

## ***The New Role of Quality: Tomorrow's Applications of Proven Quality Tools***

***May 16–18, 2011 • Pittsburgh, PA***

*Presented by the Institute for Continual Quality Improvement*

The ASQ Quality Management Division and the Statistics Division have combined their extensive resources and subject matter experts to provide attendees at this year's **World Conference on Quality Improvement (WCQI)** an additional educational opportunity. The QMD and the Statistics Division are conducting three days of subject-specific sessions and workshops with the theme of "The New Role of Quality: Tomorrow's Applications of Proven Quality Tools." Attendees will experience a richness of communication enhanced by these smaller, less formal and more personal sessions. This Conference-within-a-Conference is available at the WCQI for no additional charge and registrants can attend other WCQI sessions.

### Focus Areas:

- Quality basics
- Management principles
- Strategies and processes for improving quality
- Data-driven decision making
- Statistical thinking and methods
- Risk management
- Organizational excellence



For full session descriptions and to register please visit  
<http://www.asq.org/conferences/institute-for-continual-quality-improvement/index.html>  
or call 1-800-248-1946.

# The New Role of Quality: Tomorrow's

Presented by the Institute for C

## MONDAY, MAY 16

11:15 a.m. – 12:15 p.m. **Lunch**

12:15 p.m. – 1:15 p.m. **ICQI Welcome & Opening Remarks**—Gordon Clark, Conference Co-Chair  
**K1—Keynote Speaker**—Dr. Nicole Lurie

### 1:30 p.m. – 2:30 p.m. Concurrent Sessions

Room 1—Introductory	Room 2—Intermediate	Room 3—Intermediate	Room 4—Intermediate
<p><b>ICQI 01—Statistical Engineering Examples in the Engine Oil Additive Industry</b>—<i>Philip R. Scinto</i></p> <p>The oil industry's use of statistical engineering principles to create practices and protocols for testing and approving engine oils for motor vehicles will be discussed. Examples will show how statistical methods, tools and logic are integrated to solve problems and make improvements to meet the needs of the industry.</p>	<p><b>ICQI 02—Innovative Use of Statistical Tools to Monitor and Control In-Process Bioburden Levels at a Drug Manufacturing Facility</b>—<i>Irv Shiffer and Lisa Musmanno</i></p> <p>In-process bioburden levels often experience a string of high test results related to some specific event. Standard control charts with Alert and Action limits based on upper percentiles create an excessive number of false alarms. An alternative and statistically-based method for monitoring these strings will be presented.</p>	<p><b>ICQI 03—Finding Nemo</b>—<i>Hung Le</i></p> <p>Do you spend a lot of time and resource training your staff in quality management? Are you struggling with not being able to "move the mass"? Experience the journey of how we align action to priorities at a hospital Pharmacy Department. Tips and lessons learned will be shared.</p>	<p><b>ICQI 04—Strategic Planning and Lean Tools</b>—<i>JD Marhevko</i></p> <p>Lean Six Sigma tools and the DMAIC (Define, Measure, Analyze, Improve and Control) process are regularly used for improvement projects, but rarely applied to an organization's strategic planning effort. Learn how managers can use these tools to visualize, articulate and execute a plan to meet their organizational goals.</p>

2:30 p.m. – 3:00 p.m. **Transit Time**

### 3:00 p.m. – 5:15 p.m. Workshops

Room 1—Introductory	Room 2—Intermediate	Room 3—Introductory	Room 4—Introductory
<p><b>ICQI W01—Growth Through Customer Success—Aligning Voice of Process to Voice of Customer</b>—<i>Robert Mitchell</i></p> <p>This workshop provides a high-level overview of the 3M PPU Roadmap through an interactive workshop approach using the 3M "ZoomFlume" table-top training tool. PPU is 3M's approach to strengthen and enhance its deployment of Lean Six Sigma for operational and transactional process improvement in commercialization, manufacturing and supply chain systems.</p>	<p><b>ICQI W02—Science, Technology, Engineering, and Mathematics (STEM) Education: Changing the Direction</b>—<i>Cindy Veenstra and Julie Furst-Bowe</i></p> <p>This workshop will discuss STEM education at the K12, college and workforce levels. After an introductory lecture, attendees will have an opportunity to learn, share and network in round-table discussions on various STEM topics including K-12 outreach and innovation, college STEM retention and successful transition to the STEM workforce.</p>	<p><b>ICQI W03—Modular Kaizen for Health Systems Improvement</b>—<i>Grace Duffy</i></p> <p>The principles of lean are well designed to support a rapidly changing, interrupt-driven health organization. Learn to apply the tools and techniques of Modular Kaizen to design a culture of quality improvement. This workshop guides participants through a series of worksheets to define an organizationally specific Modular Kaizen plan.</p> <p><i>(Brought to you by ICQI &amp; QIHC)</i></p>	<p><b>ICQI W04—Introduction to Innovation</b>—<i>Peter Merrill</i></p> <p>The workshop shows how innovation is an imperative in order to compete in the marketplace and how innovation is driven by people's desire for convenience. Participants evaluate where you will make your own best personal contribution to Innovation, whether by generating ideas, finding solutions, making solutions practical or implementing solutions.</p>

