

# Making Impact

Annual Report 2011-2012



**Compete.**

Council on  
Competitiveness





# Inside

From Our Leaders	2
The Inaugural America Competes Awards	6
25th Anniversary Celebration Dinner & National Manufacturing Competitiveness Summit	8
Compete: <b>MANUFACTURING</b>	
The Council Makes a National Manufacturing Movement	13
Compete: <b>TECHNOLOGY</b>	
Council Drives Next Generation Innovation Strategy for United States	20
High Performance Computing Advisory Committee	24
Compete: <b>BENCHMARKING</b>	
Council on Competitiveness Forms Economic Advisory Committee	28
Compete: <b>GLOBAL</b>	
Global Innovation Initiatives	30
Global Federation of Competitiveness Councils	33
Council Welcomes New Staff	35
Council on Competitiveness Membership	36

# Building on 2011 Accomplishments

*The year ahead...*



*The Council on Competitiveness celebrated its 25th anniversary with a gala dinner in Washington, D.C., on December 7, 2011.*

For the past 25 years, the Council on Competitiveness has framed the national and global conversation around one of the most critical issues of our time: how to create the conditions for sustainable productivity growth at the heart of national prosperity.

Founded in 1986, the Council is the United States' only non-partisan, non-governmental organization whose mission is U.S. competitiveness. Our uncommon tripartite membership of corporate CEOs, university presidents, and labor leaders generates innovative public policy solutions, translates those ideas into action, and measures performance to ensure the future prosperity of all Americans.

Indeed, 2011 was a seminal year for the Council, but also a time of transition for the organization and for the country. Last Fall, we kicked off and celebrated our 25th Anniversary, highlighting the Council's achievements and impact, and thanking the many leaders who helped shape and define the Council's work.

This retrospective of our engagement and accomplishments during the past quarter century gives us a clear view of how we are positioned to give great force to the competitiveness agenda: our robust set of ongoing initiatives. While we are firmly addressing the immediate challenges to the U.S. economy, we are strongly rooted in the long-term competitiveness of the nation. Among our most distinctive features: we work closely with the nation's top leaders, yet we are free from political agendas. Given this enormous value, and as the national debate centers on job creation and U.S. prosperity, the Council is poised to play a prominent role in shaping the nation's economic future.

As the United States continued its slow climb out of recession during the past year, the Council released *Make: An American Manufacturing Movement* as the roadmap of recommendations to reinvigorate manufacturing capability and long-term economic growth. Our groundbreaking U.S. Manufacturing Competitiveness Initiative (USMCI), including a series of "Out of the Blue" dialogues across the country, informed *Make*, as did the Council's three *Ignite* reports reflecting responses from three separate constituencies: industry leaders, university presidents and national lab directors, and heads of labor organizations. Our ongoing research and analysis continue to make their mark on the administration's and lawmakers' policy discussions and proposals about driving economic growth, spurring job generation, and boosting energy security. But the USMCI's biggest imprint is outside the Capital Beltway, where state governors, and the leaders from business, universities and labor organizations work to implement *Make's* recommendations. Identifying and promoting technology-based innovation's role in the nation's long-term prosperity is one of the Council's hallmarks. The Council's Technology Leadership and Strategy Initiative (TLSI) makes the business case for innovation as a fundamental driver of national

## Council on Competitiveness Board

### Chairman

Samuel R. Allen  
Chairman and  
CEO, Deere &  
Company



### President & CEO

Deborah L.  
Wince-Smith



security and economic competitiveness, and in 2011, the TLSI was a dominant player. Entering its fourth year, the TLSI will release significant reports and findings as it lays the groundwork for its next phase of work.

At the same time, our High Performance Computing (HPC) initiative is way ahead of the curve as it pushes propagation of advanced modeling and simulation capability to provide competitive differentiation in the global marketplace and economic development across the United States—particularly through the National Digital Engineering Manufacturing Consortium (NDEMC).

## Council on Competitiveness Board



### Industry Vice Chairman

Michael R. Splinter  
Chairman,  
President and  
CEO, Applied  
Materials, Inc.



### University Vice Chairman

Shirley Ann  
Jackson  
President,  
Rensselaer  
Polytechnic  
Institute



### Labor Vice Chairman

William P. Hite  
President, United  
Association of  
Plumbers and  
Pipefitters

A public-private partnership, the NDEMC moves sophisticated modeling and simulation capabilities down into the supply chains of large companies, where it would otherwise be unaffordable and out of reach. In just months since launching, we have realized success with this innovative program.

Emblematic of the Council's dedication to the nation's economic health and its prominence in advancing the competitiveness dialogue across the worlds of scholarship, policy and business, the Council held the inaugural America Competes Awards dinner in New York City in March 2012. Honoring Jeffrey R. Immelt, chairman and CEO of the General Electric Company, and Shirley Ann Jackson, president of Rensselaer Polytechnic Institute, the dinner drew a capacity crowd, and raised more than \$1.2 million to support the Council's mission and programs. The tribute was an unqualified success, and the Council is indebted to its honorees and many generous sponsors.

The year ahead presents exciting opportunities and challenges. Two major goals guide the Council's current work:

- Moving *Make: An American Manufacturing Movement* through aggressive outreach and engagement with state and federal policymakers; holding cross-country regional dialogues; leveraging other Council initiatives; broadening media outreach; and, partnering with Council members in their respective home towns.
- As the outlook for the U.S. economy is again at the center of public concern and political debate—and as the line between developed and emerging economies blurs more each day—understanding and communicating the nature and meaning of “competitiveness” is more important than ever. The Council, along with its Economic Advisory (EAC)—several dozen of the nation's top economists—will revitalize and reshape the Council's flagship product, the *Competitiveness Index*, to promote a

common understanding of where America and Americans stand in the early 21st century. The EAC will set the stage for the next phase of the Council's *Index* work.

In many ways, America is better positioned than perhaps any other country to benefit from the forces reshaping the global economy, but key to doing this is to equip ourselves with the policies, skills and assets we need to prosper. The Council's leadership, and its members and staff, are fully committed to its mission. The Council is uniquely defined as a disparate group of stakeholders unified by a practical approach toward promoting U.S. competitiveness. In this year of political transition, the Council is widely recognized for cutting through the politics and making sound recommendations to raise the standard of living for all Americans.



**Samuel R. Allen**

Chairman, Council on Competitiveness  
Chairman and CEO, Deere & Company



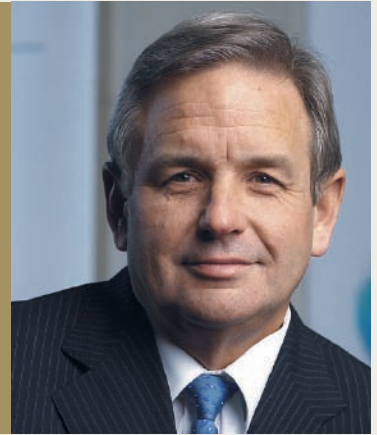
**Deborah L. Wince-Smith**

President & CEO, Council on Competitiveness

## Council on Competitiveness Board

### Chairman Emeritus

Charles O.  
Holliday, Jr.  
Chairman,  
Bank of America



### Treasurer, Secretary and Chief of Staff

William C. Bates



*“We focus on fundamentals. And from our solid base, we address our economy’s biggest challenges, seizing immediate opportunities and scanning ‘over the horizon issues’ that drive our nation’s long-term prosperity.”*

**Deborah L. Wince-Smith**

President & CEO  
Council on Competitiveness

# *The Inaugural America Competes Awards*



*From left: Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Shirley Ann Jackson, president, Rensselaer Polytechnic Institute; Jeffrey R. Immelt, chairman and CEO, General Electric Company; and, James Lee, Jr., vice chairman, JPMorgan Chase.*

*The Council on Competitiveness hosted its inaugural America Competes Awards dinner at the Plaza Hotel's Grand Ballroom in New York City on March 6, 2012.*

*The honorees were Jeffrey R. Immelt, General Electric Company chairman and CEO, recognized for corporate leadership, and Shirley Ann Jackson, Rensselaer Polytechnic Institute president, recognized for public service.*

*JPMorgan Chase's CEO Jamie Dimon chaired the event and was joined by the firm's vice chair, James Lee, Jr., who served as the event's distinguished co-chair.*

*Both awardees put a premium on United States competitiveness by demonstrating extraordinary dedication to the nation's economic health and advancing the public dialogue across the worlds of scholarship, policy, and business. As a tribute to their accomplishments, the dinner raised more than \$1.22 million to benefit the Council's ongoing work.*

*The Council established the America Competes Award for Corporate Leadership to recognize a leader with an exemplary life and a career-long commitment to work across the lines of business, academia, and politics for the betterment of America's communities, the nation, and indeed, the world.*

*The Council established the America Competes Award for Public Service to recognize a leader making tireless efforts to improve the quality of life in America and abroad through public service and private sector outreach.*

*Both of these awards highlight commitment to excellence and the American spirit. More than 50 sponsors supported this milestone event, including Deere & Company, Lockheed Martin Corporation, JPMorgan Chase, General Electric Company, Deloitte, and Cisco. The Council plans to host a series of America Competes Awards ceremonies around the United States.*



*Jeffrey R. Immelt*  
Chairman and CEO  
General Electric Company



*Shirley Ann Jackson*  
President  
Rensselaer Polytechnic Institute

# 25th Anniversary Celebration Dinner & National Manufacturing Competitiveness Summit

2011 marked the 25th anniversary of the Council on Competitiveness. The 25th Anniversary Celebration Dinner and the National Manufacturing Competitiveness Summit were on December 7-8, 2011, in Washington, D.C.

