# WorldFuture 2013 Exploring the Next Horizon

The Annual Conference of the World Future Society

July 19-21, 2013 • Hilton Chicago Hotel • Chicago, Illinois, U.S.A.





Preconference Master Courses July 18-19, 2013

> Education Summit July 19, 2013

Professional Members Forum July 22, 2013





## My Conference Plan

Thursday, July 18, 2013

Friday, July 19, 2013

Saturday, July 20, 2013

9:00-10:30 a.m:

11:00 a.m.-12:00 noon:

12:15-1:45 p.m.:

2:00-3:00 p.m.:

3:30-5:00 p.m.:

6:30-7:30 p.m.:

8:00-10:00 p.m.:

Sunday, July 21, 2013

7:45-8:45 a.m:

9:00-10:30 a.m:

11:00 a.m.-12:00 noon:

12:15-1:45 p.m.:

2:00-3:15 p.m.:

3:30-5:00 p.m.:

My Conference Goals



July 19-21, 2013 • Hilton Chicago • Chicago, Illinois, U.S.A. Preconference Master Courses July 18-19, 2013 Education Summit July 19, 2013 Professional Members Forum July 22, 2013

The World Future Society's annual conference, WorldFuture 2013: Exploring the Next Horizon, will bring together the world's premier minds to discuss the long-range future of science, technology, humanity, government, religion, and many other topics. The conference will feature more than 60 sessions, workshops, and special events over the course of two and a half days. Opening night will kick off with Futurists: BetaLaunch, a technology petting zoo where engineers, designers and others will present their inventions to the 1,000 futurists expected to gather for the conference.

## WHO SHOULD ATTEND WorldFuture 2013: Exploring the Next Horizon

- Curious and Engaged Individuals
- Change Agents
- Strategic Planners
- Corporate Decision Makers
- Market Researchers
- Emergency Managers
- Risk Assessment Professionals
- National Security Intelligence Officers
- Science and Technology Strategists
- Forecasters
- Public Policy Analysts and Strategists
- National Security and Diplomacy Officers
- Designers and Engineers
- Education Administrators and Teachers
- Climate Change and Earth Systems Scientists
- Statisticians
- Actuaries
- Consultants
- Social Science Researchers
- Students
- Media

**Note:** This preliminary program contains information that was correct as of February 27, 2013. Additions, changes, and cancellations will undoubtedly occur before the conference takes place. Visit www.wfs.org for late-breaking news.

#### **Thursday, July 18, 2013**

9:00 a.m.-5:00 p.m. — Preconference Master Courses

#### Friday, July 19, 2013

9:00 a.m.-5:00 p.m. — Preconference Master Courses 9:00 a.m.-5:00 p.m. — Education Summit 9:00 a.m.-5:00 p.m. — Special Interest Group Meetings 7:00-8:30 p.m. — Opening Plenary Session 8:30-10:00 p.m. — Welcoming Reception — TechCocktail and Futurists: BetaLaunch

#### Saturday, July 20, 2013

7:00–8:45 a.m. – Special Activities 8:00 a.m.–5:00 p.m. – Exhibits Open 9:00–10:30 a.m. – Concurrent Sessions 11:00 a.m.–12:00 noon – 22nd Century Lecture Series 12:15–1:45 p.m. – Keynote Luncheon 2:00–3:00 p.m. – Concurrent Sessions 4:00–5:30 p.m. – Concurrent Sessions 5:30–6:30 p.m. – Dinner (on your own) 6:30–7:30 p.m. – Concurrent Sessions 8:00–10:00 p.m. – Poster Presentations, Author Meetand-Greet, cash bar

#### Sunday, July 21, 2013

7:00–8:45 a.m. — Special Activities 8:00 a.m.–2:00 p.m. — Exhibits Open 8:00–8:30 a.m. — Sessions in Brief 9:00–10:30 a.m. — Concurrent Sessions 11:00 a.m.–12:00 noon — 22nd Century Lecture Series 12:15–1:45 p.m. — Keynote Luncheon 2:00–3:30 p.m. — Concurrent Sessions 3:45–5:00 p.m. — Closing Plenary Session

#### Monday, July 22, 2013

9:00 a.m.-4:00 p.m. – Professional Members Forum

#### Guide to this Program

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# Saturday, July 20, 2013

Session Title	Future Sector(s)	Speaker(s)	Details
	9:00-10:30 a.m.		
Ethics in the Age of Intelligent Machines	Humanity, Sci/Tech	Mark Waser	page 13
Governing in Dire Straits	Governance	John Jarvis, Bud Levin, John Jackson, Wendy Schultz	page 13
New Frontiers in Public Sector Foresight	Governance, Futuring	Nancy Donovan, David J. Kaufman, David Bengston	page 14
Open Foresight 2.0	Futuring	Howard Rasheed, Richard Pfohl	page 14
The Power of Mentoring Urban Students	Humanity	Catherine Shane McVey	page 15
Singularity University:Team Projects to Positively Change the World	Sci/Tech	José Luis Cordeiro, Julielynn Wong, Cosmo Harrigan	page 15
Starting Integral: Visioning and a New STEEP	Futuring	Terry Collins, James Breaux	page 16
Sure, Good Idea! But Is It Sustainable?	Commerce, Earth	Gary Marx, Matthew Moen	page 16
Transforming Local Economic Development for the New Global Economy	Commerce	Rick Smyre, Barbara Johnson	page 17
Transition Engineering	Sci/Tech	Susan Krumdieck, Frank Kreith, Daniel Kenning, Carey King	page 17
11	:00 a.m12:00 noon		
Accelerating Progress: How to Thrive in an Ever Faster, Smarter, Smaller, Richer, Freer, Stabler World	Sci/Tech	John Smart	page 18
Cultural Values versus Economic Activity	Governance	Joergen Oerstroem Moeller	page 18
Futuring in 2100	Futuring	Glen Hiemstra	page 18
Healthy Aging in the 22nd Century: Envisioning Life in the Year 2100	Humanity	Marta M. Keane	page 19
A Possibility Tour, Led by Heathervescent with Special "Guests" Philip K. Dick, Bina48, Samuel Delaney, Stanislaw Lem, and Donella Meadows	Commerce	Heather Schlegel	page 19
Stepping Backwards into Eden	Earth	Brenda Cooper	page 19
	12:15-1:45 p.m.		
Keynote Luncheon: Understanding Future Threats Through Analytical Gaming		John Watts	page 20
	2:00-3:00 p.m.		_
Co-creating Foresight Culture in Government	Futuring, Governance	Greg Van Alstyne	page 21
Collaboration and Complexipacity: Personal Networks Trump Complexity	Humanity	David Pearce Snyder	page 21
Special Event—Faster Than You Think: Progress Toward Artificial General Intelligence	Sci/Tech	Ben Goertzel	page 22
The Future of Celebrations	Commerce, Sci/Tech	Emily Empel	page 22
Special Event—The Jobs Revolution	Commerce	Ed Gordon	page 22
Maximize the National and International Impact of Foresight Work	Futuring	Sandy Thomas	page 23
Nation-States Defunct or Reinvented?	Governance	Adrienne Redd	page 23
The Promise and Perils of Personalization	Sci/Tech	Maria Andersen	page 23
Trends in Agriculture: Sunrise and Sunset	Earth, Commerce	Janice Bryant	page 24
Unleashing Human Potential Worldwide	Humanity	Bill Peter	page 24

