



IC² Newsletter

November
2002

ic² INSTITUTE
The University of Texas at Austin



THE UNIVERSITY OF
TEXAS
AT AUSTIN

2815 San Gabriel
Austin, TX 78705
Phone: 475-8900
www.ic2.org

Notes From John Sibley Butler— IC² Fellow and Director

The IC² Institute is, and has been, an international "Think and Do" tank devoted to solving unstructured problems in a way that leads to wealth and job creation. Like all institutes at The University of Texas at Austin, we concentrate on original research and publications. Our laboratory, known to most of the world as the Austin Technology Incubator [ATI], has allowed us to engage in numerous experiments related to the creation of wealth and jobs and the organizational structures that support such an effort. There is no doubt that the Institute's early experiments in these areas were a success. Companies were established and the research lessons learned were disseminated through major publications around the globe. The structures that supported such efforts: the Austin Software Council (now the Austin Technology Council), the "knowledge know-how network," and the Capital Network, are now on-going organizations that began as experiments. The vision of George Kozmetsky, our founder and a true visionary, requires experimentation in the classic scientific sense. Our experiments have influenced economic development both here and abroad.

For those of us who have been IC² Fellows for many years, watching the results develop from years of experimentation has been gratifying. The Institute's exciting mixture of academicians, civic entrepreneurs, government officials, business entrepreneurs, and community individuals adds much value to these experiments. As we look over the landscape of the world, now is an excellent time to re-engage with individuals and groups in preparation for the 21st Century. Creative organizations are required to meet the challenges of the new century. Innovative new experiments must be run. Contributions from new and dynamic mixes of groups and individuals are essential to a world that must realize global sharing of prosperity and wealth.

When I was called to direct the Institute, I simply knew that it was my turn to dedicate my efforts and time to giving something back to The University of Texas at Austin, and integrate the dynamics of the Herb Kelleher Center for Entrepreneurship at the McCombs School of Business. For example the MBA courses on Entrepreneurship and Process have been synchronized with the Austin Technology Incubator. Students now have the opportunity to

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Austin Technology Incubator Adds Four Companies

The Austin Technology Incubator has announced the addition of four new companies to its roster. The list includes New Orleans-based software firm ProTier Corp, Legend Sports Gear Inc., a designer of sporting equipment, Solid State Displays Inc., a designer of flat panel display panels, and Benerus Technologies LLC. ATI stabilizes early-stage technology companies by providing innovative consulting that helps them solidify management teams, secure adequate financing and get their products to market.



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Clean Energy Incubator Receives U.S. Department of Energy Grant

The Clean Energy Incubator (CEI), a project of The IC² Institute at The University of Texas at Austin, has received a grant in the amount of \$120,100 from the U.S. Department of Energy (DOE). The grant was made possible through CEI's membership with the National Alliance of Clean Energy Business Incubators, an organization that supports a broad portfolio of clean energy technologies such as renewables, microturbines, fuel cells, power quality, energy efficiency, alternative fuels, transportation, and energy-related e-commerce and information technologies.

The DOE grant will allow CEI to enhance its current program initiatives, assess new candidates for business development and add personnel as necessary to ensure the incubator's viability and growth. CEI also will utilize these new resources to continue marketing itself to clean energy companies while also participating in industry-related investor forums.

The Clean Energy Institute was selected for the grant based on its status as one of the nation's 10 best business incubators, as selected by DOE's National Renewable Energy Laboratory (NREL). Additional clean energy incubators representing Alabama, California, Florida, Georgia, Massachusetts, New Mexico and New York shared the overall \$1.5 million DOE grant.

IC² Institute Introduces Spanish-Language Job and Life Skills Development Program

The IC² Institute at The University of Texas at Austin recently announced the launch of a Spanish-language version of its successful EnterTech™ e-Learning program. Designed to provide critical job and life skills to displaced or disadvantaged individuals in predominantly Latino communities, the Spanish version of EnterTech will be tested at Universidad Valle del Bravo in Reynosa, Mexico, with the pilot planned for late fall 2002 at The University of Texas at Brownsville/Texas Southmost College.

The EnterTech program, created by the IC² Institute's E-Learning & Training Labs, simulates realistic life experiences and "on-the-job" training skills within a workplace setting. The 45-hour instructor-led curriculum consists of computer simulations (70%) and group activities (30%) to accommodate a large learner population with vastly diverse experiences and learning styles.