To commemorate the historic occasion, the Council honored its tradition of excellence by convening some of America's most influential leaders at an exclusive gala on December 7th. The Council held the dinner at the National Portrait Gallery's Donald W. Reynolds Center for American Art and Portraiture to honor the Council's founding chairman, John Young, who, as chairman and CEO of Hewlett-Packard, created and led the Council during its inception.

The National Manufacturing Competitiveness Summit followed on December 8th, harnessing the insight of the nation's premier decision-makers to forge a new path toward sustained American prosperity.

The Summit, held at the Ronald Reagan Building and International Trade Center, included active

participation from media partners. Among them: *U.S. News and World Report*, *IndustryWeek*, *Popular Science*, *Scientific American*, *Manufacturing Executive*, and CNBC. CNBC's

"Street Signs" was filmed on location, where host Brian Sullivan posed questions to c-suite speakers and guests.

At the Summit, the Council unveiled *Make: An American Manufacturing Movement*, a report identifying new opportunities to create a more robust industrial base.

For a quarter century, the Council has worked closely with the White House, Congress, and the private sector

to raise the standard of living for every American. This approach embodies the spirit of American competitiveness, and this event showcased the Council's dedication to that cause.



## OPPOSITE PAGE

*Top left: John A. Young, founder, Council on Competitiveness.*

*Top right: Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company.*

*Center left: Charles M. Vest, president, National Academy of Engineering.*

*Center right: Robert D. Hormats, under secretary for economic growth, energy, and the environment, U.S. Department of State; and Deborah L. Wince-Smith, president & CEO, Council on Competitiveness.*

*Bottom: Entertainment was provided by professional children's performing company, The Silhouettes.*





## National Manufacturing Competitiveness Summit

*Top:* The Summit brought together leaders from business, academia and labor.

*Center:* Steven Knapp, president, George Washington University; Mark Peters, deputy director for programs, Argonne National Laboratory; and Craig Giffi, vice chairman, Deloitte.

*Bottom left:* Daniel B. Poneman, deputy secretary of energy, U.S. Department of Energy; and Thom Mason, director, Oak Ridge National Laboratory.

*Bottom right:* Alexander "Andy" A. Karsner, distinguished fellow, Council on Competitiveness, former assistant secretary of Energy for Efficiency and Renewable Energy, U.S. Department of Energy; James M. Phillips, chairman and CEO, NanoMech, Inc.; and John F. Mizroch, managing member, John F. Mizroch, LLC.





**Top left:** Anne Clough; Wayne Clough, secretary, The Smithsonian Institution; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; and G.P. "Bud" Peterson, president, Georgia Institute of Technology.

**Top right:** Terry Urbanek, international representative, United Association of Plumbers and Pipefitters; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Gov. Pat Quinn, Illinois; and William Bohnett, president, Whitecap Investments LLC.

**Center:** Charles O. Holliday, Jr., chairman emeritus, Council on Competitiveness, and chairman, Bank of America; Keith D. Nosbusch, chairman and CEO, Rockwell Automation, Inc.; and Nicholas T. Pinchuk, chairman and CEO, Snap-on Incorporated.

**Bottom:** Council on Competitiveness staff.



American manufacturing  
is moving forward.



The Council on Competitiveness  
is leading the way.



Join us at [www.compete.org](http://www.compete.org).



**Top right:** Patrick D. Gallagher, under secretary of commerce for standards and technology, and director, National Institute of Standards and Technology (NIST), U.S. Department of Commerce.

**Center:** Jack McDougale, senior vice president, Council on Competitiveness.

**Bottom:** Randi Weingarten, president, American Federation of Teachers, AFL-CIO; Keith E. Williams, president, CEO and trustee, Underwriters Laboratories Inc.; Alice Gast, president, Lehigh University; Fred Guteri, executive editor, "Scientific American;" and Rana Foroohar, assistant managing editor, "TIME Magazine."

# Compete: MANUFACTURING

## *The Council Makes a National Manufacturing Movement*

### 2011 in Review

The U.S. Manufacturing Competitiveness Initiative (USMCI) culminated in a National Manufacturing Summit in December, convening hundreds of business, university, labor, and government leaders for a day-long event. *U.S. News and World Report*, *IndustryWeek*, *Popular Science*, *Scientific American*, *Manufacturing Executive*, CNBC, and other national media outlets partnered with the Council to cover the event with onsite broadcasts, articles, and interviews with Council members and staff. Additionally, CNBC went live at the event, interviewing:

- Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company;
- Charles O. Holiday, Jr., chairman emeritus, Council on Competitiveness; chairman, Bank of America; and, chairman, Global Federation of Competitiveness Councils;
- David Vieau, president and CEO, A123 Systems;
- Nicholas T. Pinchuk, chairman and CEO, Snap-On Incorporated;
- Gene Huang, chairman, Council on Competitiveness Economic Advisory Committee; and chief economist and vice president, FedEx Corporation; and
- Deborah L. Wince-Smith, president & CEO, Council on Competitiveness.



*Alan Taub, vice president, global research and development, General Motors Company; Chad Evans, senior vice president, Council on Competitiveness; James M. Phillips, chairman and CEO, NanoMech, Inc.; Alan Mulally, president and CEO, Ford Motor Company; Ray O. Johnson, senior vice president and chief technology officer, Lockheed Martin Corporation; Jean-Lou Chameau, president, California Institute of Technology; James P. Campbell, former president and CEO, GE Appliances & Lighting, and former president, GE Consumer & Industrial; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; and Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company.*

*“Manufacturing is a cornerstone of American independence, economic prosperity, and national security, and we must not give ground.”*

**Samuel R. Allen**

Chairman, Council on Competitiveness, and  
Chairman and CEO, Deere & Company

# 2011 Dialogue Topics



**RICHLAND, WA**  
May 23-24, 2011  
"Out-of-the-Blue" Dialogue:  
Accelerating Life-Cycle Commercialization  
Hosted by Steven F. Ashby,  
Pacific Northwest National Laboratory