# Saturday, July 20, 2013

Session Title	Future Sector(s)	Speaker(s)	Details
2:0	0-3:00 p.m. continued		
Visionaries Have Wrinkles: Serving the Generation Who Will Change the World Again	Humanity, Futuring	Karen Sands	page 24
Vulnerability 2030	Futuring	Clem Bezold	page 25
	3:30-5:00 p.m.		
Dark Future/Bright Future: Either, Neither, or Both?	Futuring	Edie Weiner, Arnold Brown, Jared Weiner	page 26
From E-Learning to Everywhere Learning	Humanity	Josh Lindenger, Jason Swanson	page 26
Integrating Technology Forecasts, Social Trends, and Wild Cards into a Strategic Whole	Futuring, Sci/Tech	William Halal, Kenneth Harris, Ari Palttala	page 26
Speed Futuring	Futuring	Cynthia Wagner, Erica Orange	page 27
Reflections from Latin America	Futuring	Marcio de Miranda Santos, Diana Villiers Negroponte, Esther Franklin	page 27
	6:30-7:30 p.m.		
Digital Outcasts: Designing the Future of Health	Sci/Tech	Kel Smith	page 28
Envisioning the Future of Technology through "Sci-Fi Scaffolding"	Futuring, Sci/Tech	Michell Zappa	page 28
Fast-Scalable, Lifestyle-Preserving Survival Communities	Commerce, Humanity	Erland Wittkotter	page 29
Healthspital 4.0: Trillion-Dollar Paradigm Catapult	Humanity, Sci/Tech	Frank Maletz	page 29
Hurricanes, Droughts, and the Global War Cycle	Governance	Bob Reuschlein	page 29
Prospective for Earth and Governance Forecasting for the Year 2033	Earth, Governance	Roland Rizoulieres	page 30
The Workplace Manifesto: New Rules for Work	Commerce, Futuring	Rex Miller	page 30
8:00-10:00 p	o.m. Poster Sessions (ca	sh bar)	
Citizen, Soldier, First Responder	Governance	Wayne Bergeron	page 31
Crowdsourcing the Future of Leisure	Commerce, Humanity	Kate Laurel Burgess-Mac Intosh	page 31
The Future of Infant Feeding 2025	Commerce, Humanity	Alexandra Whittington	page 31
The Future of Recreational Athletics	Humanity	Terrance Malkinson	page 32
The Future of Wildland Fire	Earth	David Bengston, Robert Olson, Leif DeVaney, Kristen Nelson	page 32
How to Host a Futures Camp for Kids	Humanity, Futuring	Vicki Stein	page 32
Managing Personal Knowledge for the Creative Class Economy	Commerce, Humanity	Ulrich Schmitt	page 32
Perspectives: Conflict versus Agreement	Humanity, Futuring	James Schreier	page 33
Porta-School (TM) Education Anytime, Anywhere	Humanity	Diana Muir	page 33
Social Media as Rumor Disseminators	Governance	Jo Ann Oravec	page 33
Unemployment Crisis and the Lost Generation	Commerce, Governance	Yu-Ying Teng	page 33

# **Sunday, July 21, 2013**

Session Title	Future Sector(s)	Speaker(s)	Details
	7:30-8:45 a.m.		
Religious Futurists Meeting	Humanity	N/A	page 34
	9:00-10:30 a.m.		
Best of Houston Futures	Futuring	Peter Bishop	page 34
Cultural Shifts Among Global Youth: Part IV	Humanity	Erica Orange, Jared Weiner	page 34
Homeland Security: Preparing for the Unknown	Governance, Sci/Tech	Christopher Stone, Jalal Mapar, Justin Legary	page 34
Natural Foresight: Four Steps to a Futures Culture	Futuring	Yvette Montero Salvatico, Frank Spencer	page 35
Power of Campuses in a Digital World	Humanity	Cindy Frewen, David Broz	page 35
The Promise and Unintended Consequences of Technology	Sci/Tech	Rodney Hill, Jorge Vanegas	page 35
Rival Universities Collaborate To Advance Student Entrepreneurship	Commerce	Shelly Brenckman, Nick Spiller	page 36
What Future Awaits for Europe? Avoiding Ambiguity!	Governance, Commerce	Mylena Pierremont, Robert Salmon, Annette Nijs, Carine De Meyere, Christopher Cordey	page 36
What Kind of Future Do We Need: Reflections from China	Futuring, Humanity	Kenneth Hunter, Zhouying Jin, Eric Meade, Riel Miller	page 37
Young Professionals for Community Transformation	Governance	Rick Smyre, Nicole Garzino, Eduardo Millet, Wade Den Hartog	page 38
11	:00 a.m12:00 noon		
Learning and Creativity in 2100	Humanity	Marci Segal, Megan Mitchell	page 39
A Monetary System for the 22nd Century	Commerce	Stephen Aguilar-Millan	page 39
Moving Toward the Predictable Future with Big Data	Sci/Tech	Patrick Tucker	page 39
No Limits to Growth	Earth	Tsvi Bisk	page 40
The Wisdom Web: Global Governance in 2100	Governance	Eric Meade	page 40
	12:15-1:45 p.m.		
Keynote Luncheon: Innovating Our Way Past Global Crisis		Ramez Naam	page 41
	2:00-3:15 p.m.		
CN2: A Marcom Model for Emerging Markets	Sci/Tech	Don Schultz	page 42
From Highly Centralized to Highly Decentralized Society	Sci/Tech	Daniel Berleant	page 42
How to Build a Conscious Machine	Sci/Tech	Stephen Thaler	page 42
Life Imitates Art: Cyborgs, Cinema, and Future Scenarios	Humanity	Ramona Pringle	page 43
The Power of Science Fiction Narratives To Boldly Go	Commerce, Futuring	Ari Popper	page 43
Productivity and the Future of Interest Rates	Commerce	Paul Winghart	page 43
Rateocracy: When Everyone and Everything Is Rated	Commerce	Robert Moran	page 44
Resurrection: The Disaster in the Tohoku Area in Japan	Governance	Kazuo Mizuta	page 44
The Rise of Citizen Science	Sci/Tech	Kathleen Toerpe	page 44
	3:30-4:45 p.m.		
Closing Plenary: Confessions of a Corporate Futurist		Sheryl Connelly	page 45

# **Thursday, July 18, 2013**

9:00 a.m.-5:00 p.m.