Since its inception, EnterTech has served more than 1,000 learners and has been implemented by community colleges, community-based organizations, high schools and workforce centers to assist transition-ready welfare and public assistance recipients, teen parents, at-risk youth, juvenile and adult offenders, dislocated workers, incumbent workers, and unemployed or underemployed workers. Cities throughout the State of Texas that have used EnterTech to create a larger pool of skilled applicants for employers and to increase career opportunities and living wages for those in need include Austin, Brownsville, Dallas, El Paso, Harlingen, Hillsboro, Kilgore, Kyle, McAllen, Mineral Wells, Round Rock, San Marcos and Waco.

MSSTC Class of 2003 – Recruiting

Recruitment is underway for the 2003 class which will begin in May. Weekly information sessions are being held in Austin and San Antonio. See www.ic2.org/msdegree/infosessaus.html for a schedule of upcoming sessions and locations. Anyone with specific questions should contact Jennifer Rusch 475-8923, jrusch@icc.utexas.edu or Brad Zehner 475-8977, brad@icc.utexas.edu.



IC² Programs

ATI

Joel Wiggins
(512) 305-0033

CBIRD

Abdu Megatelli
(512) 474-6312 x 248

Commercialization

Sid Burback
(512) 475-8942
Sid@icc.utexas.edu

Degree Programs

Brad Zehner
(512) 475-8977
Brad@icc.utexas.edu

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Clean Energy Incubator Leader Recognized by Austin Business Journal

Richard Amato, director of the Clean Energy Incubator (CEI), a project of The IC² Institute at The University of Texas at Austin, was recognized by the Austin Business Journal as a finalist in the non-profit category for its Rising Stars segment. Amato brought years of experience in the energy industry to CEI, including roles with Houston-based American Shuttle Tankers LLC and with the natural gas and gas products department of Conoco Inc. He is a graduate of Texas A&M University with a degree in mechanical engineering.

New & Noteworthy— IC² Research

On November 12th, IC² Institute released its latest research report, *Enriching Economy and Environment: Making Central Texas the Center for Clean Energy*. The report discusses Texas' recognized national leadership in the creation of a policy and market environment in which renewable and energy efficient technologies can compete with conventional energy production. The commercial viability of clean energy technologies is increasingly clear. Many central Texas companies are leading the way by creating new technologies and markets to alleviate the negative effects of emissions on the environment and human health. This will help ensure self-sufficiency and energy security through sustainable use of regional resources. The report was produced for the Austin Clean Energy Initiative with the support of the IC² Institute, Angelou Economic Advisors, Austin Energy, Lower Colorado River Authority, the Texas State Energy Conservation Office, and Vinson & Elkins LLP.

Once again the IC² research program is putting its know-how to the test. IC² has organized central Texas community leaders to form a new organization, Austin Forward, to develop and execute a vision for Austin's next 20 years. In addition to fulfilling a vital community function, Austin Forward will provide an opportunity for IC² to investigate and experiment with methods of creating and mobilizing institutions, networks, and leadership in the context of current economic challenges. The organization is in its formative stages and we encourage the participation of IC² Fellows and friends. For more information contact austin@icc.utexas.edu.



Eliza Evans— Director of Research



John Sibley Butler
Director, IC²
(512) 471-4788

John.Butler@bus.utexas.edu

Alex Cavalli
Deputy Director, IC²
475-8930
Alex@icc.utexas.edu

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IC² Institute Launches Accelerated Technology and Commercialization Program at Motorola

On October 16th IC² Institute announced the successful completion of its initial Accelerated Technology Assessment and Commercialization (ATAC) program for Motorola, Inc. (NYSE:MOT). Motorola's Semiconductor Products Sector (SPS) plans to use the technology commercialization expertise obtained from the ATAC program to increase momentum for its Intellectual Property (IP) Licensing program.

The recently completed 14-week ATAC program, held at the offices of both IC² and Motorola, included an assessment of Motorola's technologies for commercial viability, analysis and validation of markets for commercially viable technologies, determination of the most effective commercialization strategies, and education among company employees regarding the overall assessment and commercialization processes that are grounded in science.

IC² Visiting Scholar Program

Since 1992 IC² Institute has hosted 48 Visiting Scholars from the U.S., Europe, South America, and Asia. IC² is currently hosting 9 Visiting Scholars: 8 from Korea Telecom in Seoul, and 1 from Anchorage, Alaska.

Jeanne HuangLi, from Anchorage, is working with George Kozmetsky and David Gibson on critical factors necessary to accelerate technology-based economic development.