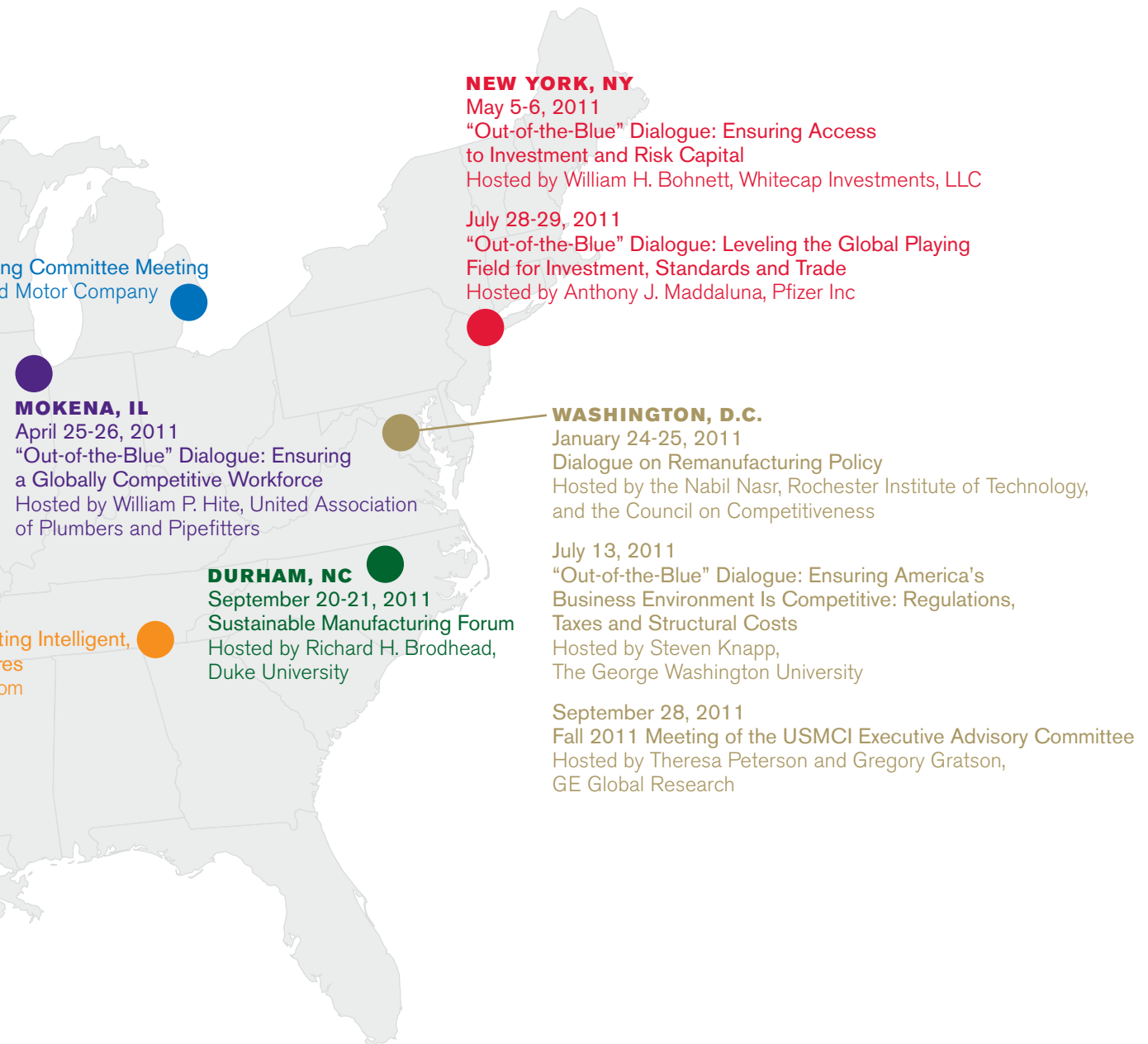
**DEARBORN, MI**  
June 13-14, 2011  
Summer 2011 USMCI Steering  
Hosted by Alan R. Mulally, Ford

**MOLINE, IL**  
October 12-13, 2011  
Fall 2011 USMCI Steering Committee Meeting  
Hosted by Samuel R. Allen, Deere & Company

**BERKELEY, CA**  
May 25-26, 2011  
"Out-of-the-Blue" Dialogue:  
Strategic Resources and Advanced Materials  
Hosted by Paul A. Alivisatos,  
Lawrence Berkeley National Laboratory

**ALBUQUERQUE, NM**  
May 2-3, 2011  
Spring 2011 USMCI Executive  
Advisory Committee Meeting  
Hosted by Paul J. Hommert,  
Sandia National Laboratories

**CHATTANOOGA, TN**  
June 20-21, 2011  
"Out-of-the-Blue" Dialogue: Creating  
Secure and Resilient Infrastructure  
Hosted by Pierre L. Gauthier, Alstom





## “Out-of-the-Blue” Dialogue: Ensuring a Globally Competitive Workforce

*William P. Hite, general president of the United Association of Plumbers and Pipefitters (pictured speaking at left), hosted the event at the UA Training Facility in Mokena, IL, April 25-26, 2011.*

The December Summit also marked the official release of *Make: An American Manufacturing Movement*. This comprehensive national strategy addresses the most critical challenges facing American manufacturers. *Make* has already made its mark.

- President Barack Obama drew heavily on *Make* during the 2012 State of the Union;
- All members of Congress, governors, cabinet secretaries, and many other influential leaders across the country have received a copy of *Make*;
- Deborah L. Wince-Smith, Council president & CEO, presented *Make* at the annual Congressional Democratic Caucus Strategy meeting;

- Jack McDougle, Council senior vice president, was featured on “PBS NewsHour” discussing *Make*, along with former Clinton Administration Labor Secretary Robert Reich; and
- News outlets picked up the press release announcing *Make* more than 14,000 times.

2011 was an important year for the Council, laying the foundation to implement the policy solutions outlined in *Make*. In 2012, the USMCI will capitalize on these successes and work with leaders in the public and private sectors to reignite an American manufacturing movement.

## 2012 Outlook

Directed by Council senior vice president Jack McDougale, the USMCI is pursuing an ambitious plan of action in 2012 to grow its steering committee, build on the success of the *Make* report, and disseminate its findings to policymakers at the federal, state, and local levels. In particular, the USMCI plan of work already includes the following:

- In February, Deborah L. Wince-Smith, Council president & CEO, spoke at General Electric Company's "American Competitiveness: What Works" forum in Washington, D.C., hosted by Jeffrey R. Immelt, chairman and CEO, General Electric Company.
- Fellow speakers included Andrew N. Liveris, president, chairman and CEO, The Dow Chemical Company; W. James McNerney, Jr., chairman, president and CEO, The Boeing Company; Gov. John Hickenlooper (CO); and Sen. Rob Portman (OH).
- Council staff are working with Gov. Dave Heineman (NE), current chair of the National Governors Association (NGA), and Gov. Jack Markell (DE), current vice chair, to present and discuss *Make* at upcoming NGA policy meetings.
- The Council is preparing a series of manufacturing town hall meetings across the country with selected state leaders, among them: Gov. Rick Perry (TX), Gov. Bill Haslam (TN), Gov. Pat Quinn (IL), Gov. Deval Patrick (MA) and Sen. Robert P. Casey, Jr. (PA).

## USMCI Chairman's Dinner

*At right:* Larry Weber, founder and CEO, W2 Group; Cynthia McIntyre, senior vice president, Council on Competitiveness; and Beth Chappell, president and CEO, Detroit Economic Club at Ford's Rouge Plant in Dearborn, MI, in June 2011.

*Bottom left:* Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company; and Ray O. Johnson, senior vice president and chief technology officer, Lockheed Martin Corporation.

*Bottom right:* Amy Kaslow, senior fellow, Council on Competitiveness; and Sheryl Handler, president and CEO, Ab Initio.



The 2011 *Ignite* report series, an effort undertaken by the Council in partnership with Deloitte, was also instrumental in the development of *Make*. The three interview-driven reports in the *Ignite* series captured the input and perspectives of corporate CEOs, university presidents and national lab directors, and labor leaders—on the near-term steps needed to improve U.S. manufacturing competitiveness. The reports also addressed the long-term measures required to ensure America retains its position of global manufacturing leadership.



- The Council continues to reach out to presidential and Congressional campaigns to ensure the Council’s voice is heard during this pivotal election year.
- The Council is working to create opportunities for Council members to interact with Congressional leadership.
- The Council is establishing a National Manufacturing Coalition to expand its grassroots reach. The Coalition will include organizations like the Society for Manufacturing Engineers and The Minerals, Metals & Materials Society.
- The Council produced the 2012 Global New Energy Summit in Colorado Springs in April as a springboard for re-engaging the Energy, Security, Innovation and Sustainability (ESIS) Initiative and further incorporating the Council’s energy portfolio into the USMCI.
- The USMCI has continued its “Out-of-the-Blue” manufacturing dialogue series:
  - **Next Generation Supply Networks:** hosted by G. P. “Bud” Peterson, president, Georgia Institute of Technology, held in Atlanta February 28–29.
  - **Materials Innovation Infrastructure:** co-hosted with The Minerals, Metals & Materials Society, held in Orlando, FL, March 14–15.
  - **Cyber Infrastructure and Security:** hosted by Eric D. Isaacs, director, Argonne National Laboratory, in Chicago, date TBD.
  - **Advanced Manufacturing Technologies and Processes:** hosted by Dennis Berkey, president, Worcester Polytechnic Institute, in Massachusetts, date TBD.
  - **Talent and Innovation:** hosted by John McGlade, chairman, president and CEO, Air Products and Chemicals, Inc.; and Alice P. Gast, president, Lehigh University, in Pennsylvania, date TBD.
  - **Accelerating and Innovating Workforce Development:** hosted by Nicholas Pinchuk, president & CEO, Snap-on Incorporated, in Kenosha, WI, date TBD.
- The USMCI Steering Committee recently welcomed the addition of Nicholas Pinchuk, president & CEO, Snap-on Incorporated; and Dennis Berkey, president, Worcester Polytechnic.