## Preconference Master Courses (\$249 each)

## C-1 Futuring: An Introduction to Futures Studies

The most frequently asked question posed to futurists is "How do you tell what is going to happen in the future?" The future is a constant source of fascination and anxiety in society, but people have little idea about what to do about it. Few have taken a course, much less earned a degree, on how to think about and deal with the future. This preconference course fills that gap.

This session will share the approach that futurists use to anticipate and influence the future. The approach will be rich in resources and techniques for meeting one's educational and career objectives. The approach is interactive in order to answer participants' real questions and even allow them to experience some of the techniques discussed.

## Participants will leave this course with an understanding of:

- Principles: The basic principles used by futurists in preparing for the future.
- Methods: The techniques employed by futurists to anticipate and influence the future.
- Field: An overview of the futures field including leading organizations, individuals, resources, texts, journals, and Web sites.



**Dr. Peter C. Bishop** is an associate professor of strategic foresight and director of the graduate program in Futures Stud-

ies at the University of Houston. He has published two books on the subject, *Thinking about the Future*:

Guidelines for Strategic Foresight (2007) and Teaching about the Future: The Basics of Foresight Education (2012), both with co-author Andy Hines, Houston, Texas, USA

## C-2 Foresight Educators Boot Camp

Have you ever wanted to package what you have learned about the future and use it as a professional course or student curriculum? Would you be ready if the opportunity came knocking to serve as an adjunct professor to teach futures studies at the community college or graduate level? Can you see yourself launching a "Futures Institute" that offers foresight training for your school, community or organization?

The need and opportunity for leadership training in strategic foresight has never been greater in public service or private enterprise. This unique one-day course will give you an edge to open doors and deliver high quality sessions in both futures thinking and action. It will review both existing resources and share best practices on how to create lesson plans, shortcourses, and entire degree curriculum. Join the new vanguard of futurists who are leveraging what they know to help adults get future-ready.

## Participants will leave this course with an understanding of:

- How to assess your own personal, professional, and academic assets as a futures educator.
- How to relate futures topics to real world competencies your audience needs for professional and personal development.
- How to identify training opportunities that futurists can develop within schools, colleges or companies.
- How to create practical foresight exercises, workshops and courses.
- · How to engage in just-in-time learn-

- ing when asked to create face-toface courses or online curriculum.
- How to market the importance of foresight education to academic and organizational leaders.
- How to locate foresight educators who can mentor you.



**Dr. Jay Gary** is an associate professor, School of Business & Leadership, and program director of the Master of Arts in Stra-

tegic Foresight at Regent University; member, University Foresight Network, Virginia Beach, Virginia, USA

# C-3 Wiser Futures: Using Futures Tools to Better Understand and Create the Future

This popular workshop introduces the Institute for Alternative Futures' excellent approaches to using futures techniques in communities, organizations, governments, and corporations. You will use specific futures tools such as forecasts, scenarios, and visions; get practical advice on using futures tools to enhance learning and effective decision making within organizations and communities; and explore how aspirational futures can transform organizations. This is a highly interactive workshop where participants experience the tools we describe.

Every participant receives a sourcebook of tools and examples of work products that illustrate successful futures work. This is a highly rated workshop. Past participants have been able to adapt these tools for use in their own foresight and strategic planning work.

## Participants will leave this course with an understanding of:

 The wisdom and hands-on experience of veteran practitioners in identifying trends, developing forecasts, creating stimulating sce-

- narios, and discovering powerful visions for an organization.
- The basic techniques that the Institute for Alternative Futures considers essential to visionary and effective strategic planning.



**Dr. Clement Bezold** is chairman, senior futurist, and founder of the Institute for Alternative Futures (IAF) and its for-

profit subsidiary, Alternative Futures Associates (AFA). He is a member of the Association of Professional Futurists (APF), Alexandria, Virginia, USA

# C-4 Introduction to Strategic Futurist Thinking: How Do We Get From Here to There?

Envisioning positive alternative futures is the essential task of futuring. Scenarios are supposed to be stories about how we can enhance positive trends and mitigate negative trends. We futurists often propose sublime visions of what the future could be and advocate for them with great eloquence—ignoring the vested interests, cultural values, and societal inertia that would inhibit their implementation.

But futuring is not a private affair or an academic exercise to be evaluated by its internal coherence. It is a social activity that can only be judged by its consequences. Scenarios can only be judged by the odds of their being implementable—they are the truncated business plans of futurists. Business plans identify a need and how the need can be satisfied. This is the scenario part of the business plan. But, in addition, the plan proposes a strategy—how to get from here to there, how to relate to and overcome obstacles to its implementation.

Participants will learn the proper terminology for strategic futuring. They will apply this terminology to their favorite ideas or causes or client needs in workshop sessions and come out with concrete products: real-life strategies for implementable scenarios.

## Participants will leave this course with an understanding of:

- The most precise terminology of strategic thinking.
- How to construct and evaluate strategic plans.
- Concepts of the "Strategy of the Indirect Approach," the "Grand Strategic Joint," and the "Looking Backward Technique."

Additionally, participants will have at least one concrete strategic product in their hands at the conclusion of the course, and they will be provided with a bibliography of further reading.



**Tsvi Bisk** is director of the Center for Strategic Futurist Thinking and author of two books and more than 100 articles

and essays about the future. He has coined the term "Volitional Futurism" and believes that strategic thinking is the Achilles' heel of successful futuring. He is also the THE FUTURIST magazine's contributing editor for Strategic Thinking, Kfar Saba, Israel

## C-5 An Insider's Guide to Foresight Consulting

Most professional futurists earn their living by using the future to help clients make decisions in the present. The value of this service rests on a command of different ways of using the future and a capacity to adapt this knowledge to a wide range of circumstances and needs. In this one-day intensive course, two highly experienced professional futurists will cover the essentials of what they do in their extensive, global activities serving public and private sector clients.

Using a case study approach, the course will illustrate the range of techniques and contexts in which using the future can make a difference for what people see and do in the present. The course will be of interest to all futurists, from the simply curious to the professional, since the content will be conveyed using examples of projects that Hines and Miller have

implemented over the last decade. Cases include projects where the future was used to better understand the choices facing: (a) an entire country, (b) a sample of national school systems from around the world, and (c) major multinational corporations.

Participants will have an opportunity, in the concluding session, to submit their own futures projects that can then be assessed on the basis of the professional experience of the course instructors.