## TUESDAY, MAY 17

### 9:15 a.m. – 10:15 a.m. Concurrent Sessions

Room 1—Introductory	Room 2—Advanced	Room 3—Introductory to Intermediate	Room 4—Intermediate
<p><b>ICQI 05—Improving Dupont's Businesses Using Statistical Thinking and Methods</b>—<i>Steven P. Bailey</i></p> <p>Case studies will be presented to illustrate how statistical thinking and methods have been used to improve DuPont businesses. The projects discussed include developing product quality management systems, approaches to creating experimental strategies, roadmaps for conducting measurement systems analysis and integration of historical data and designed experiments in problem solving.</p>	<p><b>ICQI 06—How to Frame Quality by Design (QbD) Space via Response Surface Methods (RSM) and Mixture Experiments</b>—<i>Patrick J. Whitcomb, Shari L. Kraber and Mark J. Anderson</i></p> <p>This presentation demonstrates via case studies how to frame the QbD design space utilizing RSM for process optimization and related tools for mixture design. It details elements of design, modeling, statistical analysis, numerical optimization of multiple response and graphical overlays that show the window of operability.</p>	<p><b>ICQI 07—ISO 9004: The Path to Experiencing Value Out of Management Reviews</b>—<i>Denise Robitaille</i></p> <p>After years of QMS implementations it's alarming to see how many top managers still aren't getting any value out of the management review process. The latest revision to ISO 9004 should help top management get more strategic planning benefit out of this key process in organizational decision making.</p>	<p><b>ICQI 08—Developing an Enterprise Wide Risk Taxonomy</b>—<i>Ron Meier</i></p> <p>One of the key changes from past Risk Management paradigms is how risk is defined. Under ISO 31000:2009 an important major revision of the terminology adds a dimension to risk. Risk is now defined as the "effect of uncertainty on objectives," acknowledging both the positive opportunities and negative consequences associated with it.</p>

10:15 p.m. – 10:45 p.m. **Transit Time**

# Applications of Proven Quality Tools

## Continual Quality Improvement

10:45 a.m.–11:45 a.m. Concurrent Sessions			
Room 1—Introductory to Intermediate	Room 2—Introductory	Room 3—Intermediate	Room 4—Advanced
<p><b>ICQI 09—Getting the Waste Out of Bulk Scheduling—Douglas Hlavacek</b> Training programs combined with software have made it easier to identify how to improve processes. But changing an individual's behavior and making change stick is much harder to accomplish. A case study of how technical and non-technical tools were used to improve a complex bulk scheduling process will be shared.</p>	<p><b>ICQI 10—Rethinking DMAIC; A More Rational Approach—Rip Stauffer</b> DMAIC is the common roadmap for Six Sigma projects. There are a number of variations, but most use the same sequence of steps and similar deliverables at each phase. This session addresses some of the DMAIC deliverables, points out potential weaknesses, and proposes simple, proven adjustments that address the weaknesses.</p>	<p><b>ICQI 11—Maintaining Senior Management Commitment in a Major Health and Human Services Agency—Grace Duffy</b> This presentation will explore the benefits and obstacles of maintaining Senior Management commitment to quality within a major Health and Human Services agency. Approaches for maintaining management involvement, visibility and accountability among a strong team of seasoned knowledge-system leaders will be discussed.</p>	<p><b>ICQI 12—Innovation and the Quality Manager of the Future—Jane Keathley</b> This presentation will explore the transition of the Quality Manager role to one of Innovation Manager, with specific approaches and activities for the transformation. The quality management professional has an opportunity to align with this shift in organizational focus by advancing quality management knowledge, methodologies, and expertise to innovation management.</p>

