National Academy of Inventors®
Inaugural Annual Conference

February 16 - 17, 2012
Tampa, Florida

Embassy Suites Hotel/Busch Gardens
at the University of South Florida
With USF research partnerships ...

**big things really do come in small packages.**

*A thousand innovations and counting.*

Florida High Tech Corridor Council’s Matching Grants Research Program
February 16, 2012

Dear Friends:

It is my pleasure to welcome you to the Inaugural Annual Conference of the National Academy of Inventors in Tampa, Florida.

By founding the National Academy of Inventors at the University of South Florida in 2010, you created an organization that encourages innovation by recognizing and honoring the inventors at universities and non-profit research institutions throughout our state, across the nation and around the world. Your mission of promoting innovation, translating the research and inventions of your members to the market place, and mentoring the next generation of inventors benefits all of society.

One of America’s greatest strengths is the innovation of its citizens. The State of Florida applauds the work of the National Academy of Inventors in promoting research efforts and finding new and better technology and solutions to the world’s problems.

It is my honor to recognize you, the members of National Academy of Inventors, for your commitment to innovation and research. Your organization has a positive impact on our communities in creating and supporting an environment favorable to the growth of the research and entrepreneurship community.

Best wishes for an enjoyable conference and a prosperous 2012!

Sincerely,

Rick Scott
Governor
Welcome to the inaugural annual conference of the National Academy of Inventors®

Distinguished Colleagues:

It is my pleasure to welcome you to the first annual meeting of the National Academy of Inventors (NAI), hosted on this occasion by the University of South Florida (USF) Chapter. This first conference is a very important one. Our Charter Member Institutions (CMIs) are together for the first time, meeting one another, and setting the stage for our growth and future as an organization. We are grateful to our sponsors for their support in making this conference possible.

We are pleased to welcome both member and non-member participants to the conference. Founded at the University of South Florida in 2010, the NAI now has 31 Charter Member Institutions (CMIs) and more than 600 individual inventor members. We thank our CMIs for their vision and willingness to be early leaders in our young organization. The NAI is growing rapidly and we look forward to an exciting 2012. We congratulate our members for your accomplishments in contributing innovative technology within your areas of expertise.

This conference, open to all academic and non-profit research institutes, brings together the research community to deliberate on the translation of science and technology within the academic community, and for the benefit of society. It is intended to be a forum to encourage creative thinking and the spirit of innovation, promote and enhance the development and utilization of inventions, and provide advice and guidance to new and existing inventors in their work. We thank all of our oral and poster presenters, conference and session co-chairs, speakers, and the USF Chapter host planning committee.

We are delighted to have Dr. Thomas Fogarty as our keynote speaker on Friday, and look forward to hearing his insights on invention and innovation in the U.S. We are grateful to the National Inventors Hall of Fame for their assistance in inviting Dr. Fogarty to the conference.

We are especially pleased to welcome representatives from the United States Patent and Trademark Office (USPTO) and are honored to have David Kappos, Under Secretary of Commerce for Intellectual Property and Director of the USPTO, as our keynote speaker at Thursday's luncheon. The USPTO has worked closely with us in preparing for the conference. We thank them for their participation and look forward to their presentations. We greatly value the growing relationship between the NAI and the USPTO, and are delighted to announce that, beginning with the current issue of our quarterly journal, Technology and Innovation – Proceedings of the National Academy of Inventors (T&I), the USPTO will be contributing an article for each issue.

All of the abstracts and invited papers from this conference will be published in our journal, now in its third year. We are proud of our outstanding Editorial Board, which includes representatives from our CMIs and other esteemed scholars and inventors. Increasingly, authors from a wide diversity of U.S. institutions are choosing T&I for their manuscript submissions and the journal is receiving contributions from universities all over the world (for example, over 60% of the articles in Issue 4 of 2012 will be from authors outside the U.S.).

The NAI is intended to be an arena where innovation and entrepreneurship leading to local and national economic development is recognized, honored and cultivated in the academic world. We applaud the efforts of our Charter Member Institutions and our inventor members. We appreciate your participation in the National Academy of Inventors and thank you for being part of our first annual conference.

Sincerely,

Paul R. Sanberg, Ph.D., D.Sc.
President, National Academy of Inventors
Summary Agenda

Wednesday, February 15, 2012

3:00 – 7:00 PM  Early Conference Check-in
5:30 – 7:00 PM  NAI Board of Directors Meeting
7:00 – 9:00 PM  Conference VIP Dinner (invitation only)

Thursday, February 16, 2012

6:00 AM – 5:00 PM  Conference Check-in
8:00 – 8:30 AM  General Session
8:30 – 9:15 AM  Session A
9:15 – 9:45 AM  Break (refreshments provided)
9:45 – 11:00 AM  Session B
11:00 AM – 1:00 PM  Luncheon featuring Keynote Address by David Kappos, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office
1:00 – 1:15 PM  Break
1:15 – 3:00 PM  Session C
3:00 – 3:30 PM  Break (refreshments provided)
3:30 – 5:30 PM  Poster set-up in Galleria
5:30 – 7:30 PM  Poster Session & Reception in Galleria (heavy hors d’oeuvres and cash bar)

Friday, February 17, 2012

6:00 AM – 4:00 PM  Conference Check-in
7:00 – 8:00 AM  Technology and Innovation Journal Editorial Board Breakfast & Meeting (invitation only)
8:00 – 8:40 AM  General Session – “State of the Academy” by President Paul R. Sanberg
8:40 – 9:40 AM  Session E
9:40 – 10:10 AM  Break (refreshments provided)
10:10 – 11:30 AM  Session F
11:30 AM – 12:00 PM  Break
12:00 – 2:00 PM  Luncheon featuring Keynote Address by Dr. Thomas J. Fogarty, Founder of the Fogarty Institute for Innovation, National Inventors Hall of Fame Inductee, Inventor of the Cardiac Balloon Catheter, Winner of the Lemelson-MIT Prize
2:00 – 2:30 PM  Break
2:30 – 4:00 PM  Session G
4:00 PM  Conference Ends
## Detailed Agenda

### WEDNESDAY, FEBRUARY 15, 2012

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>3:00 – 7:00 PM</td>
<td>Conference Check-in (Atrium Waterfall)</td>
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<tr>
<td>5:30 – 7:00 PM</td>
<td>NAI Board of Directors Meeting (Salon A)</td>
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<tr>
<td>7:00 – 9:00 PM</td>
<td>Conference VIP Dinner (invitation only) (Salon B &amp; C)</td>
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### THURSDAY, FEBRUARY 16, 2012

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<th>Time</th>
<th>Event</th>
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<tr>
<td>6:00 AM – 5:00 PM</td>
<td>Conference Check-in (Foyer E, F &amp; G)</td>
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***** All sessions are held in Ballroom/Salon E, F & G *****

### GENERAL SESSION

8:00 – 8:30 AM Welcome Remarks  
Paul R. Sanberg, President, National Academy of Inventors

### SESSION A

Session A  
Session Co-Chairs:  
David Conrad, University of Nebraska  
Harry Anderson (Andy) Page, Oak Ridge Associated Universities

A-1 8:30 – 8:45 AM Vinit Nijhawan, Managing Director of the Office of Technology Development, Boston University  
“Attracting Venture Capital for Your University’s New Venture”

A-2 8:45 – 9:00 AM Len Polizzotto, Vice President for Marketing and Strategic Business Development, Draper Laboratory  
“Innovation and the Value Balance”

A-3 9:00 – 9:15 AM Howard J. Federoff, Executive Vice President for Health Sciences, Georgetown University Medical Center  
“Rationale for a Drug Discovery Acceleration at Georgetown University Medical Center”

9:15 – 9:45 AM Break (refreshments provided)

### SESSION B

Session B  
Session Co-Chairs:  
Andrés G. Gil, Florida International University  
Nasser Arshadi, University of Missouri – St. Louis

B-1 9:45 – 10:00 AM M.J. Soileau, Vice President for Research & Commercialization, University of Central Florida  
“Accelerating the Innovation Economy by a Strong Coupling of the Academic Research Enterprise to Industry”

B-2 10:00 – 10:15 AM Nirmal Khandan, Professor, Department of Civil Engineering, New Mexico State University  
“From Concept Towards Commercialization: A Case Study”

B-3 10:15 – 10:30 AM Michael F. Moore, Associate Vice President for IP Commercialization & Economic Development, University of North Dakota  
“Development of a Strategic Plan for a Technology Transfer Office”
**SESSION C**

**11:00 AM – 1:00 PM**  
**Keynote Luncheon**

**11:00 AM – 11:45 AM**  
Buffet Open

**11:45 AM – 11:55 AM**  
Introduction  
Mayor Bob Buckhorn, City of Tampa

**11:55 AM – 1:00 PM**  
**Keynote Address**  
David Kappos,  
Under Secretary of Commerce for Intellectual Property and Director, United States Patent and Trademark Office (USPTO)  
“Building a 21st Century Patent and Trademark Office”