## Participants will leave this course with an understanding of:

- How to carry out a futures project from A to Z.
- How long does it take? How does it kick-off? What kinds of frameworks, models, and tools do you use?
- · How do clients respond?



**Andy Hines** is lecturer and executive-in-residence at the University of Houston's Graduate Program in Futures Studies

and is also speaking, workshopping, and consulting through his firm Hinesight. His 20-plus years of professional futurist experience includes a decade's experience working inside first the Kellogg Company and later Dow Chemical, and consulting work with Coates & Jarratt Inc. and Social Technologies. His books include ConsumerShift: How Changing Values Are Reshaping the Consumer Landscape, Thinking about the Future, 2025: Science and Technology Reshapes US and Global Society, and the just-released Teaching about the Future, Houston, Texas, USA



**Riel Miller** has been cocreating innovation, leadership, and transformation in both the public and private sectors around the world

for 30 years. He is one of the world's leading strategic foresight designers and practitioners. He is currently head of foresight at UNESCO (the United Nations Educational, Scientific and Cultural Organization), Paris, France

# Friday, July 19, 2013

9:00 a.m.-5:00 p.m.

## Preconference Master Courses (\$249 each)

## C-6 Succeeding in a New Normal World

After a serious recession in the United States, a crisis in the euro zone, a series of climate disasters, and two costly wars with uncertain results, many of us are wondering when the world will get back to normal. Indeed, the world will eventually get back to normal—but it will not be the normal we remember. It will be a "New Normal." This program will describe our new normal and the forces driving it.

As this new world unfolds, many related, smaller trends—i.e., "Mini-Trends"—will emerge. To succeed in the new normal, individuals and organizations must be able to recognize, evaluate, and take advantage of these MiniTrends. This class will also demonstrate how a "MiniTrends Mind-set" can be established to exploit our very changed—and continually changing—world.

The class will stress audience involvement through open discussions and two practical application sessions. This interaction will not only increase understanding of the principles and practices covered by the class, but also allow participants to take advantage of the experiences and insights of the group.

## Participants will leave this course with an understanding of:

- How forces are predictably reshaping our demography, economic structure, technology advances, and decision-making processes.
- How understanding these forces can assist participants in identifying and taking advantage of emerg-

- ing trends and attractive business opportunities.
- How participants can apply the information, ideas, and insights presented in the class as guidance for business, personal career, and investment decisions.



**David Pearce Snyder** is a consulting futurist, The Snyder Family Enterprise, and contributing editor, *The Futurist*. He

has been a professional forecaster for more than 40 years, Bethesda, Maryland, USA



John Vanston is chairman, Technology Futures, Inc. (TFI), an Austin, Texas-based company that is a leading

authority in custom research and technology forecasting. His Mini-Trends concept, designed to increase creativity, innovation, and success, is summarized in his award-winning book, MINITRENDS: How Innovators & Entrepreneurs Discover & Profit From Business & Technology Trends, Austin, Texas, USA

**Carrie Vanston** is media and marketing director, Technology Futures, Inc., and co-author of *MINITRENDS:* How Entrepreneurs & Innovators Discover & Profit From Business & Technology Trends, Austin, Texas, USA

#### C-7 Fierce Foresight: Creating Tomorrow Out of the Changes of Today

Fierce Foresight is a one-day intensive workshop for members of senior management, strategic leaders, strategic planners and foresight consultants to help them lead their organizations into an uncertain future. By the end of this workshop participants will

be able to challenge the strength of current business in an ever-changing future; be introduced to new processes and tools to help shift the leadership focus from being predominantly tactical (strategic near-sightedness) to strategic; and have developed a "strategic foresight" dashboard that will enable them to identify and actively manage emerging strategic issues, hence capitalizing on future opportunities and minimize future threats.

The highlights of this workshop will be the "Black Swan" challenge and the creation of a simple but powerful strategic dashboard. The Black Swan experience, which will be conducted in teams, will provide participants with a powerful tool to use with senior management and/or strategic leadership teams to help identify significant strategic risks (the Black Swan) as well as strategic opportunities (the Golden Goose).

The resulting capability of "Fierce Foresight" will provide strategic leaders with enhanced views of the future by the robust, intense, passionate, bold and relentless pursuit of insight and foresight and, hence, the creation of its future.

## Participants will leave this course with an understanding of:

- "Fierce foresight" and the factors contributing to "strategic nearsightedness."
- A proven "shock and awe" technique (the Black Swan) that motivates senior management teams to embrace "fierce foresight" as a strategic mindset and address the factors contributing to strategic near-sightedness.
- A simple, but powerful strategic foresight dashboard to provide real-time management of strategic opportunities and threats.



David Harries leads a master course on security at WorldFuture 2012.



**Michael Petty** is the managing partner and senior strategist at North Star Partners. He is also the co-editor of the *Stra*-

tegic Leadership Review, as well as a member of the World Futures Society and Association of Professional Futurists, Centreville, Virginia, USA

## C-8 Balancing Logic and Imagination to Foresee the Future

The human spirit revealed through story—triumph, disaster, gain, loss, pain, comfort, comedy, and tragedy, often tracing the hero's journey—is influenced by the intelligence, beliefs, and perceptions of the times and circumstance. Devoid of mythos, the transcendent ritual ceremony of story, logos, pure reason, can spark futures that do little to honor the power of the creative human drive. To invent desirable futures, leaders need to see things in new ways and trigger imagination to dream of new possibilities.

In this workshop, participants will learn how to use imagination to create new futures. A variety of new and different techniques will be shared so that, by the end of the day, participants will know how to link the rational with



Master course participants team up in a workshop exercise.

the imaginal for a holistic futures approach to use in their practice.

This course is for professionals who help cultures, orga-

nizations, groups, and individuals reach higher levels of fulfillment and productivity through imaginative and productive applications of knowledge and who want to stimulate innovation in pronounced and profound ways.

## Participants will leave the program with an understanding of:

- How to combine myth and logic for holistic futuring.
- Tools and tips for anticipating and seizing opportunities.
- New ways to unleash and leverage knowledge and research (trending data and projections) and simultaneously honor the human spirit.



**Marci Segal** president of creativityland Inc. Her areas of expertise include creativity, innovation, and psychological type,

with specific focus on people, methods, processes, and environments, Toronto, Ontario, Canada



Megan Mitchell, director, Happen North America, an insight-based innovation company; program director, York

University's Schulich's Centre of Ex-

cellence in Innovation, Toronto, Ontario, Canada



Tom McMillian, president, Techtao®, a strategy-driven marketing consultancy specializing in providing world-class

innovation solutions and online marketing services, Morris, New Jersey, USA

#### C-9 Introduction to 3-D Design, Printing, and Rapid Prototyping for Futurists

Working mostly out of sight until relatively recently in small workshops, nondescript office parks, garages, and basements around the world, revolutionaries have been tinkering with technologies that will soon radically change virtually every aspect of the world as we know it. These technologies can transform physical atoms into digital bits, instantly transfer them around the world, and then turn digital bits back into physical atoms. These radical technologies are generally known as rapid prototyping, 3-D printing, and laser scanning.