11:45 a.m.–12:30 p.m. **Lunch**

12:30 p.m.–1:30 p.m. **K2—Keynote Speaker—Ronald Snee**

1:30 p.m.–2:15 p.m. Concurrent Sessions			
Room 1—Intermediate	Room 2—Intermediate	Room 3—Introductory	Room 4—Introductory to Intermediate
<p><b>ICQI 13—Continual Improvement Using Simulation—Gordon Clark</b> Simulation is a powerful and underutilized tool for improving system performance. The presentation outlines the integration of simulation in improvement methodologies such as Lean Six Sigma. Case studies will illustrate the use and benefits of simulation in Lean Six Sigma. A valid simulation model reduces the need for physical experimentation.</p>	<p><b>ICQI 14—Balancing Stability and Innovation—Ian Meggarry</b> You know the saying, "Look before you leap.", but you have undoubtedly heard, "He who hesitates is lost." In any industry that requires leading-edge technology, it is critical to strike a balance between these two. This interactive presentation explores stability versus innovation, and risk management solutions that help balance the two.</p>	<p><b>ICQI 15—Project Selection, Teams and Tools for Lean Six Sigma in Public Health Agency—Bill Riley</b> Review, discuss and critique techniques for project selection, team development and tools application within an emerging lean Six Sigma health agency. The Assistant Secretary for Preparedness and Response within HHS chartered 6 pilot QI teams to initiate a Culture of QI. Experience the wins and the speed bumps encountered during this year long journey.</p>	<p><b>ICQI 16—Failure Analysis as a Cost of Quality Practice—Dan Zrymiak</b> In this presentation I have expanded on the failure analysis as a Cost of Quality practice. The logic is that by correctly diagnosing the internal or external failure, the suitable correction can be more easily selected, and the Cost of Quality program can more effectively track and record activities. A generic model is discussed.</p>

2:15 p.m.–2:45 p.m. **Transit Time**

2:45 p.m.–5:00 p.m. Workshops			
Room 1—Introductory to Intermediate	Room 2—Introductory	Room 3—Intermediate	Room 4—Intermediate
<p><b>ICQI W05—Statistical Engineering: Principles and Examples—Lynne Hare</b> Statistical Engineering is the practice of putting statistical thinking and methods into the hands of those who need it the most, namely scientists and engineers who solve real world problems. Here, we discuss basic principles of successful statistical engineering and provide examples of its application.</p>	<p><b>ICQI W06—Teaching Lean Principles with Simulation: The Helicopter Game—Steve Cox</b> Lean principles can be effectively taught using simulations, a "game". This workshop presents a model using a simulation in both transactional and operational paths. A curriculum outline will be presented and participants will actually conduct several rounds of the simulation.</p>	<p><b>ICQI W07—How Should Organizations Evaluate Risk?—Ron Meier</b> Decision makers would evaluate a proposed project's impact on the overall organization and would orchestrate coordinated strategies and trade-offs based on proper risk-return analyses. Nevertheless, it has proven difficult to integrate a risk management perspective throughout an organization such that it becomes the preferred and natural way to approach problems and decisions and to initiate processes and activities.</p>	<p><b>ICQI W08—Management Objectives vs. Audit Findings—J P Russell</b> The workshop focuses on matching audit findings with organization objectives. The workshop will take you through the after-the-audit process for: management thinking, analyzing financial impact of findings and determining effectiveness of corrective actions. The corrective and preventive actions from audits are payback to the organization.</p>