IC² Executive Scholars from Korea Telecom are auditing courses in the MSSTC Program, studying English, and working with IC² researchers and UT professors in the areas of marketing, strategy, telecommunications, and wireless technology.

IC² Institute's EnterTech Program Featured in E-Learning Magazine

An article written by Melinda Jackson, project manager of the EnterTech program at the IC² Institute's E-Learning & Training Labs, was recently featured in the October 2002 edition of e-learning magazine. The piece, "Simulating Work: What Works," provides an overview of the EnterTech program, which has proven successful in teaching crucial job and life skills to unemployed or underemployed individuals. See the article in its entirety at <http://www.elearningmag.com/elearning/article/articleDetail.jsp?id=36879>.



**Mindy Jackson—
ELT Labs Manager**

IC² Director Notes— Continued

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interact with “live” case studies.

Alex Cavalli, a person who understands the immense task before us, joins me as we take the Institute into the new century. We are working as a team to further position IC² for great things. We both look forward to launching different kinds of experiments that will enhance our overall mission and make significant contributions to the excellent research and publication work already underway at The University of Texas at Austin.

One of the first experiments that we are pleased to announce is a collaboration with Stanford University that will allow us to partner on new ideas, projects, and

commercialization of new innovations. Of course, we have worked with Silicon Valley since our inception, and our IC² Fellows there continue to generate great experiments to identify and help solve unstructured problems. You will certainly hear more about this in the future.

Other exciting projects are on the table. Paul Barbara, Professor in the Chemistry and Biochemistry Department, is working with us to bring the commercialization aspect of nano-manufacturing from The University of Texas at Austin's Center for Nano- & Molecular Science and Technology to the Institute. We are working on additional funding for ATI, which will allow us to continue to prepare it for the future. Its director, Joel Wiggins is working to re-invent ATI. Laura Kilcrease has agreed to come back to the family and serve as a Senior Advisor to the Institute. As the founding director of ATI, she brings a wealth of knowledge and talent back to IC². George Kozmetsky, our founder and our most active researcher, has agreed to serve as Senior Advisor for Research.

David Gibson will concentrate on IC² Publications and on articulating the business history of the Institute, as well as managing the IC² Fellows and Visiting Scholars Programs. Eliza Evans is Director of Research and will manage all new research activities at the Institute. IC²'s strong Advisory Board is actively guiding us as we position ourselves for the 21st Century. Many community leaders have joined us for conversations about strategies for the Institute. We have initiatives at the National Science Foundation, Ford Motor Company, and the Kauffman Foundation. We are connecting systematically with the Colleges of Engineering, Communications, Pharmacy, Music, and the McCombs School of Business. We are very excited about the leadership and support on the "Hill" from Juan Sanchez, Vice President for Research, and once again are positioned for a very exciting future.

I would like to say hello to all IC² Fellows around the globe and mention how much we look forward to working with you. Finally, I would like to thank all of those in past leadership positions who have made a contribution to the mission of the Institute. In this issue please read further about some of the things currently happening at IC².



**Alexander Cavalli—
Deputy Director, IC² Institute
Co-Director E-Learning & Training Labs**



John Sibley Butler
Director, IC²
(512) 471-4788

John.Butler@bus.utexas.edu

Alex Cavalli
Deputy Director, IC²
475-8930
Alex@icc.utexas.edu

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IC² Programs

ELT Labs

Mindy Jackson
(512) 482-0273 x 258
Melindaj@mail.utexas.edu

Fellows, Publications & Conferences

Dave Gibson
(512) 475-8941
Daveg@icc.utexas.edu

Research

Eliza Evans
(512) 475-8982
Eliza@icc.utexas.edu

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Upcoming Conferences

Branding Organizations, Institutions and Regions for the 21st Century: A Transdisciplinary Approach, is being organized by the newly formed, Center for Brand Research, Department of Advertising, in UT's College of Communication and IC² Institute. The conference will be held at the LBJ School of Public Affairs and the LBJ Library at The University of Texas at Austin, May 7-9, 2003. [www.ic2.org/].

International Conference on Technology Policy and Innovation [<http://in3.dem.ist.utl.pt/confpolicy>] - The 7th conference, Connecting People, Ideas, and Resources Across Communities, will be held in Monterrey, Mexico, June 10-13, 2002 [<http://egade.sistema.itesm.mx/monterrey2003>].

International Conference on Integrated Design and Process Technology - The 7th annual conference honoring Professor Siwei Cheng, Vice President of Standing Committee, Chinese Peoples Congress will be held in Beijing, China, June 16-20, 2003. [Contact Professor Atila Ertas, Texas Tech University [aertas@coe.ttu.edu] or www.sdpsnet.org concerning this conference.