**1:00 – 1:15 PM**  
Break

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**SESSION C**

**Session C**  
Session Co-Chairs:  
Shinn-Zong (John) Lin, China Medical University  
Carolyn Cason, University of Texas at Arlington

**C-1 1:15 – 2:15 PM**  
Hiram Bernstein, Senior Legal Advisor, Office of Patent Legal Administration, USPTO  
“Coordinating the America Invents Act of 2011”

**C-2 2:15 – 2:30 PM**  
Sandra J. Degen, Interim Chair of the Department of Molecular Genetics, Biochemistry and Microbiology & Associate Chair for Academic Affairs, University of Cincinnati  
“Faculty Entrepreneurship at a State-Funded University: A VP for Research Perspective”

**C-3 2:30 – 2:45 PM**  
Jarrett Rieger, Director, Office of Technology Management and Commercialization & Associate General Counsel, H. Lee Moffitt Cancer Center & Research Institute  
“High Throughput Genome Sequencing, A Powerful Disruptive Technology”

**C-4 2:45 – 3:00 PM**  
Paul Swamidass, Professor of Operations Management and Director of the Thomas Walter Center for Technology Management, Auburn University  
“Disruptive Innovators Create Disruptive Innovations”

**3:00 – 3:30 PM**  
Break (refreshments provided)

***** Set up Posters in the Galleria between 3:30 and 5:30 PM *****

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**SESSION D**

**Session D**  
Session Co-Chairs:  
Arlene A. Garrison, Oak Ridge Associated Universities  
Tanaga Boozer, Florida Agricultural and Mechanical University

**D-1 3:30 – 3:45 PM**  
Daniel Daly, Director of the Alabama Institute for Manufacturing Excellence, University of Alabama  
“The Creation of Jobs Through Innovation”

**D-2 3:45 – 4:00 PM**  
Larry Langebrake, Director, SRI International  
“Open Architecture Information Sharing: Concepts and Applications”

**D-3 4:00 – 4:15 PM**  
Christos Christodoulatos, Associate Provost for the Office of Academic Entrepreneurship, Stevens Institute of Technology  
“Academic Entrepreneurship: A Paradigm Shift in Higher Education”
D-4  4:15 – 4:30 PM  Julie Sheppard, General Counsel and Special Assistant to the Director, Institute for Human & Machine Cognition  
“Talent, Ideas and Innovation”

D-5  4:30 – 4:45 PM  Brian Butka, Associate Professor, Department of Electrical Engineering, Embry-Riddle Aeronautical University  
“From Student Project to Student Profit: Developing a Technology Company in an Academic Environment”

D-6  4:45 – 5:00 PM  Anton J. Hopen, Managing Partner, Smith & Hopen, P.A.  
“Electronic Distillation of Verbose Technology Descriptions”

5:00 – 5:30 PM  Break

5:30 – 7:30 PM  Poster Session & Reception in the Galleria (heavy hors d’oeuvres and cash bar)  
(The Galleria is located directly across the street from the hotel, at 3802 Spectrum Blvd. It is the glassed-in area between the tall red and white buildings. You may walk or drive. Parking is available on the east side of the building in visitor parking.)

FRIDAY, FEBRUARY 17, 2012

6:00 AM – 4:00 PM  Conference Check-in (Foyer E, F & G)
7:00 – 8:00 AM  Technology and Innovation Journal Editorial Board Breakfast & Meeting (invitation only)  
(Citrus Room, 2nd floor)

***** All sessions are held in Ballroom/Salon E, F & G *****

GENERAL SESSION

8:00 – 8:05 AM  Introduction  
George R. Newkome, University of Akron

8:05 – 8:40 AM  “State of the Academy”  
Paul R. Sanberg, National Academy of Inventors and Senior Associate Vice President for Research & Innovation, University of South Florida

SESSION E

Session E  Session Co-Chairs:  
George R. Newkome, University of Akron  
Marcus W. Shute, Clark Atlanta University

E-1  8:40 – 8:55 AM  Marti Van Scott, Director of the Office of Technology Transfer, East Carolina University  
“Training the Next Generation of Innovation and the Development of Leaders for Maximum Impact in Rural Eastern North Carolina”

E-2  8:55 – 9:10 AM  Leonard D. Young, Director of the Technology Transfer Office & Associate General Counsel, Cleveland State University  
“University and Corporations: Contrast Between Two Cultures”

E-3  9:10 – 9:40 AM  John J. Kopchick, Goll-Ohio Eminent Scholar Professor in Molecular Biology, Ohio University  
“Growth Hormone Receptor Antagonists: From Bench to Product”

9:40 – 10:10 AM  Break (refreshments provided)

SESSION F

Session F  Session Co-Chairs:  
Robert Silva, Jr., Ohio University  
Vimal Chaitanya, New Mexico State University
F-1 10:10 – 10:25 AM Felix A. Okojie, Vice President for Research & Federal Relations and Professor of Public Health & Education, Jackson State University
“Changing the Academic Culture: A Proposed Model for Limited Resource Institutions”

F-2 10:25 – 11:30 AM Ram Shukla, Supervisory Patent Examiner, USPTO; Elizabeth Dougherty, Acting Deputy Director, Office of Patent Legal Administration, USPTO; and Jeffrey Dollinger, Senior Vice President, Program Development, Invent Now
“USPTO Outreach and Initiatives for Inventors: Patent Office of Innovation Development”

11:30 AM – 12:00 PM Break

12:00 – 2:00 PM Keynote Luncheon

12:00 – 12:40 PM Buffet Open
12:40 – 1:00 PM Welcome Remarks and Introduction
President Judy Genshaft, University of South Florida System
Howard J. Federoff, Executive Vice President for Health Sciences, Georgetown University Medical Center

1:00 – 2:00 PM Keynote Address
Thomas J. Fogarty, Founder of the Fogarty Institute for Innovation, National Inventors Hall of Fame Inductee, Inventor of the Cardiac Balloon Catheter, Winner of the Lemelson-MIT Prize
“Status of Invention and Innovation in the United States, Then and Now”

2:00 – 2:30 PM Break

SESSION G

Session G
Session Co-Chairs:
Howard J. Federoff, Georgetown University Medical Center
Haskell Adler, H. Lee Moffitt Cancer Center & Research Institute

G-1 2:30 – 2:50 PM Shinn-Zong (John) Lin, Professor of Neurosurgery, Superintendent of China Medical University Beigang Hospital, and Vice Superintendent of the Center of Neuropsychiatry, China Medical University Hospital
“Strategies for Translating Basic to Clinic in Cell Therapy of Stroke at CMU Chapter”

G-2 2:50 – 3:10 PM Dean L. Sicking, Director and Professor, Midwest Roadside Safety Facility, University of Nebraska – Lincoln
“Racing Safety Through Invention”

G-3 3:10 – 3:30 PM Valerie Odero-Marah, Assistant Professor, Biological Sciences, Clark Atlanta University
“Camalexin, the Phytoalexin from Cruciferous Plant, as a Treatment for Aggressive Prostate Cancer”

G-4 3:30 – 3:45 PM Dean F. Martin, Distinguished University Professor Emeritus, University of South Florida
“What Might Have Happened if the America Invents Act had been a Law in 1886”

G-5 3:45 – 4:00 PM Valerie Landrie McDevitt, Assistant Vice President of the Division of Patents & Licensing, Technology Transfer Office, University of South Florida
“The Importance of Professionalism in Developing a Modern Technology Transfer Office”

4:00 PM Conference Ends
Because of the generous support of the organizations listed below, the National Academy of Inventors was able to offer conference fellowships to offset registration costs for thirty-three undergraduate and graduate students and postdoctoral fellows. Recipients are presenting a poster at the Poster Session.

Florida High Tech Corridor Council
Oak Ridge Associated Universities (ORAU)
Morsani College of Medicine, University of South Florida
Florida Center of Excellence for Drug Discovery and Innovation, University of South Florida
College of Pharmacy, University of South Florida

Trainee Fellowship Recipients

Chandan Barhate
Jeremy Beau
Wade Borchers
Whitney Burda
Laurent Calcul
Fethullah Caliskan
Joel Cooper
Ruan Cox Jr.
David Cure
Yvonne Davis
Kevin Guzman

Hiroto Ishikawa
Pankaj Jain
Ravikiran Krishnan
Phuong Le
Jun Liang
Changhui Liu
Ruijuan Luo
Jordany Maignan
Misty N. Muscarella
Neel R. Naber

Athar K. Naif
Sinan Onal
Sarvadaman Pathak
Md Shahaduzzaman
Jiazhi Sun
Naoki Tajiri
Danielle M. Vachon
Jia Wang Wang
Zhixin Wang
Terianne Wong
Juanjuan Yin
POSTER SESSION

The Poster Session will take place on Thursday evening, from 5:30 to 7:30 PM, in the Galleria at 3802 Spectrum Boulevard, across from the Embassy Suites Hotel (the Galleria is the glassed-in area that connects the tall red building and the tall white building across the street to the northeast of the hotel). You may walk or drive. Parking is available on the east side of the building, in the visitor parking lot.