### WEDNESDAY, MAY 18

8:00 a.m.–10:00 a.m. Workshops			
Room 1—Introductory	Room 2—Introductory	Room 3—Introductory	Room 4—Intermediate
<p><b>ICQI W09—Design of Experiments to Improve Our Processes—Daksha Chokshi</b> This workshop will present a hands-on overview of Design of Experiments. Learn how effectively designed experiments significantly reduce the number of tests, objectively identify key process inputs, provide a structured approach for data analysis, and increase the chance of program success. Many case studies and success stories will be presented.</p>	<p><b>ICQI W10—Unlocking the Mystery Behind Failure Mode Effects Analysis (FMEA)—David M. Little</b> The mystery behind the FMEA process will be reviewed. It is a step-by-step approach for identifying all possible failures in a design, a manufacturing process, or a product or service. This workshop will include a case study to help understand the form. This is an overview of ASQ's FMEA Course.</p>	<p><b>ICQI W11—Integrating ISO 26000 into an Existing QMS—Milt Krivokuca</b> This workshop will provide an overview of ISO 26000—Social Responsibility. Attendees will learn ways to measure how well their organization is performing in this area. Several of its elements will be examined in greater detail identifying how an organization can integrate social responsibility into its existing quality management system.</p>	<p><b>ICQI W12—The Million Dollar Meeting—Tracy Owens</b> This workshop describes a process for conducting a collaborative, cross-functional meeting for innovation, value creation, and cost reduction. The Million Dollar Meeting (M\$M) requires advance preparation, open communication, data analysis, honest prioritization, and skilled facilitation. Attendees will leave with an action plan that can be implemented the very next week.</p>

# Keynote Speakers



## Dr. Nicole Lurie

Dr. Lurie is the Assistant Secretary for Preparedness and Response (ASPR) at the US Department of Health and Human Services (HHS). The Assistant Secretary for Preparedness and Response serves as the Secretary's principal advisor on matters related to bioterrorism and other public health emergencies. ASPR also coordinates interagency activities between HHS, other Federal departments, agencies, and offices, and State and local officials responsible for emergency preparedness and the protection of the civilian population from acts of bioterrorism and other public health emergencies. The mission of her office is to lead the nation in preventing, responding to and recovering from the adverse health effects of public health emergencies and disasters.

Prior to that, she was Senior Natural Scientist and the Paul O' Neill Alcoa Professor of Health Policy at the RAND Corporation. There she

directed RAND's public health and preparedness work as well as RAND's Center for Population Health and Health Disparities. She has previously served in federal government, as Principal Deputy Assistant Secretary of Health in the US Department of Health and Human Services; in state government, as Medical Advisor to the Commissioner at the Minnesota Department of Health; and in academia, as Professor in the University of Minnesota Schools of Medicine and Public Health. Dr. Lurie has a long history in the health services research field, primarily in the areas of access to and quality of care, managed care, mental health, prevention, public health infrastructure and preparedness and health disparities.

Dr. Lurie attended college and medical school at the University of Pennsylvania, and completed her residency and MSPH at UCLA,

where she was also a Robert Wood Johnson Foundation Clinical Scholar. She served as Senior Editor for Health Services Research and has served on editorial boards and as a reviewer for numerous journals. She has served on the council and was President of the Society of General Internal Medicine, and on the board of directors for AcademyHealth, and has served on multiple other national committees. She is the recipient of numerous awards, including the AHSR Young Investigator Award, the Nellie Westerman Prize for Research in Ethics, the Heroine in Health Care Award, the University of Pennsylvania School of Medicine's Distinguished Alumni Award, and is a member of the Institute of Medicine.

Finally, Dr. Lurie continues to practice clinical medicine in the health care safety net in Washington, DC.

## Ronald Snee



Ron Snee is Founder and President of Snee Associates, LLC, a firm dedicated to the successful implementation of process and organizational improvement initiatives. He provides guidance to senior executives in their pursuit of improved business performance using Quality by Design, Lean Six Sigma and other improvement approaches that produce bottom line results. He has played a leadership role in 28 major improvement initiatives for firms such as Novartis, Schering

Plough, Human Genome Sciences, Boehringer-Ingelheim and Kraft Foods. Ron recently authored three books on statistical thinking and Lean Six Sigma with Roger W. Hoerl of General Electric. Ron also serves as Adjunct Professor in the Temple University School of Pharmacy.

He received his BA from Washington and Jefferson College and MS and PhD degrees from Rutgers University. He is an academician in the International Academy for

Quality and Fellow of the American Society of Quality, American Statistical Association, and American Association for the Advancement of Science. Ron has been awarded ASQ's Shewhart and Grant Medals, and ASA's Deming Lecture Award as well as numerous other awards and honors. He is a frequent speaker and has published 4 books and more than 200 papers in the fields of performance improvement, quality, management, and statistics.