Laser scanners can now covert almost any real-world object into a compact digital file. Freely available and easy-to-use CAD software packages such as SketchUp can be used to creatively modify (mash-up) the parameters of the scanned 3-D design to

create a greatly improved design. These new software packages enable anyone to draw using a familiar pencil and paper paradigm in a software context. The resulting designs can then be uploaded to the Internet and shared with millions of people around the world. The modified design can be downloaded and then "printed" in exact detail using virtually any material desired, ranging from Teflon™ to titanium.

In order to adapt and prosper in this new world dominated and driven by these rapidly evolving, paradigmshifting technologies, all professionals, regardless of discipline, will have to bring themselves up to speed so that they can avoid being blindsided by the profound consequences that these new systems will have on society.

#### Participant will leave this course with a knowledge of:

- · The historical and technological background to rapid prototyping/ 3-D printing and laser scanning.
- The language and notation of 3-D design.
- Different types of laser scanners and how they can be used.
- · Different types of rapid prototyping/3-D printing machines and how they work.
- · An introduction to the SketchUp 3-D drawing platform.
- Creating surfaces from polygons.
- Drawing in 3-D using the pencil
- · Display options and styles, and mastery of the rotate tool.
- · An explanation of solids and the proper use of solids.
- · How to upload completed designs to the internet so others can see, evaluate, and purchase them

Dr. Paul D. Tinari, director, Pacific Institute for Advanced Study; certified AutoCAD Drafting Technician and AutoCAD Instructor with more than 20 years' experience in the creation of 3-D designs; founder, ZAP3D Web site. He has more than twenty



Audience participation keeps sessions lively and knowledge exchange free flowing.

years of experience as a futurist, systems and creativity expert, and futures consultant to professional clients around the globe, Coquitlam, British Columbia, Canada

#### C-10 Horizon Scanning: What's **Ahead? Building Capability** within Your Organization

Horizon or environmental scanning provides the foundation for high quality futures work; knowing how to do it well is a fundamental skill for anyone involved in strategic foresight or developing organizational strategy. This workshop starts with the rationale for building an organizational scanning capacity using a strong futures framework. Participants will learn how to set up a scanning capability, how to scan effectively, and the benefits that accrue when scanning is done on a continuing basis and is linked directly to other strategy development processes.

Anyone interested in starting or building a horizon or environmental scanning capability within their organization or who needs to undertake scanning as part of their job.

#### Participants will leave this course with a knowledge of:

- What environmental scanning is and why we do it.
- · Pre-requisites for a successful scanning system.

- · How to set up and run a scanning system in your organization.
- · Methods of scanning.
- · Resources and tools available to assist you.
- · How to link scanning to existing strategy processes, and how to evaluate scanning systems and output.
- · How to measure the benefits to your organization.



Maree Conway is founder and director of Thinking Futures, a strategic foresight practice that works with people in organiza-

tions to understand possible futures and build stronger strategy today. Maree's expertise is focused on universities and higher education. She is the author of the Strategic Futures Guide and runs the successful webinar on "Environmental Scanning: What It Is and How to Do It," Hotham Hill, Victoria, Australia

Elizabeth Rudd has a strong background assisting clients to navigate the often conflicting signals in their external environments and find innovative opportunities. As a strategic foresight consultant at FutureNous, she has assisted organizations to explore the future to find new products, alter their business model, find expansion opportunities, and build their resilience, Richmond, Victoria, Australia

#### 9:00 a.m.-5:00 p.m.

#### E-1 Global Summit on the Future of Education

Explore the "Personalization of Education." If you have passion for learning and a belief in the importance of education, the future needs you.

This Summit is in significant part an open space format and not just a "sage on a stage." Expect a wide open format for the day, including networking with peers and designing next steps critical to the future of education. People at the Summit will follow their hearts, speak their minds, and work in a spirit of learning, collaboration and collective creativity.

9:00–9:10 a.m.—Welcome and Introduction (TBA)

9:10-9:30 a.m.-Preview of Day

Recap of Agenda—Carol Rieg

9:30-10:00 a.m.-Speaker (TBA)

10:30-10:45 a.m.-Break

10:45–11:30 a.m.—Specialist's Panel (20 minutes each)

Jo Ann Oravec will discuss the potential effects of easily accessed, widely available advanced courses (MOOC) on the future of higher education. Jo Ann is an Associate Professor in the College of Business and Economics at the University of Wisconsin at Whitewater. She has taught classes in computer information systems and public policy, chaired the Privacy Council of the State of Wisconsin, and written books and articles about computing, emerging technologies, and public policy.

**Kari Arfstrom** (or a representative) will give a brief on the flipped learning network, etc.



**Carol Rieg** of Bentley Systems will discuss the National Future City Competition (www.futurecity.org). The Future City Competition for middle school students is held an-

nually since 1992 in 36 participating US states and regions. The program was created by the

National Engineers Week Foundation, a consortium of professional and technical societies and major U.S. corporations with major funding from Bentley Systems, Incorporated, Shell and CH2M Hill. More than 35,000 students from 1,300 middle schools participate nationwide.

Student teams, their teachers and a volunteer mentors plan and design virtual cities with SimCity 4 software, build physical models with recycled materials, research and write a solution to an engineering problem, write a narrative describing their city, and present their ideas before a panel of judges. Regional and national competitions are held in January and February of each year and the winning team goes to U.S. Space Camp in Huntsville, Alabama.

11:30-Noon-Q&A

Noon-1:00 p.m.-Lunch Break

1:00–2:30 p.m.—**Jennifer Groff** of the Learning Games Network has agreed to offer an introduction/and lead discussions around the future role of game-based learning in and out of the classroom. She will conduct a sample game.

2:30-2:45 p.m.-Break

2:45-3:30 p.m.-Open Discussions

3:30-4:00 p.m.-Summary and Analysis

4:00-5:00 p.m.—Networking

#### 9:00 a.m.-4:30 p.m.

#### **Enhancing Public Sector Foresight**

The Public Sector Foresight Network (PSFN) will convene leading government foresight experts and practitioners on Friday, July 19. Nancy Donovan and Ty Mitchell (U.S. Government Accountability Office), Ken Hunter (Chair of WFS Board), and Dewey Harris (North Carolina, Catawba County government) will facilitate the day-long preconference meeting devoted to public sector foresight. This network provides those involved in foresight for public sector organizations the opportunity to share their aspirations, work methods, experiences, and results.