International Science and Technology Center Moscow, Russia

Dave Gibson and Senior Research Scientist James Jarrett are Co-Principal Investigators for IC²'s International Science and Technology Center [ISTC] Research Project. ISTC is funded by the U.S., European Union, Japan, Norway, and the Republic of Korea. ISTC in-turn funds about \$80 million/year research in the Russian Federation and the CIS. IC² will provide a strategy and metrics for assessing ISTC programs and activities in transition from engagement/non-proliferation (funding weapons researchers) to sustainability through technology commercialization. The research team includes 6 IC² Fellows from the EU, Japan, and Korea and 4 IC²-UT Austin, Resident Researchers.

MSSTC Student Wins Scholarship

Tom Kropewnicki, an MSSTC student in on-line program was recognized by The Texas Technology Transfer Association with a \$1,000 scholarship for his outstanding performance in the STC 383 course: Technology Management and Transfer: Theory and Practice. The course instructors are David Gibson and Meg Wilson.

\$25,000 IBM Faculty Grant Awarded

David Gibson and Larry Browning jointly received their second IBM Faculty Award for \$25,000, from the Austin Center for Advanced Studies to support ongoing research in the field of organizational complexity: *Regatta and POWER4: World Class Innovation and Limits of Organizational Complexity* for the 2002-2003 academic year. Three PhD candidates at The University of Texas at Austin are using this research to support their dissertations.



Coral Franke
Editor & Photographer

To comment, or submit
future content:
coral@icc.utexas.edu
(512) 475-8947

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New IC² Publications

THE TRANSFORMATION OF THE SECTOR STRUCTURE OF THE U.S. ECONOMY, by George Kozmetsky and Piyu Yue, will be available in early 2003. This work completes their research on economic growth in the United States through the examination of four major areas: 1) Principal Drivers for the U.S. Economic Transformation and the Performance of the U.S. Economy, 2) Demographic Transformation of the United States 3) The Evolution of Sectors in the U.S. Economy, and 4) Evolution of the Financial Service Sector in the U.S. Economy.

IMMIGRANT AND MINORITY ENTREPRENEURSHIP: The Continuous Re-birth of American Communities, by John Sibley Butler and George Kozmetsky, will be available in 2003.

KNOWLEDGE FOR INCLUSIVE DEVELOPMENT (Eds.) Pedro Conceicao, David Gibson, Manuel Heitor, Giorgio Sirilli, and Francisco Veloso, 2nd volume of International Series on Technology Policy and Innovation, Quorum Books, 2002. Sections of the book cover the university and the knowledge economy, innovation and economic development, knowledge creation and diffusion, and tools and policies for sustainable development.

NEW WEALTH: Commercialization of Science and Technology for Business and Economic Development, by George Kozmetsky and Frederick Williams, Greenwood Group, 2003. This book explores how accelerated commercialization strategies are building on advances in science and technology, and offer a sustainable source for international wealth.

THE INNOVATION SUPER HIGHWAY: Harnessing Intellectual Capital for Collaborative Advantage, by Debra M. Amidon, Butterworth-Heinemann, 2002. The book describes knowledge strategy in terms of a global vision at individual, enterprise, national and societal levels of analysis.

Cross Border Initiative for Regional Development: CBIRD

The CBIRD Project is a binational, public-private initiative, established in April 1999 as a "think and do" tank to accelerate regional technology-based economic development in the 21st Century. Its geographic target area includes Southeast Texas and the northern part of Tamaulipas and Nuevo Leon, Mexico. In May 2001 the founding members created CBIRD-TRAC (Texas Regional Action Council) as a non-profit corporation for the Texas side and CBIRD-CODERT (Consejo para el Desarrollo Regional Transfronterizo) of Tamaulipas.

CBIRD-TRAC has completed Hidalgo and Cameron Counties Knowledge Base Benchmarking. The University of Texas Pan American, The University of Texas at Brownsville, and Texas Southmost College conducted work for Cameron, the City of Tamaulipas, and Hidalgo counties, respectively. Baylor University supported by the Texas State Technical Colleges of Harlingen and Waco completed the Telecommunications Infrastructure Assessment Pilot Project of the CBIRD Communities' Networking and Next generation Networks. The project helped Harlingen, win a \$500,000 grant from TIF to implement a small network.

An in-depth feature on CBIRD is scheduled for the next issue of this newsletter. Meanwhile, please visit: www.cbird.org.

—CF

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