Please put up your poster in the Galleria between 3:30 and 5:30 PM on Thursday afternoon. The Galleria is not available for putting up your poster at any other time. There will be event staff on site to show you where to place your poster.

Please remove your poster immediately following the Poster Session & Reception, at approximately 7:30 PM.

ORAL PRESENTATIONS

TIME LIMITATIONS ON PRESENTATIONS

Please be aware of the time limitations for each oral presentation as noted in the Detailed Agenda. Most presentations are allotted 15 minutes. The time allotted includes the time for questions.

There are several presentations that are allotted a different amount of time. Please adhere to the time allocated for your presentation.

Session co-chairs have a timer and will provide a one-minute warning when you are nearing the end of your allocated time.

To ensure that the meeting proceeds as scheduled, please refer to the Detailed Agenda for your presentation time. Please provide the Audio Visual Technician your Power Point Presentation at least 30 minutes prior to the beginning of the Session in which you are presenting (Sessions A – G). The Audio Visual Technician will be available during the Sessions to assist as needed. If you have any questions, prior to the start of your Session, please speak with the Chair of your Session or to someone at the Check-in Table outside Ballroom/Salon E, F & G.

Thank you for your cooperation.
National Academy of Inventors®

The National Academy of Inventors® (NAI) was founded at the University of South Florida (USF) in 2010, in order to recognize investigators at universities and non-profit research institutes who translate their research findings into inventions that may benefit society.

To join the NAI, an inventors must be affiliated with a Member Institution and be a named inventor on one or more patents issued by the United States Patent and Trademark Office (USPTO). In addition to regular membership, honorary membership is recognized.

The USF Office of Research & Innovation established the USF Academy of Inventors™ in 2009. 131 members joined as Charter Members at an inaugural luncheon on October 5, 2009.

The NAI currently has 31 Charter Member Institutions and more than 600 individual inventor members.

The NAI is a 501(c)3 organization and edits the multidisciplinary journal Technology and Innovation – Proceedings of the National Academy of Inventors®, published by Cognizant Communication Corporation (NY).

The NAI publishes an email newsletter and maintains a presence on Facebook and Twitter. The NAI website is at www.AcademyofInventors.org.

• MISSION •

The mission of the National Academy of Inventors® is to honor academic invention; recognize and encourage inventors; enhance the visibility of university and non-profit research institute technology and innovation; encourage the disclosure of intellectual property; educate and mentor innovative students; and translate the inventions of its members to benefit society.

• GOALS AND OBJECTIVES •

To recognize publicly a cadre of investigators who are also inventors.

To enhance visibility of university and non-profit research institute technology development, promote entrepreneurship and be advocates for academic innovation in the local community.

To be a resource for the local community to facilitate greater industry research contracts and interactions with companies and organizations in order to increase economic impact.

To increase awareness of intellectual property by mentoring, fostering and encouraging faculty, staff and students to develop their intellectual property and inventions.

To help shape society by being in a position to understand the translational use of inventions at the university or research institute and elsewhere; and to be a role model in such endeavors for students.

To develop relevant invention-based activities in collaboration with the institution’s administration of patents and licensing.
National Academy of Inventors®

Board of Directors and Officers
Paul R. Sanberg, President, University of South Florida
Shyam Mohapatra, Vice President, University of South Florida
Barry B. Bercu, Secretary, University of South Florida
Dennis K. Killinger, Treasurer, University of South Florida
Sandra J. Degen, University of Cincinnati
Howard J. Federoff, Georgetown University
Christina M. Frederick-Recascino, Embry-Riddle Aeronautical University
George R. Newkome, University of Akron
Shivshankar Sundaram, Draper Laboratory
John D. Weete, Auburn University
Sarath Witanachchi, University of South Florida

Current Charter Member Institutions
Auburn University
Boston University
China Medical University
Clark Atlanta University
Cleveland State University
Draper Laboratory
East Carolina University
Embry-Riddle Aeronautical University
Florida A&M University
Florida Atlantic University
Florida Institute for Human & Machine Cognition
Florida International University
Florida Gulf Coast University
Georgetown University
The Jackson Laboratory
Jackson State University
H. Lee Moffitt Cancer Center & Research Institute
New Mexico State University
Ohio University
Oklahoma State University
SRI International
Stevens Institute of Technology
The University of Akron
University of Alabama
University of Central Florida
University of Cincinnati
University of Missouri – St. Louis
University of Nebraska – Lincoln
University of North Dakota
University of South Florida
University of Texas at Arlington
The Florida High Tech Corridor Council (FHTCC) is a regional economic development initiative of the University of Central Florida (UCF), the University of South Florida (USF) and the University of Florida (UF) whose mission is to grow high tech industry and innovation in the region through research, workforce and marketing partnerships. A partnership involving more than 25 local and regional economic development organizations (EDOs) and 14 community colleges, the Council is co-chaired by the presidents of UCF, USF and UF. The Council includes the presidents of two of the community colleges, the president of Florida Institute of Technology and representatives of high tech industry. The unique partnership has resulted in a strategic approach to high tech economic development that involves matching funds research, workforce development and a marketing program leveraging governmental, EDO and corporate budgets on a regional rather than local basis.

USFP Blue Sky is a technology based business incubation program at the University of South Florida Polytechnic. Based in Central Florida, with locations in both Lakeland and Winter Haven, it was established in 2010 and focuses on attracting and growing businesses. USF Polytechnic faculty, staff and students are able to engage in experiential learning opportunities by working with client firms to help grow their companies and bring their innovative technologies to market.

Smith & Hopen is the largest law practice on Florida’s West Coast exclusively devoted to Intellectual Property (IP). Ron Smith and Anton Hopen are both Board Certified in IP, the highest level of recognition by the Florida Bar of a lawyer’s competency and experience. Only 121 out of 88,000 attorneys in Florida are Board Certified in IP. Every practitioner at Smith & Hopen is registered to practice before the U.S. Patent and Trademark Office and holds a science or engineering degree.

Oak Ridge Associated Universities is a consortium of 102 doctoral degree-granting universities and colleges whose legacy stretches back to the Manhattan Project. ORAU is also a 501(c)3 non-profit corporation that supports a number of federal government agencies and programs, and that manages the Oak Ridge Institute for Science and Education for the U. S. Department of Energy. ORAU’s activities include fellowship and scholarship programs, research participation, internships, travel and special events programs (such as the National Academy of Inventors Conference), high performance computing grants, faculty awards, HBCU summer programs, and technology awards. Simply put, it pays to be a member of ORAU.

The University of South Florida is a high-impact, global research university dedicated to student success. USF is classified by the Carnegie Foundation for the Advancement of Teaching in the top tier of research universities, a distinction attained by only 2.2 percent of all universities. It is ranked 44th in total research expenditures and 34th in federal research expenditures for public universities by the National Science Foundation. The USF System has an annual budget of $1.5 billion, an annual economic impact of $3.7 billion, and serves 47,000 students in Tampa, St. Petersburg, Sarasota-Manatee and Lakeland.
Inaugural Annual Conference of the National Academy of Inventors
• Presenter Biographies •

THURSDAY, FEBRUARY 16, 2012

General Session
Welcome Remarks
Paul R. Sanberg, National Academy of Inventors (see page 22)

Session A: Co-Chair
David Conrad, University of Nebraska

David Conrad is Executive Director of NUtech Ventures—the nonprofit affiliate of the University of Nebraska that connects university innovators with the people and funding they need to bring their technologies and start-ups to life. In a previous research life, he worked as a chemist in industry, government, and academic settings before deciding that experiments involving people were more challenging and rewarding. He also co-founded an angel-funded software start-up. His current interests are in collaborative research, teams vs. groupthink, principal-agent problems, game theory, and negotiation. David received his Ph.D. in chemistry from the University of Illinois at Urbana-Champaign and his MBA from Duke University’s Fuqua School of Business.

Session A: Co-Chair
Harry Anderson (Andy) Page, Oak Ridge Associated Universities

Andy Page is president and CEO of Oak Ridge Associated Universities (ORAU) and director of the Oak Ridge Institute for Science and Education. He provides strategic direction and leadership for ORAU’s six major programs as well as directing the organization’s business operations. Page serves as ORAU’s primary representative to the Department of Energy and works closely with other government agencies and the academic community to further ORAU’s partnership initiatives. Since his appointment as president in May 2009, Page has exemplified ORAU’s pursuit of performance, quality and integrity. Before becoming president, Page was vice president and director of ORAU’s National Security and Emergency Management Program, supporting the DOE/National Nuclear Security Administration Office of Emergency Response.