*From left: Glenn Baker, director of engineering, technology, and quality services, Deere & Company; Klaus Hoehn, vice president, advanced technology and engineering, Deere & Company; Beth Chappell, president and CEO, Detroit Economic Club; Shirley Ann Jackson, university vice chairman, Council on Competitiveness, and president, Rensselaer Polytechnic Institute; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company; and Paul J. Hommert, director of Sandia National Laboratories and president of Sandia Corporation, at the Detroit Economic Club.*

- Paul Hommert, director of Sandia National Laboratories and president of Sandia Corporation, joined the Leadership Council as the National Laboratory Lead, succeeding the recently retired director of Lawrence Livermore National Laboratory, George Miller.
- The USMCI team is working closely with Deloitte to produce the next iteration of the *Global Manufacturing Competitiveness Index*.
- Finally, the USMCI Steering Committee anticipates meetings in the spring and fall, with working groups configured around the five major *Make* recommendations:
  1. Innovation and Production Economy
  2. Exports, Trade Deficit, Market Access and Mercantilism
  3. Power and Potential of American Talent
  4. Smart Innovation and Manufacturing
  5. Next Generation Supply Networks and Advanced Logistics

2012 may be a seminal time for the nation's manufacturing base. The pending elections and ensuing political debates will have a tremendous impact on America's economic trajectory and its position as a global manufacturing leader. The Council looks forward to working with stakeholders throughout its network to truly make an American manufacturing movement.

*“We have to work together, and we have to pull out all the stops to make the manufacturing industry successful.”*

**William P. Hite**  
General President  
United Association of Plumbers and Pipefitters

# Council Drives Next Generation Innovation Strategy for United States

## *Technology Leadership and Strategy Initiative Charts Technology and Policy Roadmaps*

Entering its fourth year, the Technology Leadership and Strategy Initiative (TLSI) continues to make the business case for strategic, prioritized investments in the research, talent and infrastructure necessary for tech-based innovation in an era of endless frontiers but limited resources.

The TLSI convenes chief technology officers from America's premier companies and their peers from top research universities and national laboratories. The initiative co-chairs are Klaus Hoehn, vice president of advanced technology and engineering, Deere & Company; Ray O. Johnson, senior vice president and chief technology officer, Lockheed Martin Corporation; and, Mark Little, senior vice president and chief technology officer, General Electric Company.

The TLSI strives to enable more productive American research partnerships and to preserve the nation's technology leadership—which has been at the core of the nation's productivity revival during the past 25 years. An invigorated innovation enterprise creates new jobs and firms, drives economic growth, and is essential to solving some of America's greatest challenges in areas as diverse as health, energy and security.

### 2011 in Review

The TLSI held dialogues in July and October of 2011, supplemented by nearly two dozen virtual working group meetings. These TLSI working groups—focusing on accelerating innovation, improving the regulatory environment for innovation, developing the talent to innovate in the 21st century, and communicating the fundamentals of innovation—helped create a slate of recommendations for the Council on Competitiveness' U.S. Manufacturing Competitiveness Initiative (USMCI) and its report *Make: An American Manufacturing Movement*.

In July, TLSI Dialogue 5 explored which technologies and challenges are most important to America's future and considered how to improve the management, rules, and funding allocation of the federal research enterprise. Prior to the dialogue,

*“The United States can succeed and prosper in the 21st century. Doing so will require a concerted effort of government, industry, and academia—all working together.”*

**Ray O. Johnson**  
Senior Vice President and Chief Technology Officer  
Lockheed Martin Corporation



*Chad Evans, senior vice president, Council on Competitiveness; Klaus Hoehn, vice president, advanced technology and engineering, Deere & Company; Bart Gordon, former member of Congress, distinguished fellow, Council on Competitiveness, and partner, K&L Gates; Arun Majumdar, acting under secretary of energy, and director, Advanced Research Projects Agency–Energy (ARPA–E); Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Ray O. Johnson, senior vice president and chief technology officer, Lockheed Martin Corporation; and Mark Little, senior vice president and chief technology officer, General Electric Company.*

the Council issued an analysis of federal research funding through several prisms—by agency, character of work (basic, applied, development), budget function, and appropriations subcommittee.

Dialogue 5 featured three guests from the Department of Energy (DOE). Steven Koonin, then under secretary of science, spoke to the TLSI participants about the DOE's Quadrennial Technology Review. Arun Majumdar, acting under secretary of energy and director of the Advanced Research Projects Agency–Energy (ARPA-E), updated the TLSI on ARPA-E's progress since he addressed the TLSI in 2009. Dan Hitchcock, associate director for Advanced Scientific Computing Research, joined TLSI member and co-chair of the Council's High Performance Computing (HPC) Initiative, Tomás Díaz de la Rubia—deputy director for science and technology at Lawrence Livermore National Laboratory—to discuss how the nation could leverage HPC's modeling and simulation powers more effectively for competitiveness.

In October, The United States Naval Academy hosted TLSI Dialogue 6, which considered several technology policy developments, discussed implementation of the TLSI recommendations, and reviewed the research and technology priorities of the United States Navy and the United States Naval Academy. Rear Admiral Nevin Carr Jr., chief of naval research and director of test and evaluation and technology requirements, shared his concerns and plans to address STEM education in the United States. Andrew Phillips, academic dean and provost of the United States Naval Academy, explained the outlook, accomplishments and challenges of the Academy as it trains midshipman in science and engineering. Led by USNA midshipmen, Dialogue 6 participants took tours of the Academy's facilities to learn about research.

Rachel Goslins, executive director of President Barack Obama's Committee on the Arts and Humanities, spoke about the linkage between an arts-infused education and greater student engagement and achievement—including in STEM fields.



**Left:** Tomás Díaz de la Rubia, deputy director for science and technology, Lawrence Livermore National Laboratory; and William F. Brinkman, director, Office of Science, U.S. Department of Energy.

**Right:** Steven Ashby, deputy director for science and technology, Pacific Northwest National Laboratory; Steven Binkley, senior advisor, Office of Science, U.S. Department of Energy; Andrew Phillips, academic dean, U.S. Naval Academy; and Thomas Rosenbaum, provost, University of Chicago.

Cyrus Wadia, assistant director for clean energy and materials R&D at the White House Office of Science and Technology Policy, reviewed the Materials Genome Initiative.

William Brinkman, director of the Department of Energy Office of Science, shared developments in HPC—including the outlook for exascale computing, the next step in the evolution of HPC.

During the course of three years, the TLSI has stimulated a robust debate on technology policy and built a powerful coalition of the nation's top technology leaders to ignite action. The TLSI has generated several positive outcomes for U.S. technology leadership. It has:

- Identified several grand challenges and strategic technologies that would help solve them, providing the nation with an improved technology roadmap.
- Contributed directly or indirectly to administration and Congressional policy reform efforts in an array of areas, including intellectual property, export controls, basic research, community colleges, manufacturing, immigration, STEM education and high performance computing.

- The TLSI's engagement with the Department of Energy played a direct role in the department's effort to boost corporate collaboration with the national laboratories through the Agreements for Commercializing Technology initiative (ACT). Deputy Secretary of Energy Daniel B. Poneman launched ACT in a major keynote address during the Council's 25th Anniversary celebration in December 2011.

By creating a community of top technologists, the TLSI continues to spur new relationships and collaborations between government, industry, academia and the national laboratories. Participants also carry insights from the TLSI Dialogues, virtual working groups and reports to other coalitions and advisory bodies of the nation's leaders, broadening the initiative's impact.



**Left:** Ambassador Frederick M. Bush, executive vice president, Council on Competitiveness; Bart Gordon, former member of Congress, distinguished fellow, Council on Competitiveness, and partner, K&L Gates; Katherine L. Jones, midshipman, U.S. Naval Academy; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Cheryl Martin, deputy director for commercialization, Advanced Research Projects Agency–Energy (ARPA–E); and Devereux B. Smith, midshipman, U.S. Naval Academy.



**Right:** Ray O. Johnson, senior vice president and chief technology officer, Lockheed Martin Corporation; and Admiral Michael H. Miller, superintendent, U.S. Naval Academy.

## 2012 Outlook

Directed by Council senior vice president Chad Evans and vice president Chris Mustain, the fourth year of the TLSI will maintain the twice-yearly progressive dialogue series and embark on a range of activities to follow up on the TLSI recommendations. Some TLSI follow up will be carried out in concert with other Council initiatives. The 2012 TLSI Dialogues will take place June 28 and October 22.

The Council, along with TLSI co-chair Ray O. Johnson, senior vice president and chief technology officer of Lockheed Martin Corporation, and National Academy of Engineering president Charles Vest (and former Council vice chair), will host the first-ever National Engineering Forum (NEF) in New York City on September 19, 2012. Envisioned as the “Davos of Engineering,” the NEF will spotlight the engineering discipline and the profession for senior leaders across America.

## The National Engineering Forum will focus on:

### Capacity

Are we training, retaining and developing the engineers necessary for the 21st century?

### Capability

What are the grand challenges and opportunities that engineering—in concert with the rest of society—can solve?

### Competitiveness

How can engineering leadership drive productivity and prosperity in the United States?