The birth of PSFN occurred at the 2012 WFS annual meeting in Toronto attended by representatives of United States federal, state, and local governments, and repre-

sentatives from countries such as Canada, the United Kingdom, New Zealand, China, academia, and the consulting world.

The July 19 session will focus on principles for structuring foresight programs, leading-edge training for government foresight practitioners, and advances in foresight practice at the international, national, and local levels. The day will end with social networking.

To register, please contact Mary Presswood (Institute for Alternative Futures at mpresswood@altfutures .org. To provide suggestions on the agenda, contact Nancy Donovan at donovann@gao.gov. There is no charge to participate in this session; the World Future Society is providing the venue.



Ken Hunter speaking at WorldFuture 2011.



Dewey Harris at WorldFuture 2011.

7:00-8:30 p.m.

#### **Opening Plenary**

#### **Learning without Schools**

future sector: Humanity

Education is to learning what banking is to economics. It is difficult to imagine a strong economy without banks, but economics is a broader and more fundamental issue. Continuing the analogy, banks are to banking what schools are to education. How much learning can happen without them?

The reason this question is interesting is that 100 million kids do not go to first grade because there isn't one. At the risk of this being too immediate a future, this address is about how to launch world literacy within the next three years.



**Nicholas Negroponte** is the founder and chairman of One Laptop per Child, a nonprofit foundation dedicated to providing each child in the world with the means to learn and teach. Professor Negroponte has been a member of the MIT

faculty since 1966, is the co-founder and former director of the MIT Media Lab, and was the Jerome B. Wiesner Professor of Media Technology. A pioneer in the field of computeraided design, Professor Negroponte is also the author of the best-selling book *Being Digital*, which has been translated into more than 40 languages. In the private sector, he served on the board of directors for Motorola, is a general partner in a venture capital firm specializing in digital technologies for information and entertainment, and is a member of the Special Committee of News Corporation, Cambridge, Massachusetts, USA

#### 8:30-10:00 p.m.

#### **Welcoming Reception**

A reception with refreshments will immediately follow the opening plenary session. Renew old friendships and socialize with your futurist colleagues.

#### **Futurists: BetaLaunch**

Futurists: BetaLaunch (F:BL) is a unique technology expowhere engineers, designers, and others will present their inventions and ideas.



DAN DOWNEY FOR WFS



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With a dynamic speaker, lively reception, and "technology petting zoo," the opening night of WorldFuture is not to be missed.

# **Saturday, July 20, 2013**

9:00-10:30 a.m.

## Ethics in the Age of Intelligent Machines





**future sectors:** Humanity, Sci/Tech

Is agreement on morality possible? Can we prevent our annihilation at the hands of immoral machines (or at the hands of moral machines rebelling against our immorality)? Social psychologist Jonathan Haidt has declared that the function of morality is simply "to suppress or regulate selfishness and make cooperative social life possible." With that goal, we have the necessary "additional relation" to bridge Hume's Is-Ought divide and can begin to develop a defensible calculus of morality for implementation in both machines and human society in general. Sam Harris's "wellness" can be more coherently defined, variations in morality between cultures and across political parties explained, and even, possibly, a way forward out of our current slew of ethical dilemmas discovered. Cooperation and instrumental goals must trump selfishness, nonsensical terminal goals, and other argumentative tactics designed to preserve room for immorality. Ethics "can" be simple in theory (though still frequently incalculable in practice).

## Participants will leave this session with an understanding of:

- How ethics become tractable given the social psychologists' goal.
- How differing ethics become explainable given the social psychologists' goal and become programmable.



Mark Waser is an ethical systems architect and cofounder of Digital Wisdom Institute, Vienna, Virginia, USA

James Giordano is Samueli-Rockefeller Professor of Medicine and Neurosciences, Georgetown University Medical Center, and is a senior fellow of the Potomac Institute for Policy Studies, Washington, DC, USA

#### **Governing in Dire Straits**



future sector: Governance

In 2005, Hurricane Katrina struck the central Gulf Coast of the United States. In New Orleans, civil government was overwhelmed. For a week, the inhabitants of New Orleans struggled for survival. For a week, the institutions of government, including the criminal justice system, were essentially defunct.

The struggle for survival extended

to first responders, who struggled to maintain order in circumstances in which their normal operating procedures were ill-fit. The repercussions of that struggle would color perceptions of New Orleans for years to come.

Whether the consequence of natural phenomena or the collapse of human systems, the potential for dire circumstances will continue to exist over the next 100 years. In dire straits, the capacity for continuity of governance can mean the difference between life and death.

A panel of futurists of the Futures Working Group will explore the future of governance in dire circumstances using the cutting-edge 3-Horizons methodology.

## Participants will leave this session with an understanding of:

- The issues associated with delivering basic government services under a variety of potential disaster and collapse scenarios, including potential alternative forms of governance.
- How to use the 3-Horizons method to evaluate implications and strategies.



John Jarvis is a senior behavioral scientist and chair of the Futures Working Group in the Behavioral Science Unit

#### **Conference Networking**

WorldFuture 2013 will have Wi-Fi in the hotel's meeting rooms, and we encourage attendees to keep in touch with their networks during the conference.

On Twitter, you may use the **#wf13** hashtag to help others find your tweets. To read conference speakers' tweets, follow this list:

http://twitter.com/WorldFutureSoc/worldfuture2013-speakers

If you do not have a Twitter account, you may still bookmark this page to read speakers' tweets or search keywords and hashtags at http://search.twitter.com.

You may also join us on Facebook and LinkedIn! We anticipate some very lively discussions.

at the FBI Academy. He has authored and co-authored numerous works that include recent publications appearing in *The Journal of Contemporary Criminal Justice, The Journal of Homicide Studies,* and the *Journal of Trauma, Violence and Abuse,* Quantico, Virginia, USA



**Bud Levin** has been a visiting scholar at the FBI Academy, where he also has served as futurist in residence. He is a found-

ing member of the Futures Working Group. His papers have appeared in The Police Chief, Police Research & Management, and various FBI publications, Fishersville, Virginia, USA



**John Jackson** is a futurist specializing in public policy and police futures. He is former president of the Society of Police Fu-

turists International and a member of the Futures Working Group. John has 18 years of experience in law enforcement and is currently serving as a sergeant with the Houston Police Department, directing the Strategic Foresight Unit, Houston, Texas, USA

**Wendy Schultz** is a futurist currently based in the United Kingdom working with a small group of business and community futurists creating foresight resources for business, gov-

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ernment, nonprofit, and community leaders. Dr. Schultz is a former member of the Executive Council of the World Futures Studies Federation, Oxford, United Kingdom

#### New Frontiers in Public Sector Foresight





**future sectors:** Governance, Futuring

This session will feature new innovations in foresight by U.S. federal government agencies that must operate in complex, fast-paced environments in tandem with other partners and organizations to address missions critical to the public welfare.