Presentation A-1
Attracting Venture Capital for Your University’s New Venture
Vinit Nijhawan, Managing Director of the Office of Technology Development, Boston University

Vinit Nijhawan is Managing Director, Office of Technology Development, and Director of Enterprise Programs at ITEC (Institute of Technology, Entrepreneurship & Commercialization) at Boston University. Vinit also teaches MBA courses on Entrepreneurship at BU. Vinit has over 30 years experience building five startups: as CEO of three, five were acquired. Vinit was Venture Partner at Key Venture Partners and over two years sourced over 200 deals and made one investment that was acquired for $430M. Vinit is an advisor and board member to several technology startups and was a Mass High Tech All-Star in 2005. Vinit has participated in over 150 panel discussions and paper presentations, and is a Board Member of MTDC, an early stage, quasi-public Massachusetts venture capital firm. Vinit earned a B.A.Sc in electrical engineering from the University of Waterloo in Ontario, Canada.
Innovation and the Value Balance

Len Polizzotto, Vice President for Marketing and Strategic Business Development, Draper Laboratory

Dr. Len Polizzotto is Draper Laboratory’s Vice President responsible for Strategic Business Development and Marketing. Reporting to the President & CEO, he is leading efforts to raise the Laboratory’s profile to help capture new opportunities for sponsored research and bring the Laboratory’s emerging technologies to market to benefit the public good. Prior to joining Draper Lab in 2007, Polizzotto served for six years as Corporate Vice President for Business Development and Marketing for SRI International, a world leader in contract R&D services. A 25-year tenure at the Polaroid Corporation preceded this, concluding with the assignment of Corporate Vice President for New Business Development. Between corporate experiences, Polizzotto directed the Center for the Globalization of Technology at Worcester Polytechnic Institute.

Rationale for a Drug Discovery Acceleration at Georgetown University Medical Center

Howard J. Federoff, Executive Vice President for Health Sciences, Georgetown University Medical Center

Howard received his M.D. and Ph.D. degrees from the Albert Einstein College of Medicine in New York City. In 2007 Howard joined the Georgetown University Medical Center as Executive Vice President of Health Sciences and Executive Dean for the School of Medicine. His research is on novel treatments for neurodegenerative diseases. He serves on four editorial boards, two foundation boards, has chaired NIH Study Sections, was a member of the Board of Scientific Counselors of NIDCR, was a member of the SMA NINDS Scientific Advisory Committee and was Chair of the NIH Recombinant DNA Advisory Committee. He has published numerous papers, chapters and editorials. Howard has received a number of awards including the Arthur Kornberg Research Award, the Society for Neuroscience Grass Lectureship, the Abreu Memorial Lectureship, induction into Alpha Omega Alpha, and the Bernard Sandberg Award. Dr. Federoff has co-founded two biotechnology start-up companies and has been awarded numerous patents.

Andrés G. Gil, Florida International University

Andrés G. Gil, PhD, is Vice President for Research at Florida International University, and Professor at FIU’s Robert Stempel College of Public Health and Social Work. Dr. Gil’s research focuses on the etiology, epidemiology, and treatment for adolescent substance abuse and mental health. He has authored numerous articles that examine the role of culture, race, and ethnicity in adolescent substance use and mental health. He is on the editorial board of numerous scientific journals in his field of research, and is currently a member of the Advisory Council for the National Institute on Alcohol Abuse and Alcoholism (NIAAA), a member of the APLU’s Council on Research Policy and Graduate Education, and a member of the Board of Trustees for the Southeastern Universities Research Association (SURA).
Session B: Co-Chair

**Nasser Arshadi**, University of Missouri – St. Louis

Nasser Arshadi is Vice Provost for Research and Professor of Finance at the University of Missouri-St. Louis. He received his Ph.D. in financial economics at the University of Nebraska-Lincoln. He has published extensively in top economics and finance journals on capital markets and the microeconomics of corporations with an emphasis on assessing and managing risk. He has published two books on financial intermediation (Prentice Hall) and insider trading (Kluwar Academic Publishing). He served as an economist and policy analyst at the Board of Governors of the Federal Reserve System in Washington, DC, and as a consultant to the American Bankers Association (Washington, DC), Treasury Management Association (Washington, DC), Securities Industry Automation Corporation (NYC), Deutsche Financial Services (St. Louis), and Commerce Bancshares (St. Louis). He serves on several boards.

**Presentation B-1**

**Accelerating the Innovation Economy by a Strong Coupling of the Academic Research Enterprise to Industry**

**M.J. Soileau**, Vice President for Research & Commercialization, University of Central Florida

M.J. Soileau is currently Vice President for Research & Commercialization and Distinguished Professor of Optics, ECE, and Physics. He heads the UCF Office of Research & Commercialization which includes: Office of Sponsored Programs, which, in turn, is responsible for providing contract and grant services for the university faculty and staff; oversight and management of interdisciplinary centers, including, the Center for Research and Education in Optics and Lasers (CREOL), the Institute of Simulation and Training (IST), the Nano Science and Technology Center (NSTC), the Florida Solar Energy Center (FSEC), the Advanced Materials Processing and Application Center (AMPAC), and the Florida Space Institute (FSI); the UCF Technology Incubator and the university Technology Transfer Office; the UCF Research Foundation (the VP Research serves as president of this organization); and represents the research agenda of the university in the senior administration and in partnerships with federal, state, and local agencies and the private business sector.

**Presentation B-2**

**From Concept Towards Commercialization: A Case Study**

**N.N. Khandan**, Professor, New Mexico State University

Dr. Nirmalakhandan (Khandan) holds the Ed & Harold Foreman Endowed Professorship in the Civil Engineering Department at New Mexico State University (NMSU). During his 22 year tenure at NMSU, he has taught several undergraduate and graduate courses in the environmental engineering area. His research has covered areas of renewable and sustainable technologies in the energy/water nexus, including biohydrogen, biodiesel, microbial fuel cells, and desalination. His research projects have been funded by the Department of Energy, National Science Foundation, Department of Agriculture, and Environmental Protection Agency, etc. Outcomes of these projects include 10 PhD degrees, 95 journal papers with over 1,000 peer citations, and several awards for his teaching and research accomplishments. The project described in this presentation has been selected as one of the 28 “Best & Brightest” projects in the Genius Issue of *Esquire Magazine* in 2008.
Presentation B-3

**Development of a Strategic Plan for a Technology Transfer Office**

**Michael F. Moore**, Associate Vice President, IP Commercialization and Economic Development, University of North Dakota

Michael F. Moore is the Associate Vice President, IP Commercialization and Economic Development at the University of North Dakota. He has complete authority for the University's intellectual property licensing program as well as responsibilities to translate the University's $125M research enterprise to the private sector to stimulate economic development in North Dakota. Previously, Mike was the Manager, Strategic Accounts and Compliance for the Office for Technology Commercialization at the University of Minnesota. Mike also managed the Agriculture & Horticulture licensing program including the Honeycrisp™ and SweetTango™ apples as well as the Contract function. Mike also spent seven years as the Director of Health Technologies where he had complete responsibility for the licensing operation in the University's Academic Health Center and College of Veterinary Medicine. Mike received an MS in Biotechnology from the Illinois Institute of Technology and a BS in Biology with a minor in chemistry from Northern Illinois University.

Presentation B-4

**How to Invent – Legal and Intellectual Requirements**

**Joseph P. Kennedy**, Distinguished Professor of Polymer Science and Chemistry, The University of Akron

Joseph P. Kennedy, PhD, MBA, Distinguished Professor of Polymer Science and Chemistry at The University of Akron, has spent most of his life in the inventing business. He spent 14 years in research in industry (Calanese, Exxon) and 40 years in academia. He co-authored four books, over 700 publications and is the co-inventor on over 100 U.S. patents, several of which are in full commercial production. His patent on the polymer coating of drug eluting coronary stents (implanted in over 5 million patients) has generated billions of dollars of revenue and thousands of jobs. He is the recipient of numerous prestigious national and international awards and honorary doctorates. His textbook for graduate students in the sciences and engineering *How to Invent and Protect Your Invention* will be published later this year.

Keynote Luncheon - Introduction

**Mayor Bob Buckhorn**, City of Tampa, Florida

Bob Buckhorn was sworn in as the 56th mayor of the nation’s 55th largest city on April 1, 2011. Buckhorn believes Tampa’s strength is in its diversity and he is focused on building an environment that will move Tampa to the next level and create a strong economic climate. Mayor Buckhorn’s priorities are job creation and economic growth. As Tampa’s mayor, Buckhorn serves on several boards and governing authorities including the Hillsborough County Aviation Authority, Tampa Bay Area Regional Transportation Authority, and the Tampa Port Authority. The mayor is represented on the Hillsborough Area Regional Transit Authority, the Metropolitan Planning Organization, Tampa Bay Water, and the Tampa-Hillsborough Expressway Authority. He also appoints citizens to serve on a number of other boards, committees and authorities charged with regulating and overseeing various city operations.
Keynote Speaker

**Building a 21st Century Patent and Trademark Office**

**David Kappos**, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

David Kappos is the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. In this role since August 2009, he advises the President, the Secretary of Commerce, and the Administration on intellectual property matters. Mr. Kappos directs an office that provides incentives to encourage technological advancement and helps businesses protect their investments, promote their goods and services and safeguard against deception in the marketplace. The Office continues to deal with a large patent application backlog, long waiting periods for patent review, and information technology systems that are regarded as outdated. Before joining the USPTO, Mr. Kappos served as Vice President and Assistant General Counsel for Intellectual Property at IBM where he managed worldwide intellectual property operations. He has served on numerous boards and other leadership roles in the intellectual property field and has written and spoken widely on intellectual property topics both in the U.S. and globally. Mr. Kappos received his Bachelor of Science degree in electrical and computer engineering from the University of California-Davis in 1983, his law degree from the University of California Berkeley in 1990, and has over 23 years of experience in the intellectual property field.