# High Performance Computing Advisory Committee

## *Putting HPC into action through the National Digital Engineering and Manufacturing Consortium*

### 2011 in Review

Under the umbrella of the Technology Leadership and Strategy Initiative, the Council on Competitiveness re-launched its High Performance Computing Advisory Committee (HPCAC)—led by TLSI members Robert Buhrman, senior vice provost for research at Cornell University; Tomás Díaz de la Rubia, deputy director for science and technology at Lawrence Livermore National Laboratory; and, Michael McQuade, senior vice president of science and technology at United Technologies Corporation—at Lawrence Livermore National Laboratory. The Council also hosted a second HPCAC meeting in Washington, D.C., on October 25, with robust discussion centered on the U.S. path to exascale computing, cyber security, access to leading-edge

HPC systems (federal and beyond), and building market demand for and commercialization of federal open source codes.

As the pre-eminent forum for convening HPC expertise in the United States, the HPCAC spans the entire HPC ecosystem by including membership from industrial commercial users, hardware and software vendors, academia, national laboratories, HPC centers, and other R&D institutions.

The HPCAC recommends policy and implementation strategies to maintain American leadership in the adoption, use, and deployment of HPC hardware and application software. It also aims to accelerate adoption, and stimulate and facilitate wider usage of HPC across the private sector in order to propel long-term U.S. productivity, innovation, and competitiveness.

### Goals of the HPCAC include:

- Developing and delivering the message of how HPC can act as a technological foundation for national competitiveness, innovation, and security;
- Providing high-level recommendations to policy makers on what and how public and private investments in HPC can have maximum impact on our common goal of maintaining U.S. leadership in science and engineering, workforce talent, and industrial productivity;
- Advocating for national policies that maximize the economic return on U.S. public investment in HPC and promote adoption and use of HPC technologies by the domestic private sector through publications, press releases, ongoing major Council initiatives, and the public forum;
- Lowering the barriers to adoption of HPC in industry by developing and promoting a national strategy, while recommending implementation that systematically identifies and addresses obstacles to wider penetration and utilization;
- Increasing access to HPC advanced modeling and simulation technologies and expertise, allowing firms of all sizes to quickly innovate, design, prototype, test and evaluate, and deploy or commercialize, reducing time to market and costs throughout every stage of the product life-cycle; and
- Supporting the research, development, and application of exascale and other advanced HPC technologies, both hardware and software, that will continue U.S. global leadership in the field.



*Aneesh Chopra, former chief technology officer of the United States; George B. Adams III, deputy director, Network for Computational Nanotechnology, Purdue University; Lary Rosenboom, president and CEO, Rosenboom Machine & Tool, Inc.; John Fernandez, former assistant secretary, Economic Development Administration, U.S. Department of Commerce; and Klaus Hoehn, vice president of advanced technology and engineering, Deere & Company.*

The HPCAC will convene top HPC technology leaders from across multiple sectors to promote discussion, interaction and action. The goal is to retain U.S. global leadership in HPC and its applications, and leveraging government investments in HPC research and development to provide the public and private sectors with the competitive advantage to out-innovate the rest of the world.

In addition to the overarching goals of the HPCAC to elevate the national conversation around the advantages and capabilities inherent in HPC, the Council has been the driver of an innovative, first-ever, large-scale, public-private pilot project designed explicitly for greater adoption and use of HPC, known as the National Digital Engineering and Manufacturing Consortium (NDEMC).

The NDEMC is a \$4.5 million partnership (\$2 million from the U.S. government matched to \$2.5 million from the private sector) between:

- The Council on Competitiveness;
- The U.S. government, including the Economic Development Administration of the U.S. Department of Commerce, the Department of Defense, the Department of Energy, NASA, the National Science Foundation, and the Small Business Administration;
- Original equipment manufacturers (OEMs), including Deere & Company, General Electric Company, Lockheed Martin Corporation, and Procter & Gamble;
- Universities, computing centers, and NGOs, including Purdue University, the National Center for Manufacturing Sciences, Inc., the National Center for Supercomputing Applications in Illinois, the Ohio Supercomputing Center; and
- The State of Ohio.

*"If we can bring doers, dreamers, and drivers together, we will have solutions to our problems."*

**Klaus Hoehn**

Vice President of Advanced Technology and Engineering  
Deere & Company



The Council coordinates the NDEMC to focus on: providing education, training, and access to computing resources for the small and medium-sized enterprise manufacturing workforce to develop modeling, simulation and analysis (MS&A) skills; shortening time-to-market for products; manufacturing improved products; and increasing quality while lowering costs. The OEMs will benefit from increased efficiency in collaborations with their suppliers, as well as from heightened confidence in their suppliers' abilities to innovate rapidly.

The initial cohort of SMEs engaged in the NDEMC pilot in early November 2011 include:

- Adams Thermal Systems, sponsored by Deere & Company;
- Greenlight Optics, sponsored by Lockheed Martin Corporation;
- Jeco Plastic Products, sponsored by Purdue University;

- Plastipak Packaging Inc., sponsored by the Procter & Gamble Company;
- Pratt Industries, sponsored by the Procter & Gamble Company;
- Rosenboom Inc., sponsored by Deere & Company; and
- TPI Composites, sponsored by GE Energy.

### 2012 Outlook

Directed by Walter Kirchner, Council chief technologist, the HPCAC will continue to grow its invitation-only membership and activities through a variety of activities tightly coupled to the Council's TLSI and USMCI. This includes biannual dialogues and workshops to understand and define the drivers and benefits of extreme computing-based modeling and simulation on U.S. competitiveness, and to advocate for greater access to national HPC assets for the private sector. It seeks to position U.S. industry to be early adopters in exploiting



#### OPPOSITE PAGE

**Left:** Pradeep K. Khosla, dean, College of Engineering, Carnegie Mellon University; and Spiros Dimolitsas, senior vice president for research and chief technology officer, Georgetown University.

**Right:** David Lifka, director, Center for Advanced Computing, Cornell University; Thomas Rosenbaum, provost, University of Chicago; Steve Rottler, chief technical officer and vice president for science, technology & research foundations, Sandia National Laboratories; Wolf von Maltzahn, vice president for research, Rensselaer Polytechnic Institute; and Montgomery Alger, vice president and chief technology officer, Air Products and Chemicals, Inc.

#### THIS PAGE

Mel Bernstein, senior vice provost for research and graduate education, Northeastern University; Steven Ashby, deputy director for science and technology, Pacific Northwest National Laboratory; Thomas Halbouty, vice president, chief information officer and chief technology officer, Pioneer Natural Resources USA, Inc.; Andrew Garman, founder and managing partner, New Venture Partners LLC; Daniel A. Hitchcock, associate director, Advanced Scientific Computing Research (ASCR), Office of Science, U.S. Department of Energy; and Tomás Díaz de la Rubia, deputy director for science and technology, Lawrence Livermore National Laboratory.

HPC to business and national advantage, and to support and develop public-private partnerships that maximize use of U.S. HPC capabilities.

The HPCAC will convene two meetings in 2012. The first will be held in Washington, D.C., on June 27, 2012. The second meeting likely will take place in concert with the October 2012 TLSI dialogue.

The NDEMC, led by SCRA senior vice president and project manager Dennis Thompson and coordinated by Council senior vice president Cynthia McIntyre and chairman of the NDEMC executive board William C. Booher, Jr., will focus on two major deliverables in 2012.

First, the NDEMC will develop an easy access, web-based portal that includes:

- A single point of entry to access MS&A software and HPC;
- A searchable database of MS&A software;
- A secure business transaction capability (pay-by-use model);
- Access to unbiased advice and direction (university partners); and
- A database of MS&A consultants and their areas of expertise.

Second, the NDEMC will produce a wide range of case studies through the Midwest Pilot's individual SME projects, and document how to replicate its success throughout the U.S. manufacturing supply chain.

The Council also plans, in 2012, to apply for a grant to lead a Southeast Pilot.

# Council on Competitiveness Forms Economic Advisory Committee

In response to its 25th anniversary and the increasing complexity of economic analysis underpinning its research agenda, the Council on Competitiveness established the Economic Advisory Committee (EAC)—a forum of leading economists across industry, academia, labor, non-governmental organizations, and think tanks to develop the sophisticated modeling and research necessary to understand the fundamental competitiveness drivers in the 21st century.

Launched in 2011, the EAC, chaired by Gene Huang, chief economist and vice president at FedEx Corporation, has a set of clear missions going forward:

1. To re-define, re-shape and innovate the Council's flagship publication, the *Competitiveness Index*;
2. To review and undertake additional economic analysis in support of the Council's current slate of initiatives (e.g., Technology Leadership and Strategy Initiative; U.S. Manufacturing & Competitiveness Initiative) and mission; and
3. To incubate and launch new projects at the Council aimed at identifying and supporting future productivity drivers.

## 2011 in Review

The EAC held its inaugural dialogue in Washington, D.C., on July 18, 2011, to discuss the vision and goals for the committee, how to think about re-defining the *Competitiveness Index*, a slate of global economic challenges and opportunities facing the nation, and how to engage with current Council initiatives.