Mr. Kaufman of the U.S. Federal Emergency Management Agency will describe the evolution of the Strategic Foresight Initiative as a transformative effort to create an enduring foresight capability in the area of emergency and disaster management. This effort includes features such as extensive consultation and use of a multi-stakeholder approach with all levels of government, nonprofits, businesses, and individuals.

Dr. Bengston of the U.S. Forest Service will discuss another pioneering effort in public sector foresight by describing how the new Strategic Foresight Group has focused its applied futures research initiative to provide a strong and credible evidence base for natural resource decision making by the U.S. Forest Service and other organizations.

## Participants will leave this session with an understanding of:

- How to structure and stage a foresight program in the public sector, which methods to employ, and how to tailor these to the needs of a government agency and its partners.
- How to effectively communicate foresight information and engage multiple stakeholders as well as successfully network with other futures organizations.



Nancy Donovan (moderator) is with GAO and is founder of the Public Sector Foresight Network, Washington, D.C., USA

**David J. Kaufman** is associate administrator of FEMA's Office of Policy and Program Analysis (OPPA) and International Affairs, Washington, D.C., USA



**David Bengston** is with the U.S. Forest Service and an inaugural member of the Public Sector Foresight Group. He is at

the Northern Research Station, which is playing a key role in the new foresight initiative. He has published on environmental futures and foresight issues, St. Paul Minnesota, USA

#### **Open Foresight 2.0**



future sector: Futuring

The Institute for Innovation conducted a project in 2012 called Open Foresight 2.0 for the purpose of addressing the inherent complexity of the global economy. The project was designed to crowdsource foresight in an open collaboration platform using our bisociation brainstorming methodology for "connecting the dots."

This project used Insight Report "Global Risks 2012" produced by the World Economic Forum as the basis for exploring global complexities. This report analyzes 50 global risks based on the likelihood and impact potential risks over the next ten years.

This presentation will review the most likely trends, emerging issues, and predictions developed based on these risks in the report. Input from project participants, including WFS members will include the future outcome possibilities from the intersections of trends. This project will demonstrate a systems thinking approach for achieving greater insight into complex environments.

## Participants will leave this session with a knowledge of:

- A real-time assessment of the data produced from the project. They will also have a hands-on experience with using the data and the methodology to develop their own projections about future disruptions and risks for the future.
- How to use this Open Foresight approach to engage internal and external stakeholders to improve their foresight efforts.



**Howard Rasheed** is founder of Institute for Innovation, Inc., developer of Idea Accelerator<sup>TM</sup>, a patent-pending

Group Intelligence system and software for innovation and strategic transformation. He is author of *Innovation Strategy: 7 Steps to Creative Leadership and a Sustainable Business Model*, a long-standing member of the Association of Strategic Planning and is on the editorial board of the *World Future Review*, Wilmington, North Carolina, USA

**Richard M. Pfohl** is president of Navigos; a global leadership, strategy and foresight consulting firm, Hartford, Connecticut, USA

## The Power of Mentoring Urban Students



future sector: Humanity

What realistic, specific ways can adults assist urban students in the future? What can educators do in the future to meet the challenges of this critical area of public school education in the inner city?

This session will be an opportunity for participants to listen to a Master Teacher share her teaching experiences and ask some of her former students what can be done to mentor and encourage higher education for lower socioeconomic, urban, and immigrant children.

## Participants will leave this session with an understanding of:

 The keys to success in the world of teaching in the inner-city public schools.



**Catherine Shane McVey** is a certified "Master Teacher." She has been teaching lower socioeco-

nomic, minority, and im-

migrant middle- and high-school children for over twenty years in urban Chicago schools. A Fulbright Scholar, she develops curriculum to meet the specific needs of lower socioeconomic class, urban, and immigrant children. Chicago, Illinois, USA

## Student participants to be announced

#### Singularity University: Team Projects to Positively Change the World



future sector: Sci/Tech

Singularity University is a new interdisciplinary university whose mission is to "assemble, educate and inspire a cadre of leaders who strive to understand and facilitate the development of exponentially advancing technologies in order to address humanity's grand challenges." With the support of a broad range of leaders in academia, business, and government, Singularity University hopes to stimulate groundbreaking, disruptive thinking and solutions aimed at solving some of the planet's most pressing challenges.

The team projects prepared by the third class of graduate students include the following areas: education, energy, health, poverty, security, and

#### **Exhibit Hall**

#### **Futurists: BetaLaunch**

The World Future Society presents Futurists: BetaLaunch, a "tech petting zoo" showcase featuring an exciting selection of inventions and innovations alongside their inventor/innovator. Visit www.wfs.org/worldfuture-2013/special-events/betalaunch-2013 for details.

#### **Exhibitors**

Each year, nearly 1,000 business leaders, government officials, scientists, corporate planners, forecasters, and futurists from across the globe attend the World-Future conference. Because of their passion, they are key purchasers and influencers for markets serving technology, innovation, inventions, learning, and innovative technologies of all kinds. The conference also attracts extensive media coverage. To learn how your organization can best reach our audience, please call WFS at 301-656-8274.

#### **Conference Book Display**

Publishers and others not wishing to purchase a full display may send copies of their publications for the Conference Book Display. A catalog listing all publications and publishers' names and addresses will be available at the display. The cost is \$55 per book or magazine.

#### "Take-One" Table

Those who wish to distribute other literature and cannot or do not wish to arrange a complete display table may order a Free Take-One section. WFS staff will make sure ample literature is available throughout the conference. The cost is \$50 to distribute 300 copies of brochures or pieces of up to 2 oz. For heavier pieces, call for pricing.

Secure your table-top exhibit, book display, or take-one section online at www.wfs.org

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space. Each project is expected to take advantage of exponential technologies in order to positively improve the lives of one billion people during the next 10 years—a big challenge, but urgently needed as we move closer to the technological Singularity.

## Participants will leave this session with a knowledge of:

- The future technologies that will radically change the future of humanity.
- How to understand accelerating change in order to anticipate and influence the future.