Session C: Co-Chair

**Shinn-Zong (John) Lin**, China Medical University *(see page 27)*

Session C: Co-Chair

**Carolyn Cason**, University of Texas at Arlington

Dr. Cason joined The University of Texas at Arlington in January 1997, as Professor and Associate Dean for Research, College of Nursing. Prior to joining UTA, she held an appointment as Professor, College of Nursing, University of Arkansas for Medical Sciences in Little Rock. In addition to her preparation in nursing, she holds a doctoral degree in Educational Psychology from the University of Texas, Austin. Her accomplishments at UTA include developing the infrastructure and faculty capability to support a PhD in Nursing program within the College of Nursing. She was instrumental in developing the program and teaches in it. The program admitted the first cohort of students in Fall 2003 and has had 15 graduates. She has also designed, developed and supported technological solutions to some of the most intransient health care problems of today including a novel solution to increase survival from sudden cardiac arrest and the creation of three interdisciplinary centers at the University of Texas at Arlington: the Smart Hospital™, Smart Care, and the Genomics Translational Research Laboratory.

Presentation C-1

**Coordinating the America Invents Act of 2011**

**Hiram Bernstein**, United States Patent and Trademark Office

Hiram Bernstein is currently a Senior Legal Advisor in the Office of Patent Legal Administration under the Associate Commissioner for Patent Examination Policy. He has served as a Primary Examiner in the areas of single crystals, distillation, and food technology. He was appointed a Special Program Examiner to review Rule 56 duty of disclosure violations. Mr. Bernstein has worked on rule making, changes to the Manuel of Patent Examination (MPEP), and a variety of petitions, including access, inventorship, and reissue matters in applications, real party in interest, and attorney conflict in reexaminations, and petitions for waiver and for matters not provided for by the rules of practice. He is now working extensively on rule making directed towards implementing the Federal Circuit’s Theresene decision relating to the duty of
Faculty Entrepreneurship at a State-Funded University: A VP for Research Perspective

Sandra J. Degen, Interim Chair, Department of Molecular Genetics, Biochemistry & Microbiology, University of Cincinnati and Cincinnati Children’s Hospital Medical Center

Dr. Degen is the Interim Chair of the Department of Molecular Genetics, Biochemistry & Microbiology and Associate Chair for Academic Affairs and Professor of Pediatrics at the University of Cincinnati (UC) and Cincinnati Children’s Hospital. She was an undergraduate at the University of California, San Diego, received her PhD in Biochemistry from the University of Washington and was a postdoc at the Friedrich Miescher Institute in Switzerland. She joined the faculty at UC and Cincinnati Children’s Research Foundation in 1985. Her research interests involved studying the biological functions of blood coagulation proteins. She has 3 patents. Dr. Degen was a Pew Scholar and an Established Investigator of the American Heart Association. Her honors include: Editorial Board of the Journal of Biological Chemistry, 2005 Special Recognition Award in Thrombosis from the American Heart Association and being elected a AAAS Fellow. She was the Vice President for Research at UC from 2004-2011.

High Throughput Genome Sequencing, A Powerful Disruptive Technology

Jarett Rieger, Director, Office of Technology Management and Commercialization and Associate General Counsel, Moffitt Cancer Center

Mr. Rieger oversees the Office of Technology Management and Commercialization (“OTMC”) at Moffitt Cancer Center. His department is charged with commercializing the cancer related discoveries made at Moffitt Cancer Center ranging from protecting the intellectual property to forging licensing alliances with established companies and startups. Prior to joining Moffitt, Mr. Rieger practiced as a patent attorney at Breed Technologies in Lakeland, Florida. Mr. Rieger received both his Juris Doctor and Master of Business Administration degrees from Stetson University College of Law in Saint Petersburg, Florida; he received his Bachelor of Arts in Chemistry from Rollins College in Winter Park, Florida. He is admitted to the Florida Bar and is a registered Patent Attorney. Mr. Rieger sits on the board of the Florida Research Consortium and the Tampa Bay Innovation Center.
Presentation C-4

**Disruptive Innovators Create Disruptive Innovations**

**Paul Swamidass**, Professor of Operations Management, Director of the Thomas Walter Center for Technology Management, Auburn University

Dr. Swamidass is Professor of Operations Management and Director of the Thomas Walter Center for Technology Management; and directs the Business-Engineering-Technology minor at Auburn University. The Center, occasionally, helps Auburn University TTO with the commercialization of selected technologies. One technology promoted and marketed by the Center became a startup in Delaware in 2007, raising $3 million in equity. He helped the startup as Board member for one year. He is an independent inventor with one issued patent. His current research and teaching interest center on high-technology entrepreneurship, technology commercialization, and business plan development for startups based on university inventions. As a faculty advisor, he helped students start the “Auburn Student Inventors and Entrepreneurs Club.” For the last two years, Dr. Swamidass ran the Invention2Venture Challenge for students, where student teams were challenged to start a business and produce profits in 72 hours. The winning team was awarded $1000. He has trained over 40 graduate students in university invention evaluation, patent search, and business plan preparation.

Session D: Co-Chair

**Arlene A. Garrison**, Oak Ridge Associated Universities

Dr. Arlene Garrison is Vice President of University Partnerships at Oak Ridge Associated Universities, responsible for enhancing ORAU’s scientific research opportunities and expanding partnerships with universities, national laboratories and private industry. Under her direction, the University Partnerships office provides awards to ORAU member universities, identifies and promotes funding opportunities by facilitating inter-institutional relationships, and leverages relationships with other organizations to support increased funding for scientific research and education. Garrison works with Oak Ridge National Laboratory to enhance and expand research participation programs that provide opportunities for faculty and students from ORAU member institutions to work alongside renowned ORNL scientists. ORNL is the nation’s largest science and energy laboratory and an internationally recognized leader in scientific research in neutron and materials sciences and high performance computing. Garrison brings more than 35 years of experience in science and education to ORAU’s university partnership and research programs. Prior to joining ORAU, she served as a program director for the National Science Foundation where she led programs to strengthen research and education in science and engineering across the United States.

Session D: Co-Chair

**Tanaga Boozer**, Florida Agricultural and Mechanical University

Tanaga A. Boozer, MBA, JD, Director for the Office of Technology Transfer, Licensing and Commercialization and Adjunct Assistant Professor, Florida A&M University, is registered to practice before the United States Patent and Trademark Office. Ms. Boozer has over fourteen years of intellectual property experience and conducts technology transfer presentations and patent seminars for faculty, staff and students. She also performs initial evaluations and patent searches, drafts patent applications, coordinates the Intellectual Property Review process and manages the Committee for the Commercialization of University Innovations (CUI). Ms. Boozer has served as a Technology Transfer Reviewer with the Department of Defense for its Congressionally Directed Medical Research Program. She also served as consultant for the American Association for the Advancement of Science (AAAS). Ms. Boozer holds a Bachelor of Science degree in Chemistry from Rust College, an MBA from Prairie View A&M University, and the J.D. degree from the University of Mississippi.
Presentation D-1

The Creation of Jobs Through Innovation

Daniel Daly, Director of the Innovation and Mentoring of Entrepreneurs Center, The University of Alabama

Dr. Dan Daly received a B.S. in Chemistry and Psychology from Florida State University, Tallahassee. He received a Ph.D. in Physical-Organic Chemistry from the University of Florida in Gainesville. He did two post-doctoral studies in computer-assisted molecular design at the University of South Florida in Tampa and Oregon State University in Corvallis. He spent 17 years as Technology Manager for several Business Development Groups, where he was responsible for coordinating the marketing, patent strategy and technology development for these emerging companies. Drawing from his industrial background, he brings a business focus to his work at the University of Alabama to insure developed technologies are linked to commercial offerings. Dan is currently the Director of the Alabama Institute for Manufacturing Excellence and the Director of Alabama's Innovation and Mentoring of Entrepreneurs Center. Dan also served as the Director of Technology Transfer from 2005-2007.