**Above:** Chad Evans, senior vice president, Council on Competitiveness; J.B. Penn, chief economist, Deere & Company; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Gene Huang, chief economist and vice president, FedEx Corporation; and Carolyn Scott, owner, McCoy Scott & Company.

#### OPPOSITE PAGE

**Top:** Paul Thomas, chief economist, Intel Corporation; William Strauss, senior economist, Federal Reserve Bank of Chicago; and Loren Scott, professor emeritus, Louisiana State University.

**Bottom:** (Foreground) Janice Eberly, assistant secretary for economic policy, U.S. Treasury Department; Chad Evans, senior vice president, Council on Competitiveness; and Gene Huang, chief economist and vice president, FedEx Corporation. (Background) Deborah Koolbeck, vice president, and Jack McDougale, senior vice president, Council on Competitiveness.

In a discussion led by Council senior vice president Chad Evans, Robert Rebelein of Vassar College, and Michael Mandel from the Progressive Policy Institute, participants explored the topic of innovating the *Competitiveness Index* in regard to substance, methodology and delivery.

Looking ahead, Huang, along with Robert Fry of DuPont, David Hale of David Hale Economics, and William Strauss from the Federal Reserve Bank of Chicago, led a discussion on future global economic challenges and identifying opportunities to boost U.S. productivity and prosperity.

## 2012 Outlook

The second year of the EAC is focusing on the development and execution of the next *Competitiveness Index*, which began with its second dialogue on April 19, 2012, and exploring new competitiveness drivers, such as imagination and creativity.

# Global Innovation Initiatives

*Building and optimizing innovation partnerships that drive productivity and prosperity in the United States*

The Council on Competitiveness continued to deepen its relationship with one of the world's fastest growing economies through its bi-national partnerships with the Brazilian Competitiveness Movement (MBC) and the Brazilian Agency for Industrial Development (ABDI).



© U.S. Chamber of Commerce. Photograph by David Bohrer.

*Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Samuel R. Allen, chairman, Council on Competitiveness, and chairman and CEO, Deere & Company; Under Secretary of State Robert Hormats; Mauro Borges Lemos, president, Brazilian Agency for Industrial Development; Ricardo Pelegrini, president, IBM Brasil; and James S. Turley, chairman and CEO, Ernst & Young; during a panel on "Innovation and Competitiveness" at the one-day conference the Council co-hosted with the government of Brazil to mark the historic visit to the United States by President Dilma Rousseff.*

During the past seven years, the Council, MBC, and ABDI have developed one of the world's most ambitious, joint, public-private partnerships to elevate innovation capacity in both nations and across the hemisphere through the creation of

the 1st U.S.-Brazil Innovation Summit in Brasília in 2007 and the 2nd U.S.-Brazil Innovation Summit in Washington, D.C., in 2010, and a new-to-the-world set of 13 Innovation Learning Laboratories.



**Left:** Mauro Borges Lemos, president, Brazilian Agency for Industrial Development; Erik Camarano, president, Brazilian Competitiveness Movement; Chad Evans, senior vice president, Council on Competitiveness; and Dario Francisco Guimarães de Azevedo, dean of international and institutional affairs and professor at the School of Engineering, Pontifical Catholic University of Rio Grande do Sul, at U.S.-Brazil Innovation Learning Laboratory 13 in Porto Alegre, Brazil, November 2011.

**Right:** Roberto Alvarez, international affairs manager, Brazilian Agency for Industrial Development; Gabrielle Trebat, director, McLarty Associates; Peter Luger, chief of staff to the senior vice president and chief technology officer, Georgetown University; and Spiros Dimolitsas, senior vice president for research and chief technology officer, Georgetown University.

## 2011 in Review

Following the 2010 2nd U.S.-Brazil Innovation Summit, the Council continued “innovating” the successful, co-creative U.S.-Brazil Innovation Learning Laboratories—moving out to engage key innovation stakeholders in the United States and Brazil.

In February 2011, Council member and president of Arizona State University, Michael Crow, hosted the 11th Innovation Learning Laboratory, focusing on the potential to turbocharge joint, entrepreneurial activities—including exploration of a concept to develop a “global co-incubator” with Brazil’s largest private university, Pontifical Catholic University of Rio Grande do Sul (PUC-RS).

In September, Council member and president of Duke University, Richard Brodhead, hosted the 12th Innovation Learning Laboratory. This Lab focused on the innovation challenges and opportunities around the health care enterprise, including translational research, innovative health care management, health informatics and the environment and human health—challenges important to leaders of the western hemisphere’s two largest countries, such as: Jorge Ávila, president of the Brazilian National Institute of Industrial Property; Erika Barbosa Camargo, deputy coordinator, Department of

Industry and Innovation with the Brazilian Ministry of Health; Victoria Brady, vice president of technology for DuPont Latin America; Tom Beauregard, executive vice president of UnitedHealth Group; John Evans, vice president of business innovation for Lockheed Martin Corporation; and Mark Dente, chief medical informatics officer for GE Healthcare.

In November, Joaquim Clotet, rector of PUC-RS, hosted the 13th Innovation Learning Laboratory in Porto Alegre, Brazil. This Lab included participation from Ray O. Johnson, senior vice president and chief technology officer of Lockheed Martin Corporation; Klaus Hoehn, vice president of advanced technology and engineering for Deere & Company; Spiros Dimolitsas, senior vice president for research and chief technology officer of Georgetown University; Ravi Iyer, vice chancellor for research of the University of Illinois at Urbana-Champaign; and Adriana Machado, CEO of GE Brazil. This Lab focused on several important themes, including: how to meet the global demand for energy and water; entrepreneurship and scaling up startups as drivers for economic growth; challenges and opportunities in developing talent with a focus on engineering; and the nexus of health, hunger and happiness.



© U.S. Chamber of Commerce. Photograph by David Bohrer.

*José H. V. Menezes, government affairs manager, AmCham Brasil; Diego Bonomo, senior director for policy, Brazil-U.S. Business Council; Michelle Shayo Tchernobilsky, government affairs manager, AmCham Brasil; Jorge Ávila, president, Brazilian National Institute of Industrial Property-INPI; Jodi Bond, vice president, Americas, U.S. Chamber of Commerce; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness; Eduardo Wanick, president, DuPont Latin America, and chairman, AmCham Brasil; Chad Evans, senior vice president, Council on Competitiveness; Gabriel Rico, CEO, AmCham Brasil; Felipe Magrim, government affairs coordinator, AmCham Brasil; Phillip Typaldos, program manager, Council on Competitiveness; and Stephen Bipes, chief representative-Brazil, Brazil-U.S. Business Council.*

## 2012 Outlook

The Council remains committed to building on and expanding its bilateral engagement with Brazil as it enters the second decade of the 21st century.

Chad Evans, Council senior vice president, continues the Council's efforts to bridge the public and private sector stakeholders seeking to optimize the innovation relationship between the Western Hemisphere's two largest economies, co-chairing the U.S.-Brazil Joint Commission Meeting on Science and Technology "Innovation Working Group" with Thomas Peterson, assistant director for engineering at the National Science Foundation.

On April 9, 2012, the Council emphasized the critical linkage between innovation, productivity, prosperity and competitiveness by partnering with the Office of the President of Brazil and Itamaraty (the Brazilian Foreign Ministry) in the historic visit to the United States by President Dilma Rousseff.

Council chairman Samuel R. Allen (chairman and CEO, Deere & Company) and Council president & CEO Deborah L. Wince-Smith led—along with

Council member James S. Turley (chairman and CEO, Ernst & Young), the president of the Brazilian Agency for Industrial Development Mauro Borges Lemos, Under Secretary of State Robert Hormats, and IBM Brasil president Ricardo Pelegrini—a major CEO panel on "Innovation and Competitiveness" at the one-day conference. The focus of the panel was how to reinforce and strengthen ties between the highest levels of the private and public sectors in both nations—as no other two nations are as "poised to deploy" the types of innovations that will be necessary to tackle and solve the greatest grand challenges and opportunities at the heart of future competitiveness.

Key deliverables from the conference include: the Council's announcement, with MBC and ABDI, to host the 3rd U.S.-Brazil Innovation Summit in Brazil in 2013; the release of the U.S.-Brazil statement from the Joint Commission on Science and Technology; and the completion of a Memorandum of Understanding with AmCham Brasil and the Brazil-U.S. Business Council.



# GFCC

## Global Federation of Competitiveness Councils

### 2011 in Review

The Council on Competitiveness continues to leverage its strong presence in the international community and to broaden its understanding of how key U.S. trading partners and markets address challenges to their own competitiveness. Through its role as the founding board member and secretariat of the Global Federation of Competitiveness Councils (GFCC), the Council maintains its clear connection to issues affecting national competitiveness in countries around the world, while deepening connections and forging new partnerships for its members.

