark Myers, Biogen Inc
Vivianne Nguyen, Praecis Pharmaceuticals
Neal Parks, Pen West Pharmaceuticals Co
Steven Perrone, Hamel & McAlister Inc
Scott Pitzer, STERIS Corp
Derek Pretti, TVC Systems
Anvan Quach, Massachusetts Biologic Labs
Paul Query, Cabot Cabot & Forbes of New
England Inc
Robert Reed, Integrated Validation Services Inc
Rebecca Rose, JM Hyde Consulting
Gary Rucinski, Foster-Miller Inc
Peter Schmidt, Superior Controls Inc
Adam Schutz, Wyeth Biopharma
Jeffrey Silcox, Hallam Assoc Inc
Gilbert Sirois, PharmaPlan ValiCor
Paul Slaman, Genzyme Corp
John Sokolowski, Haemonetics Corp
Colin South, Biometrics
Ralph Spinelli, TVC Systems
Kimberley Sprague, Genzyme Corp
Monique Sprueill, WYETH Genetics Institute
Richard Stakutis, Phoenix Controls Corp
Coreen Sullivan, Invensys
Walter Talbot, The Chisholm Corp
Chris Tsourides, Kinetics
Amy Vandoren, GBH Macomber
Carole Varanelli, Muro Pharmaceutical Inc
Adam Villa, Wyeth BioPharma
David Walsh, Intellution
David Walsh, Jacobs Engineering Group Inc
Mark Walters, AutomaTech Inc
Michel Warny, Acambis
Phillip Werth, WYETH Genetics Institute
Mary Wojtyk, Acambis
Glenn Yale, Pond Technical Sales Inc
Barry Young, New England Controls Inc
Habib Zerriny, Industrial Process Group Inc

2001-2002 ISPE Boston Area Chapter Officers

André Walker, President
Biogen, Inc., 617/679-4977
andre_walker@Biogen.com

Joe Musiak, Vice President
Biogen, 617/679-3345
Joseph_Musiak@Biogen.com

Larry Weiner, Treasurer
Massachusetts Biologic Laboratories,
617/983-6543
larry.weiner@state.ma.us

James V. Blackwell, Secretary
Abbott Bioresearch Center, 508/849-2976
james.blackwell@abbott.com

2001-2002 Board of Directors

Daniel Lavin, Past President
daniellavin@attbi.net

Janice Abel
Invensys, 508/549-6373
Janice.abel@invensys.com

Carolyn Ball
Process Facilities, Inc., 617/449-1205
cball@pfi.com

Doug Castle
Engineered Technologies, 401/521-5700, ext. 27
Dcastle@engineeredtechnologies.com

Patti Charek
Linbeck/Kennedy & Rossi, 781/372-1100
pcharek@linbeck.com

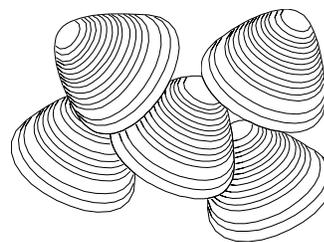
Jim Grunwald
SPEC Engineering, 781/221-0123
jgrunwald@spec-eng.com

Niall Johnson
TKT, 617/613-4459
njohnson@tktx.com

Hank Moes
Arion Water, 508/778-6975, ext.17
hankmoes@tdstelme.net

ISPE Boston Chapter End of Summer Social Lobster & Clam Bake

When: *September 19, 2002*



Where: *Jasper White's Summer Shack*
Alewife Brook Parkway, Cambridge, Massachusetts

What's Happening: *5:00 PM Cocktails, Beer & Snacks*
6:00PM Full Clambake including steamed lobster

Come enjoy a night of socializing with your fellow ISPE members and potential new members at the Summer Shack in Cambridge. Bring a friend.

Keep you eyes open for more information.

Save the date! 



International Society for
Pharmaceutical Engineering
3816 W Linebaugh Ave
Suite 412
Tampa, FL 33624

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
TAMPA, FL
PERMIT NO. 2661