Presentation D-2

Open Architecture Information Sharing: Concepts and Applications

Larry Langebrake, Director, Marine Technology Program, Engineering Research and Development Division, SRI International, St. Petersburg, FL

Larry Langebrake is director of SRI's Marine Technology Program in St. Petersburg, Florida. He was an integral part of the team that attracted SRI to St. Petersburg and became the director when SRI opened its doors there in January 2007. Prior to SRI, he led the Center for Ocean Technology at the University of South Florida’s College of Marine Science. Langebrake began work at USF in 1994 as a founding member of the Center. His efforts resulted in the creation of an engineering organization that became an internationally recognized leader in environmental sensors research and development. SRI St. Petersburg supports projects that span homeland defense to environmental research, including application of microsystems and nanotechnology. Langebrake’s career includes 15 years in the aerospace industry working with organizations such as Goodyear, General Electric, AT&T, Lockheed Martin, and several national laboratories. He holds a BS in Electrical Engineering from the University of Kentucky and an MS in Electrical Engineering from USF. His education includes Ph.D. studies in marine science. Langebrake is a registered P.E. (professional engineer) in the State of Florida.

Presentation D-3

Academic Entrepreneurship: A Paradigm Shift in Higher Education

Christos Christodoulatos, Associate Provost for the Office for Academic Entrepreneurship, Stevens Institute of Technology

Dr. Christos Christodoulatos is the Associate Provost for the Office for Academic Entrepreneurship at Stevens Institute of Technology in Hoboken, New Jersey. The mission of the OAE is to modernize the technology transfer process and implement educational and research programs that bring the concepts of innovation and entrepreneurship into the classroom and the research laboratory. He holds several patents and has authored over one hundred and fifty research articles. Recognizing the importance of innovation and entrepreneurship to academia he has worked diligently over the last ten years to eliminate the obstacles endemic to the traditional university intellectual property exploitation. He is the cofounder of two successfully commercialized spin off companies that were acquired by major U.S. corporations. Dr. Christodoulatos emphasized the participation of undergraduate and graduate students in entrepreneurial activities and has worked with various faculty teams to develop courses and programs for the undergraduate and graduate curricula that are now available to the Stevens student.
Presentation D-4

Talent, Ideas and Innovation

Julie Sheppard, General Counsel and Special Assistant to the Director, Institute for Human & Machine Cognition

Julie Sheppard joined IHMC as General Counsel and Special Assistant to the Director in March of 2004 to assist in the start up of this not-for-profit research institute. She is primarily responsible for the transactional, intellectual property, immigration, employment, external relations and educational outreach activities of the Institute. Julie has worked extensively in higher education serving as General Counsel at UWF, Associate General Counsel at UNF, and as Labor and Employment Counsel to the former Florida Board of Regents. Julie has worked in private practice with the Maine law firm of Bernstein, Shur, Sawyer and Nelson, clerked for the Massachusetts Trial courts and has served as an Administrative Hearings Officer. Julie earned her J.D. from Suffolk University Law School and her B.A. from the University of Virginia. She is the immediate Past President of IMPACT 100 Pensacola Bay Area and a Florida Bar Board Certified Education Lawyer.

Presentation D-5

From Student Project to Student Profit: Developing a Technology Company in an Academic Environment

Brian Butka, Associate Professor, Embry-Riddle Aeronautical University

Dr. Brian Butka is an associate professor in the Electrical, Computer, Software, and Systems engineering department of Embry-Riddle Aeronautical University. His research interests include the design of safety-critical hardware, autonomous vehicles, and green energy. He holds six patents and is a founding member of NuovoWind, a wind power company.

Presentation D-6

Electronic Distillation of Verbose Technology Descriptions

Anton J. Hopen, Innovation Express Corporation

Anton Hopen graduated from the USF Honors Program in 1992 with a degree in Interdisciplinary Science and obtained his law degree from the University of Florida College of Law. After law school, he served as a criminal prosecutor in Pinellas County, Florida, for three years, trying nearly fifty criminal cases to a jury verdict. He passed the U.S. Patent Bar examination in 1998 and has been managing partner of Smith & Hopen, P.A., the largest intellectual property law practice in the Tampa Bay area since 1999. Anton is Board Certified by the Florida Bar in Intellectual Property Law and represents a number of universities and Fortune 500 companies across the country. In 2009, he founded the USF Young Innovator Program that encourages children to apply science and math creatively. He is also a continuing speaker for Pitch Tank with Kevin Harrington, a multi-day conference teaching inventors how to convey the value of their technology.
General Session

State of the Academy

Paul R. Sanberg, National Academy of Inventors

Paul R. Sanberg is founder and president of the National Academy of Inventors. He is Special Assistant to the President, Senior Associate Vice President for Research & Innovation, Distinguished University Professor, Executive Director of the Center of Excellence for Aging and Brain Repair, and Vice Chairman of the Department of Neurosurgery in the Morsani College of Medicine, at the University of South Florida. Dr. Sanberg trained at York University, the University of British Columbia, the Australian National University and Johns Hopkins University School of Medicine, among others. Before coming to USF, Dr. Sanberg held academic positions at Ohio University, the University of Cincinnati, and Brown University. Dr. Sanberg is an inventor on over 30 health-related patents issued by the U.S. Patent and Trademark Office (USPTO), and over 70 foreign patents. His co-discovery of a novel antidepressant drug is in late development by AstraZeneca. Dr. Sanberg's work has been instrumental in translating new pharmaceutical and cellular therapeutics to clinical trials for Tourette syndrome, depression, stroke, Huntington's disease and Parkinson's disease.

Session E: Co-Chair

George R. Newkome, The University of Akron

Professor George R. Newkome received his B.S. and Ph.D. in Chemistry from Kent State University. After a postdoctorate at Princeton University, he joined LSU where he became a full professor in 1978, and then LSU Distinguished Research Master in 1982. In 1986, he went to USF as their Vice President for Research and professor of chemistry then in 1992 was named Distinguished Research Professor. In 2001, he went to the University of Akron as their Vice President for Research; Dean of the Graduate School; the Oelschlager Professor of Science and Technology; and Professor, Departments of Polymer Science and Chemistry. Currently, he is also President & CEO of the University of Akron Research Foundation, the Akron Innovation Campus, and on the board of directors for 14 corporations. He has published over 450 scientific papers, has 45 patents, and edited/written over 15 scientific books/monographs.

Session E: Co-Chair

Marcus W. Shute, Clark Atlanta University

Dr. Marcus W. Shute, P.E. has actively participated in R, D&E activities in optical communications, wireless communications, and telecommunications since 1983. He is experienced in leading cross-functional R&D groups to transition technology innovations from laboratory prototypes to products in compressed timeframes. During his tenure at Bell Laboratories, Lucent Technologies, he developed expertise, led development efforts, obtained several patents, and is widely published in optical fiber communications, wireless communications, optical fiber amplifiers, planar waveguide technology, polarization phenomena, electronic materials, and initiatives related to increasing minority participation in STEM. Currently, Dr. Shute is the Vice President for Research and Sponsored Programs and Professor in the Department of Physics and the Dual-Degree Engineering Program at Clark Atlanta University.
Presentation E-1

*Training the Next Generation of Innovation and the Development of Leaders for Maximum Impact in Rural Eastern North Carolina*

**M.J.S. Van Scott**, Office of Technology Transfer, East Carolina University

Marti Van Scott did her undergraduate and graduate studies at SUNY Fredonia, WVU, UNC-CH, and ECU. Her career began as an industrial geologist before transitioning to contracts and property management with the U.S. Department of Energy in 1982. Her administrative career continued in private sector contracts management in RTP in 1984. She transitioned to academic administration at East Carolina University, first with the Office of Sponsored Programs at East Carolina University in 1991, then later as founding Director of ECU’s Office of Technology Transfer in 1997. Under her direction, ECU has been recognized nationally in several technology transfer measures. To continue driving the commercialization process in rural eastern North Carolina, Ms. Van Scott has collaborated on multiple initiatives to build, establish and fortify local industry. Marti is also the co-founder of ECU’s Outreach Network, founded in response to challenges of rural communities following the 1999 Hurricane Floyd Flood.