On November 21-22, 2011, the GFCC co-hosted along with the 2011 Vice-Chairs, the Brazilian Agency for Industrial Development (ABDI) and the Brazilian Competitiveness Movement (MBC), the Competitiveness Forum and 2011 Annual Meeting in Porto Alegre, Brazil. These events brought together competitiveness councils from around the globe, c-suite leaders from U.S. and global private sectors, senior government officials from member countries, and other stakeholders to discuss competitiveness and related issues as a pan-global imperative.

The event presented several Council members with unique business networking opportunities with public and private sector representatives from more than 12 countries. At the Competitiveness Forum, the GFCC released the *2011 Global Competitiveness Principles*, which reflect the GFCC's united voice on recommendations every country should implement to enhance national competitiveness and increase the standard of living of all people.



*Charles O. Holliday, Jr., chairman emeritus, Council on Competitiveness, and chairman, Bank of America; Mauro Borges Lemos, president, Brazilian Agency for Industrial Development; Deborah L. Wince-Smith, president & CEO, Council on Competitiveness, and president, GFCC; and Erik Camarano, president, Brazilian Competitiveness Movement.*

The meeting also marked the inaugural release of *Accelerating Growth: Best Practices in Competitiveness Strategy*, a compendium of successful initiatives that have provoked substantive changes through which member countries have sharpened their competitive edge.

The broad GFCC membership network now includes competitiveness councils in 32 countries across the globe. The GFCC is composed of eight board members, seven general members and a network of more than 20 other national and regional organizations from regions and countries whose markets are of strategic importance to Council members.



**Top:** On November 21-22, 2011, the GFCC co-hosted along with the 2011 vice-chairs—the Brazilian Agency for Industrial Development (ABDI) and Brazilian Competitiveness Movement. (MBC)—the Competitiveness Forum and 2011 Annual Meeting in Porto Alegre, Brazil.

**Bottom left:** (Panel from left) Deborah L. Wince-Smith, president & CEO, Council on Competitiveness, and president, GFCC; William C. Bates, treasurer, secretary and chief of staff, Council on Competitiveness, and executive director, GFCC; HRH Prince Saud K. Faisal, president and board member, SAGIA-National Competitiveness Center; H.E. Abdullah Lootah, secretary general, Emirates Competitiveness Council; and Roberto Alvarez, international affairs manager, Brazilian Agency for Industrial Development.

**Bottom right:** Roberto Alvarez, international affairs manager, Brazilian Agency for Industrial Development; Erik Camarano, president, Brazilian Competitiveness Movement; Mauro Borges Lemos; president, Brazilian Agency for Industrial Development; and William C. Bates, treasurer, secretary and chief of staff, Council on Competitiveness, and executive director, GFCC.

## 2012 Outlook

At the 2011 GFCC Annual Meeting, members set out an ambitious agenda for the next year, which includes specific initiatives and strategic partnerships to advance understanding of the global economy. During this period, the organization will:

- Release the second edition of *Accelerating Growth: Best Practices in Competitiveness Strategy*;
- Announce the *2012 Global Competitiveness Principles*, to be presented at the 2012 GFCC Meeting—set to be held in Dubai, United Arab Emirates in November;
- Issue a set of next-generation competitiveness metrics—including a GFCC branded scorecard to better enable countries to measure competitiveness;

- Completely restructure and replace the GFCC website to enhance its interactivity and usefulness to GFCC members and policymakers worldwide; and
- Broaden partnerships with multilateral organizations, including the STS Forum in Japan, the World Economic Forum, UNIDO, and the World Bank, among others.

The GFCC continues to bring together a unique international network, providing member councils with an opportunity to gain valuable insight into issues that affect change in global competitiveness policy. In recognition of the accelerating pace of competition in worldwide markets and the shifting global economic landscape, the Council views its membership and participation in the GFCC, as well as its contribution to the GFCC's overall agenda, as critical for its members and an important component of the United States' overall competitiveness portfolio.

# Council Welcomes New Staff

## Walter Kirchner



Walter Kirchner is the chief technologist in residence at the Council on Competitiveness, where his primary focus is advising the Council on matters at the intersection of science and technology-based innovation and U.S. economic

competitiveness. In addition, he is playing a leadership role in the Council's High Performance Computing Advisory Board, which has the objective of convening expertise from across the entire HPC ecosystem—government and laboratories, academia, and industry—to recommend policies and implementation strategies to assure U.S. global leadership in HPC and its applications, particularly in regard to providing public and private sectors the competitive advantage to out-compute the rest of the world.

## Deborah Koolbeck



Deborah Koolbeck is the Council's vice president leading outreach to the White House, federal agencies, Capitol Hill, and state and local governments, conveying Council issues to stakeholders and bringing their ideas to Council

initiatives and programs. Koolbeck brings a rich mix of experience in science, education, and policy.

In Congress, she served first as an Albert Einstein Distinguished Educator Fellow, working as a legislative assistant, then served on committee staff and as a legislative director for two members of Congress. Among many successes, she mobilized two reauthorizations signed into law during the 110th Congress.

Koolbeck helped redesign part of Chicago's Museum of Science and Industry, and taught five different science courses at the famed Chicago Academy for the Arts. Koolbeck also taught and participated in various leadership activities at the University of Arizona's Department of Physics. Her experience in science includes working as a guest scientist at Fermi National Accelerator Laboratory and on the ATLAS project at CERN, as well as working at other national laboratories.

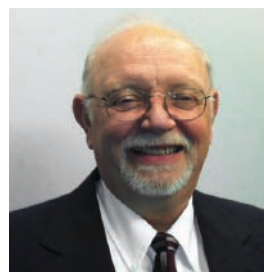
## Douglas Rohde



Douglas Rohde joined the Council in 2011 as the director of communications. He has managed public relations for a Maryland law firm representing veterans with disability claims before the U.S. Department of Veterans Affairs, and he

has directed international marketing for an Istanbul, Turkey-based educational consultancy. Rohde holds a bachelor's degree in philosophy from Portland State University, a master's degree in diplomacy from Norwich University, and a master's degree in management from Harvard University.

## Thomas Trueblood



Tom Trueblood is the database manager for the Council on Competitiveness. In this position, his primary focus is maintaining the accuracy of the Raiser's Edge Database, training employees in the use of the database, and invoicing members.

**BOARD**

**Chairman**

Samuel R. Allen  
Deere & Company

**Industry Vice Chairman**

Michael R. Splinter  
Applied Materials, Inc.

**University Vice Chairman**

Shirley Ann Jackson  
Rensselaer Polytechnic Institute

**Labor Vice Chairman**

William P. Hite  
United Association of Plumbers  
and Pipefitters

**Chairman Emeritus**

Charles O. Holliday, Jr.  
Bank of America

**President & CEO**

Deborah L. Wince-Smith

**Treasurer, Secretary and  
Chief of Staff**

William C. Bates

**EXECUTIVE COMMITTEE**

Thomas R. Baruch  
Baruch Future Ventures, LLC

Gene D. Block  
University of California,  
Los Angeles

William H. Bohnett  
Whitecap Investments LLC

Jean-Lou A. Chameau  
California Institute of Technology

Jared L. Cohon  
Carnegie Mellon University

John J. DeGioia  
Georgetown University

Marye Anne Fox  
University of California,  
San Diego

James Hagedorn  
The Scotts Miracle-Gro Company

Sheryl Handler  
Ab Initio

Susan Hockfield  
Massachusetts Institute  
of Technology

Steven Knapp  
The George Washington  
University

Anthony J. Maddaluna  
Pfizer Inc

John E. McGlade  
Air Products and Chemicals, Inc.

Lee A. McIntire  
CH2M HILL

Harris Pastides  
University of South Carolina

James M. Phillips  
NanoMech

Dominic J. Pileggi  
Thomas & Betts Corporation

Nicholas T. Pinchuk  
Snap-on Incorporated

Michael E. Porter  
Harvard University

Luis M. Proenza  
The University of Akron

James H. Quigley  
Deloitte LLP

Robert L. Reynolds  
Putnam Investments

Kenan E. Sahin  
TIAX LLC

Allen L. Sessoms  
University of the District  
of Columbia

Mayo A. Shattuck III  
Exelon Corporation

David E. Shaw  
D.E. Shaw Research

Lou Anna K. Simon  
Michigan State University

William H. Swanson  
Raytheon Company

Lawrence Weber  
W2 Group, Inc.

Randi Weingarten  
American Federation of  
Teachers, AFL-CIO

Mark G. Yudof  
University of California System–  
Regents

Robert J. Zimmer  
University of Chicago

**Founder**

John A. Young  
Hewlett-Packard Company

**GENERAL MEMBERSHIP**

Michael F. Adams  
The University of Georgia

Daniel Akerson  
General Motors Company

Prakash Ambegaonkar  
Bridging Nations

Joseph E. Aoun  
Northeastern University

Daniel Armbrust  
SEMATECH Inc.

J. David Armstrong, Jr.  
Broward College

Neil Z. Auerbach  
Hudson Clean Energy

Sandy K. Baruah  
Detroit Regional Chamber

Mark Becker  
Georgia State University

Dennis D. Berkey  
Worcester Polytechnic Institute

A. Lorris Betz  
The University of Utah

Jamshed Bharuca  
The Cooper Union for the  
Advancement of Science and Art

Robert J. Birgeneau  
University of California, Berkeley

George Blankenship  
Lincoln Electric North America

Joel Bloom  
New Jersey Institute of  
Technology

Lee C. Bollinger  
Columbia University

Molly Corbett Broad  
American Council on Education

Richard H. Brodhead  
Duke University

Robert A. Brown  
Boston University

Roger G. Brown  
University of Tennessee–  
Chattanooga

David W. Burcham  
Loyola Marymount University

Steve Cardona  
Spartan Ranger Clean Tech  
Ventures

Curtis R. Carlson  
SRI International

Roy A. Church  
Lorain County Community  
College

Mary Sue Coleman  
University of Michigan

Barbara Couture  
New Mexico State University

Michael M. Crow  
Arizona State University

Scott DePasquale  
Braemar Energy Ventures

William W. Destler  
Rochester Institute of Technology

Ernest J. Dianastasis  
CAI

Daniel DiMicco  
Nucor Corporation

Joe DiPietro  
The University of Tennessee

Kenneth C. Frazier  
Merck & Co., Inc.

John A. Fry  
Drexel University

Alice P. Gast  
Lehigh University

E. Gordon Gee  
The Ohio State University

Judy Genshaft  
University of South Florida

R. Barbara Gitenstein  
The College of New Jersey

Robert B. Graybill  
Nimbus Services, Inc.

Amy Gutmann  
University of Pennsylvania

Peter T. Halpin  
World Resources Company

Patrick T. Harker  
University of Delaware

Mary Kay Henry  
Service Employees  
International Union

Catharine Bond Hill  
Vassar College

John C. Hitt  
University of Central Florida

John D. Hofmeister  
JKH Group

Jeffrey R. Immelt  
General Electric Company

Lloyd Jacobs  
University of Toledo

Madeleine S. Jacobs  
American Chemical Society

Jimmy R. Jenkins  
Livingstone College

John I. Jenkins  
University of Notre Dame

Jeffrey A. Joerres  
ManpowerGroup

John P. Johnson  
Embry-Riddle Aeronautical  
University

Robert Johnson  
Becker College

John P. Jumper  
Science Applications International  
Corporation

Linda P.B. Katehi  
University of California, Davis

Jim Yong Kim  
Dartmouth College

Paul G. Kimball  
Sagebrush Capital, LLC

Maria M. Klawe  
Harvey Mudd College

Ellen J. Kullman  
DuPont

John S. Langford  
Aurora Flight Sciences  
Corporation

Lester A. Lefton  
Kent State University

J. Bernard Machen  
University of Florida

Sally Mason  
University of Iowa

David Maxwell  
Drake University

Jane McAuliffe  
Bryn Mawr College

William E. McCracken  
CA Technologies

Mark McGough  
loxus, Inc.

Michael A. McRobbie  
Indiana University

Carolyn Meyers  
Jackson State University

Paul Michaels  
Mars, Incorporated

Richard K. Miller  
Franklin W. Olin College  
of Engineering

James B. Milliken  
University of Nebraska

Mark A. Nordenberg  
University of Pittsburgh

Keith D. Nosbusch  
Rockwell Automation, Inc.

Stephen J. Owens  
University of Missouri System

Eduardo J. Padrón  
Miami Dade College

Vikram S. Pandit  
Citigroup Inc.

Daniel S. Papp  
Kennesaw State University

G.P. "Bud" Peterson  
Georgia Institute of Technology

William C. Powers, Jr.  
The University of Texas at Austin

Stuart Rabinowitz  
Hofstra University

V. Lane Rawlins  
University of North Texas

Edward Ray  
Oregon State University

Rory Riggs  
Balfour, LLC

John R. Ryan  
Center for Creative Leadership

Leonard A. Schlesinger  
Babson College

M. W. Scoggins  
Colorado School of Mines

Scott D. Sheffield  
Pioneer Natural Resources  
Company

Ruth J. Simmons  
Brown University

David J. Skorton  
Cornell University

Frederick W. Smith  
FedEx Corporation

Jack Stack  
SRC Holdings Inc.

Samuel L. Stanley, Jr.  
Stony Brook University,  
Southampton

Susan S. Stautberg  
Partner Com Corporation

Charles W. Steger  
Virginia Polytechnic Institute and  
State University

Robert J. Stevens  
Lockheed Martin Corporation

Erik Straser Mohr  
Davidow Ventures

Elizabeth Stroble  
Webster University

Teresa Sullivan  
University of Virginia

Andrew C. Taylor  
Enterprise Holdings, Inc.

H. Holden Thorp  
The University of North Carolina  
at Chapel Hill

James S. Turley  
Ernst & Young, LLP

Satish Tripathi  
State University of New York  
at Buffalo

Tom M. Uhlman  
New Venture Partners LLC

Steven L. VanAusdle  
Walla Walla Community College

David Vieau  
A123 Systems, Inc.

Frederick H. Waddell  
Northern Trust

Jeffrey Wadsworth  
Battelle Memorial Institute

Joseph L. Welch  
ITC Holdings Corp.

John D. Welty  
California State University,  
Fresno

Robert A. Wharton  
South Dakota School of Mines  
& Technology

Timothy P. White  
University of California, Riverside

Keith E. Williams  
Underwriters Laboratories Inc.

W. Randolph Woodson  
North Carolina State University

Mark S. Wrighton  
Washington University  
in St. Louis

Paul A. Yarossi  
HNTB Holdings Ltd.

Audrey Zibelman  
Viridity Energy, Inc.

#### **INTERNATIONAL AFFILIATE**

Pierre L. Gauthier  
Alstom U.S.

#### **NATIONAL AFFILIATES**

AIGA

American Academy of Arts and  
Sciences

American Association for the  
Advancement of Science

American Association of  
Community Colleges

American Council on Renewable  
Energy

American Mathematical Society

Arizona Technology Council

Association of American Colleges  
and Universities

Association of American  
Universities

Georgia Research Alliance, Inc.

IEEE-USA

International Economic  
Development Council

JumpStart Inc

Junior Achievement USA

National Center for  
Manufacturing Sciences

NorTech

Oak Ridge Associated  
Universities

Rothman Institute for  
Entrepreneurship-FDU

SMC3

The Bi-National Sustainability  
Laboratory

The Cumberland Center

United States Council for  
International Business

U.S. Civilian Research &  
Development Foundation

University Economic  
Development Association

#### **DISTINGUISHED FELLOWS**

Erich Bloch

Bart J. Gordon

Daniel S. Goldin

Alexander A. Karsner

Alan P. Larson

Thomas Ridge

Anthony J. Tether

#### **SENIOR FELLOW**

Amy Kaslow

#### **SENIOR ADVISOR**

Jennifer Bond

#### **SENIOR STAFF**

Frederick M. Bush  
Executive Vice President

William C. Bates  
Treasurer, Secretary and  
Chief of Staff

Chad Evans  
Senior Vice President

Jack McDougale  
Senior Vice President

Cynthia R. McIntyre  
Senior Vice President

Mohamed N. Khan  
Vice President

Walter Kirchner  
Chief Technologist in Residence

Deborah Koolbeck  
Vice President

Christopher Mustain  
Vice President

Betsy Thurston  
Vice President



**Compete.**

**Council on  
Competitiveness**

## About the Council on Competitiveness

### WHO WE ARE

The Council's mission is to set an action agenda to drive U.S. competitiveness, productivity and leadership in world markets to raise the standard of living of all Americans.

The Council on Competitiveness is the only group of corporate CEOs, university presidents and labor leaders committed to ensuring the future prosperity of all Americans and enhanced U.S. competitiveness in the global economy through the creation of highvalue economic activity in the United States.

Council on Competitiveness  
1500 K Street, NW  
Suite 850  
Washington, DC 20005  
T 202-682-4292  
Compete.org  
@CompeteNow on Twitter

### HOW WE OPERATE

The key to U.S. prosperity in a global economy is to develop the most innovative workforce, educational system and businesses that will maintain the United States' position as the global economic leader.

The Council achieves its mission by:

- Identifying and understanding emerging challenges to competitiveness
- Generating new policy ideas and concepts to shape the competitiveness debate
- Forging public and private partnerships to drive consensus
- Galvanizing stakeholders to translate policy into action and change