Presentation E-2

*University and Corporations: Contrast Between Two Cultures*

**Leonard D. Young**, Associate General Counsel and Director of the Technology Transfer Office, Cleveland State University

Leonard Young is Director of the Technology Transfer Office and Associate General Counsel for the Cleveland State University. Young’s responsibilities include handling University inventions from disclosure through patenting and licensing to both established and start-up businesses. He is also responsible for terms of industrial research, non-disclosure, and material transfer agreements with private sector partners. Young has specialized in providing publicly-traded and privately-held companies services ranging from advising Senior Management on day-to-day legal issues to participating in a variety of complex business transactions including acquisitions and dispositions, joint-ventures, international transactions, and technology licensing agreements. Mr. Young has practiced corporate and international business law in Northeast Ohio for more than 30 years as Senior Corporate Counsel for Reliance Electric Company, and General Counsel and Assistant Secretary for the Ferro Corporation, a $2 billion publicly-traded international specialty chemicals company where he provided legal advice on the strategic policy and technical decisions throughout the organization.
Session F: Co-Chair

Vimal Chaitanya, New Mexico State University

Dr. Vimal Chaitanya is the Vice President for Research, and Professor of Mechanical Engineering and Chemical Engineering at New Mexico State University. Prior to joining NMSU, Dr. Chaitanya was the Founder/Director of the Advanced Materials Processing and Analysis Center (AMPAC) and Director of Materials Characterization Facility (MCF) at the University of Central Florida, where he was a Professor of Mechanical, Materials and Aerospace Engineering. Dr. Chaitanya’s research areas include materials characterization, materials degradation and failure analysis. His significant technical contribution ranges from life prediction of thermal barrier coatings for gas turbines to chemical mechanical polishing for multi-layer electronic device fabrication. He has published about 90 technical papers and has received competitive research funding from DARPA, DOE, NASA, NSF, NIST, Siemens-Westinghouse and Lucent Technologies. Dr. Chaitanya holds a Ph.D. in Materials Science and Engineering from the Johns Hopkins University, a Masters in Bioengineering from Clemson University, and a Bachelor of Engineering in Mechanical Engineering from MSU.

Session F: Co-Chair

Robert Silva, Jr., Ohio University

Bob Silva has over 25 years of experience in senior level positions in areas such as technology development, technology commercialization and general company management. At Ohio University, Bob is responsible for the administration, coordination, protection and disposition of all intellectual property (IP) and technology commercialization matters. He also provides support to the university’s small business incubator and university personnel to assist in the growth of research partnerships, as well as to the offices of Research and Sponsored Programs and Research Compliance. Before accepting the position at Ohio University, Bob was a commercialization manager for Battelle Memorial Institute at the Pacific Northwest National Laboratory (PNNL) in Richland, Washington. For about ten years, Bob developed and managed Battelle’s energy technology portfolio, which consisted of more than 200 U.S. patents and 150 foreign counterparts. He also supported Battelle’s Global Energy Technology Business, identifying and capturing IP and refining IP strategies for the global business. As part of that responsibility he evaluated funding proposals and negotiated various agreements with commercial clients. Bob is skilled in working with large and small firms as well as start-up companies to commercialize and deploy technology.

Presentation E-3

Growth Hormone Receptor Antagonists; From Bench to Product

John J. Kopchick, Edison Biotechnology Institute and Department of Biomedical Sciences, Heritage College of Osteopathic Medicine, Ohio University

John J. Kopchick is an internationally recognized leader in the growth hormone field. He is the Goll-Ohio Eminent Scholar Professor in Molecular Biology at Ohio University in Athens, Ohio. His PhD in Biomedical Sciences was awarded in 1980 by the University of Texas. Dr. Kopchick and his group were the first to discover and characterize GH receptor antagonists, an accomplishment for which he and Ohio University were awarded several US and European patents. Dr. Kopchick was instrumental in founding a company, Sensus, which applied his research to the development of an FDA approved drug for acromegaly. He has published more than 290 scientific articles and serves on the Editorial Boards of Endocrinology, Molecular Endocrinology, GH & IGF-1 Research and The Journal of Biological Chemistry. He is President Elect of the Growth Hormone Research Society and has received many awards including the British Endocrine Society Transatlantic Award (2011).
Presentation F-1

Changing the Academic Culture: A Proposed Model for Limited Resource Institutions

Felix A. Okojie, Vice-President for Research and Federal Relations, Jackson State University

Dr. Felix A. Okojie is the Vice President for Research and Federal Relations and Professor of Public Health at Jackson State University. He has been proactive in providing administrative, academic and research leadership in several disciplines including Science and Technology, Health Sciences, Liberal Arts, Business, Education, and Social Sciences. Dr. Okojie has devoted considerable energies to the growth of research programs at Jackson State University and plays leadership roles in the funding and ongoing implementation of several research centers including National Center for Biodefense Communications, Center for Defense Integrated Data, Institute for Epidemiology and Health Services Research, Jackson Heart Study Coordinating Center, Center for Nanotoxicity, and Center of Excellence for the Study of National Disasters, Coastal Infrastructure and Emergency Management. A Certified Research Administrator and academician, he is active in several academic and research organizations, publishes, and serves on several regional and national research and education boards.

Presentation F-2: USPTO Panel

USPTO Outreach and Initiatives for Inventors: Patent Office of Innovation Development

Ram Shukla, USPTO

Elizabeth Dougherty, USPTO

Jeffrey Dollinger, Senior Vice President, Program Development, Invent Now

Ram Shukla is a Supervisory Patent Examiner in the Technology Center 1600. Currently he is a Supervisor of the art unit that examine Cellular Immunology and the Use of antibodies in diagnosing and treating diseases. He joined the United States Patent and Trademark Office in 1998 and examined in the area of transgenic animals, gene therapy and related recombinant technology. He became a Primary Examiner in 2002 and a Supervisory Patent Examiner in 2005. He has supervised patent examiners in various biotechnology areas, including transgenic animals, gene therapy, nucleic acid probes and diagnostics and antibody mediated therapy and diagnostics. Ram has given presentations on Examination Practices to Patent Practitioners at USPTO TC 1600 Road Shows. He has also presented in several workshops on US Patent Examination Practice to Indian Patent Offices and Patent Practitioners in India. Ram has received Department of Commerce Bronze Medals for outstanding performance in patent examination and special projects.

Elizabeth Dougherty is an Acting Deputy Director in the Office of Patent Legal Administration at the United States Patent and Trademark Office (USPTO). In this capacity she is responsible for the oversight and direction of a team of senior legal advisors and legal staff who serve as the legal policy advisors for the U.S. Patent Corps. Ms. Dougherty and her team devise and implement training for the Patent Corps and the public, draft and disseminate legal policy memorandum and guidance documents for use by the Patent Corps and the public, and assist in the development and handling of special application issues and USPTO patent initiatives. In addition to her duties in the Office of Patent Legal Administration, Ms. Dougherty also serves, on a career detail, to the USPTO Office of Innovation Development. While on detail, she provides outreach assistance, education, and support to underrepresented innovation communities, educational institutions, and organizations.

Jeffrey Dollinger is Senior Vice President for Program Development at Invent Now. Since joining Invent Now in 1996, he has been engaged in promoting the organization’s mission of inspiring invention and creativity. In his current role, Jeffrey works to develop, manage and find resources for projects and programs that encourage and honor invention in people of all ages. These include programs like the Collegiate Inventors Competition – which provides national recognition for the inventive work of college
and university students, Camp Invention – a nationwide summer camp for elementary schoolchildren, and outreach initiatives in partnership with the USPTO. Jeffrey is a spokesperson for Invent Now on programs that relate to young and independent inventors and is a member of the organization’s Development team. Based in the Los Angeles office of Invent Now, Jeffrey is a graduate of the Ohio State University and Indiana University. Prior to Invent Now, he worked in Development at the Rock and Roll Hall of Fame and Museum.

Keynote Luncheon

**Welcome Remarks**

**President Judy Genshaft**, University of South Florida System

Dr. Judy Genshaft serves as University of South Florida System President and President of the University of South Florida, one of the nation’s largest and most comprehensive metropolitan research universities. As Chief Executive Officer of the USF System, she oversees a system serving more than 47,000 students at two institutions, including a major academic medical center, and two regional campuses. Dr. Genshaft is responsible for the management of all units of the USF System, a $1.8 billion operating budget that includes $380.4 million in sponsored research funding, and relations with the Board of Trustees, the Board of Governors, the State Board of Education, the Florida Legislature and other state agencies, as well as Congress and federal agencies.

Keynote Speaker

**Status of Invention and Innovation in the United States, Then and Now**

**Thomas J. Fogarty**, Founder, Fogarty Institute for Innovation

Dr. Thomas J. Fogarty is an internationally recognized cardiovascular surgeon, inventor, entrepreneur, and vintner. He has been involved with a wide spectrum of innovations in business and technology. Dr. Fogarty has served as founder/co-founder, and Chairman/Board Member of over 33 various business and research companies, based on medical devices designed and developed by Fogarty Engineering, Inc. During the past 40 years, he has acquired 135 surgical patents, including the “industry standard” Fogarty balloon catheter and the widely used Aneurx Stent Graft that replaces open surgery aortic aneurysm. Dr. Fogarty is the recipient of countless awards and honors; most significantly, he is the recipient of the Jacobson Innovation Award of the American College of Surgeons, the 2000 Lemelson-MIT prize for Invention and Innovation and was inducted into the National Inventors Hall of Fame and the National Academy of Engineering. Recently, Dr. Fogarty and his colleagues founded the Fogarty Institute for Innovation at El Camino Hospital. The purpose of the Institute is to create an environment where innovation in medicine is encouraged, supported, and nurtured.

Session G: Co-Chair

**Howard J. Federoff**, Georgetown University *(see page 14)*
Haskell Adler was recently a Science Advisor in the Intellectual Property Practice of the law firm Ballard Spahr. He joined the law firm after a number of years working as a Principal at Georgia Venture Partners (GVP), an early-stage biomedical Venture Capital Fund, where he was also the Interim CEO of Axona Inc., a GVP portfolio company developing drugs for chemotherapy-induced peripheral neuropathy. Prior to GVP, Haskell was an analyst at both Kilkenny Capital Management and S Squared Technology Corporation, hedge funds that specialized in biomedical securities. Earlier in his career, Haskell was a researcher at the VA Medical Center in Seattle, where he studied human leukemia genes. Haskell holds an MBA in finance from the Yale School of Management, a PhD in chemistry from the University of California at San Diego and the Salk Institute, and a BA with a double major in chemistry and physics from Cornell University.

Presentation G-1

**Strategies for Translating Basic to Clinic in Cell Therapy of Stroke at CMU Chapter**

**Shinn-Zong (John) Lin**, Superintendent, China Medical University, Beigang Hospital

Professor Shinn-Zong (John) Lin is a Professor of Neurosurgery, Superintendent of China Medical University Beigang Hospital, and Vice Superintendent of the Center for Neuropsychiatry at China Medical University Hospital in Taiwan. With an M.D. from National Defense Medical Center in Taipei, a Ph.D. in Physiology and Biophysics from the State University of New York at Stony Brook, he has served as a Professor of Neurosurgery at the National Defense Medical Center, Chairman of the Department of Neurosurgery at Tri-Service General Hospital, and Superintendent at Tzu-Chi General Hospital. He is the inventor of many patented treatment technologies for Brain Damage patients. His background also includes: Membership on the editorial boards of Cell Transplantation, Acta Neurologica Taiwanica, and Taiwan Neuroscience Alliance, Presidency of the Taiwan Neurosurgical Society, 50 research programs, 13 patents, and more than 212 publications in refereed journals. He is a highly accomplished neurosurgeon and applied neuroscientist for translational innovative therapies for stroke and neuro-degenerative diseases.

Presentation G-2

**Racing Safety Through Invention**

**Dean L. Sicking**, Midwest Roadside Safety Facility, University of Nebraska – Lincoln

Dr. Dean L. Sicking began developing roadside safety systems in 1980, shortly after obtaining a BSME degree from Texas A&M. His list of “firsts” include development of the first crash cushion with reusable energy absorbers, first energy absorbing guardrail terminal, first trailer-truck mounted attenuator, first crashworthy culvert grate system, first guardrail system compatible with light trucks and SUV’s. His roadside safety features have been installed along virtually every mile of all major rural highways in the nation and sales of his proprietary products have exceeded $1 billion. Dr. Sicking also led the development of the SAFER Barrier for use on high speed race tracks. NASCAR and IRL have not had any serious injuries or fatal crashes involving the SAFER Barrier since it was installed system-wide in 2004. In recognition of his contributions to roadside and race track safety, Dr. Sicking was awarded the 2005 National Medal of Technology by President George W. Bush.
What Might Have Happened if the America Invents Act had been a Law in 1886

Dean F. Martin, Distinguished University Professor Emeritus, Department of Chemistry, University of South Florida

Dean F. Martin, Distinguished University Professor of Chemistry Emeritus, University of South Florida received his training in chemistry at Grinnell College (B.A. with Honors, 1955), at The Pennsylvania State University (Ph.D.,1958) and at University College, London, as a National Science Foundation Post-Doctoral Fellow (1958-59). After faculty positions at the University of Illinois, Urbana-Champaign (1959-1964), he became a faculty member at USF (1964-2006; emeritus, 2006). He received (1969-1974) a Career Development Award from the Division of General Medical Sciences, NIH, to study the chemistry and chemical environment of algal toxins. In 1970-71, he was a Visiting Professor of Physiology and Pharmacology at Duke University Medical Center. His research interests have been concerned with the coordination chemistry of natural water systems, including problems of red tide and aquatic weeds. He is the author or co-author of over 300 publications, including four books and two patents.

Camalexin, the Phytoalexin from Cruciferous Plants, as a Treatment for Aggressive Prostate Cancer

Valerie Odero-Marah, Center for Cancer Research and Therapeutic Development, Clark Atlanta University

Dr. Valerie Odero-Marah is Assistant Professor in the Department of Biological Sciences at Clark Atlanta University. Her research interests focus on epithelial-mesenchymal transition (EMT), a process that occurs during normal embryonic development and epithelial tumor progression. Several factors such as Snail transcription factor, are associated with EMT, and contribute to motility, invasion, and tumor progression. Understanding the factors that contribute to EMT and prostate cancer metastasis is crucial for development of cancer therapies. Her laboratory focuses on the role of Snail transcription factor in prostate cancer progression and metastasis and antagonizing signaling with natural products.

The Importance of Professionalism in Developing a Modern Technology Transfer Office

Valerie Landrio McDevitt, Assistant Vice President, Division of Patents and Licensing, University of South Florida

Valerie Landrio McDevitt is a U.S. registered patent attorney and Assistant Vice President at the University of South Florida Division of Patents and Licensing, which acts as the main university contact for industry partners and start-up companies interested in technology transfer. In 2010, USF was ranked 20th among technology transfer offices in licensing revenue and 9th among universities for US patents issued. Prior to joining USF, Valerie served as assistant patent counsel and a research chemist for Bausch & Lomb Pharmaceuticals. She also participated in the American Association for the Advancement of Science Fellowship program and worked as a science advisor with a House subcommittee in Washington, D.C. In addition to her JD degree, Valerie holds a BS and MST in Chemistry, is a certified licensing professional through LES, a member of the Georgia and Florida bars, and admitted to practice before the Federal Patent and Trademark Office. She serves on the USPTO Patent Public Advisory Committee, a position to which she was appointed by the U.S. Secretary of Commerce.
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and the many others who have made this conference possible
Recent Patents Issued to Members of the National Academy of Inventors

8,097,008 a laparoscopic hernia mesh spreader
8,093,967 a MEMS high speed switching converter
8,089,196 a microcavity enhanced surface acoustic wave device
8,088,638 a MEMS DC to DC switching converter
8,087,559 a wheelchair vehicle ramp
8,083,967 a hydrogen storage nano-foil and method of manufacture
8,080,030 an endoscopic sheath having a biomimetic retractor
8,079,968 a computer-aided pathological diagnosis system
8,077,311 flow-through measurements of inorganic carbon, PH and CO2 fugacity
8,073,549 a method of electrogenically controlling pump molecules
8,071,031 a device for in situ calibrated potentiometric PH measurements
8,067,630 T-Butyl Cascade Polymers
8,067,430 an anti-HIV activity of the opioid antagonist naloxone
8,064,836 a cognitive radio transceiver for dispersed spectrum utilization
8,063,832 a dual-feed series microstrip patch array
8,060,943 a carbon nanotube oscillator surface profiling device and method of use
8,058,155 an integrated nanowires/microelectrode array for biosensing
8,045,954 a wireless emergency-reporting system
8,034,302 transparent conducting composites (TTCS)
8,026,223 treating malignant tumors with electroporation of plasmids encoding IL-12
8,020,490 a method of fabricating MEMS-based micro detonators
8,017,368 a molecular delivery to cells using aspirin-related compounds
8,012,760 a sensor for direct measurement of carbonate ions in seawater
8,015,199 a putamen grid
8,008,539 transgenic human soluble amyloid precursor protein alpha expressing mice
8,003,778 detection of red tide organisms by nucleic acid amplification
8,003,778 an integrated nanowires/microelectrode array for biosensing
7,999,404 phase change on demand integrated pressure pump and power plant
7,981,442 ultrasound enhancement of drug release across non-ionic surfactant membranes
7,978,085 a human and physical asset movement pattern analyzer
7,977,573 a solderless cable-in-conduit-conductor (CICC) joint
7,977,555 a method of modifying the frequency response of a wooden article
7,964,408 lyso phospholipids as biomarkers of ovarian cancer
7,963,980 a cervical plate system
7,976,607 a method of reducing soft errors in logic circuits
7,943,677 a method of producing interconnected volumetric porosity in materials
7,931,978 an electrochemical power source using halogenated organic compounds
7,927,807 an accelerated aging process for acoustic stringed instruments
7,923,072 silver crystals through Tollen’s reaction
7,920,997 an electric power distribution interruption risk assessment calculator
7,918,442 ultrasound enhancement of drug release across non-ionic surfactant membranes
7,906,182 a method of thin film electrospray deposition
7,898,097 a phase change on demand integrated pressure pump and power plant
7,896,953 a practical method of CO2 sequestration
7,892,440 a wet etching process
7,880,891 a total internal reflection holographic microscope
7,879,545 novel targets for radio sensitization using a genomic-based radiation sensitivity classifier
7,879,068 a barrier-permeable proxy reporter analysis
7,874,122 an electrochemical power source using halogenated organic compounds
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