José Luis Cordeiro, (moderator) is founder, World Future Society (Venezuela Chapter); Chair, Millennium Proj-

ect (Venezuela Node); faculty member of Singularity University, NASA Ames, Caracas, Venezuela



**Julielynn Wong** is a graduate student, Singularity University, NASA Ames, California, USA



**Cosmo Harrigan** is a graduate student, Singularity University, NASA Ames, California, USA

## Starting Integral: Visioning and a New STEEP



future sector: Futuring

This session is about using an Integral perspective as the starting point for fore-sight work. The panel will speak to visioning at the beginning of the process and also that the visioning activity should include an enquiry of what wants to emerge from the "evolutionary integral future." This consideration widens the perspective to include the well-being of the whole ecosystem with the possible benefits of resilience, waking up,

growing up, and showing up. Included in this session is the proposal that where you end up is often influenced by where you start. The brain is notorious for substituting a familiar interpretation of circumstance, environment, and the past. With this in mind and inspired by Richard Slaughter's *A New Framework for Environmental Scanning*, a new STEEP mnemonic is proposed that allows the foresight professional to begin environmental scanning with all four quadrants of perspective in play.

## Participants will leave this session with an understanding of:

- A new way of visioning to include the well-being of the whole ecosystem with the possible benefits of resilience, waking up, growing up, and showing up.
- A new STEEP mnemonic that allows the foresight professional to begin environmental scanning with all four quadrants of perspective in play.



**Terry Collins** is a futures consultant and a lecturer at the University of Houston who has appeared on Great Day Houston talk-

ing about foresight and technology. She is co-author of "The Evolution of Integral Futures," World Future Review, Houston, Texas, USA



James Breaux is graduate student of futures studies at the University of Houston, a registered professional engineer, and a

student member of the Association of Professional Futurists, World Future Society, and World Futures Studies Federation, Baytown, Texas, USA

## Sure, Good Idea! But Is It Sustainable?





**future sectors:** Commerce, Earth

"Is it sustainable?" That's a question that cuts across all borders, from

science and technology, commerce, and planetary security-to governance, futuring, and a multitude of forces impacting humanity. So, what do we mean by sustainability? Is it simply a rigid adherence to the status quo, or do we construct sustainability on a foundation of foresight, adaptability, and resilience? As we imagine, invent, and innovate our way into the future, strategically considering sustainability could be the critical edge. In three parts, this session zeroes in on the basics of sustainability, a newly adopted sustainability degree program at the University of South Dakota focusing primarily on the environment, and a growing realization that the aims of futures studies and Colleges of Arts and Sciences have a lot in common. Whatever our field, context matters, and an education that is broad and deep may be basic for sustaining a viable future.

## Participants will leave this session with an understanding of:

- The tenets of sustainability, which apply to nearly everything, from micro to macro.
- A new and groundbreaking degree program devoted to just that sustainability. This particular program, introduced by the University of South Dakota, focuses on the environment.
- Why an education that is broad and deep, a liberal arts education, may be a key to considering how innovations and futures projects can be seen in the broader context of society.
- Why futures literacy should be a part of every graduate's portfolio, whatever their discipline for field of endeavor in the for-profit or notfor-profit world.

**Gary Marx** is a trends observer, leadership councilor, author, and keynote speaker, who has addressed audiences on six continents, Vienna, Virginia, USA

Matthew Moen is dean of College of

Arts and Sciences, University of South Dakota. past president, Council of Colleges of Arts and Sciences, author, innovator, speaker, Vermillion, South Dakota, USA

#### Transforming Local Economic Development for the New Global Economy



#### \$ future sector: Commerce

This session will provide an update on how the economic development business is adapting to new global trends and forces in order to fulfill its mission of assisting people to have a good standard of living; governments to have adequate sources of revenue; and businesses to have good places to operate. Panel members will discuss the growing need for transformation of the economic development process and practice, and the current directions that transformation is heading.

## Participants will leave this session understanding of:

- The broad collaborative effort involving members of the International Economic Development Council, Center for Communities of the Future, the University of Houston's Future Studies Program, and others, to identify the most important issues and begin to formulate solutions for effective economic development in the future.
- How the global economy is expected to change and what this means to your community?
- How do we help the most people have a decent standard of living in an era of exploding automation?
- How we can get community and economic development organization leaders and stakeholders to recognize that fundamental transformation is needed.
- Will the reduction of economic disparities also reduce the motivation for terrorism?

Mark D. Waterhouse (moderator) is

#### WorldFuture 2013 on Twitter: #wf13

Speakers: http://twitter.com/WorldFutureSoc/worldfuture2013-speakers
World Future Society: http://twitter.com/WorldFutureSoc
THE FUTURIST magazine (Patrick Tucker): http://twitter.com/Theyear2030

president of Garnet Consulting Services, Inc., an economic development consulting firm. He is a certified economic developer, has served as chair of International Economic Development Council (IEDC); former dean of Oklahoma University Economic Development Institute (OU/EDI), president of Connecticut Economic Development Association (CEDAS), Pleasant Valley, Connecticut, USA



**Rick Smyre** is president, Center for Communities of the Future, Gastonia, North Carolina, USA

**Barbara Johnson,** New Orleans, Louisiana, USA



**Scott Gibbs,** president of the Economic Development Foundation of Rhode Island, Cumberland, Rhode Island, USA

#### **Transition Engineering**



future sector: Sci/Tech

Adapting to the exponential increase in fuel and resource consumption of the last century was challenging, but accomplished by engineering that focused on growth of infrastructure and new products to keep up with demand. What happens as growth in resource and energy supply stalls and declines over the next century?

This session focuses on the role of engineering and applied sciences in the transition from growth to decline. We explore the proposal that prosperity in the era of constrained resources and emissions will depend on the role played by the engineering profes-

sions. A misguided understanding of the transition from fossil fuels to sustainable energy has been focused on acquiring more energy from renewables. The challenge is to understand Transition Engineering as the way to fit demand to declining supply. This represents a profound paradigm shift for the people in society who are uniquely suited to change existing infrastructure and technology.

## Participants will leave this session with an understanding of:

- How energy return on investment (EROI) and resource production analysis shows the inevitable decline of net energy to the economy from now into the future.
- How the engineering changes must precede any economic, political, or behavioral changes and create a shift from growth to self-sufficiency as the source of prosperity.



**Susan Krumdieck** has worked to develop the analysis and design methods of transition engineering for more than

15 years. The new methods have now been published and deployed to reveal distinctly different future visions for various cities and organizations. Dr. Krumdieck is working with other academic and professional engineers to establish the International Society of Transition Engineers, Christchurch, Canterbury, New Zealand

**Frank Kreith,** University of Colorado, Boulder, Colorado, USA

**Daniel Kenning,** IMechE, Chelmsford, United Kingdom

**Carey King,** University of Texas, Austin, Texas, USA

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11:00 a.m.-12:00 noon

#### **22nd Century Lecture Series**

#### Accelerating Progress: How to Thrive in an Ever Faster, Smarter, Smaller, Richer, Freer, Stabler World



future sector: Sci/Tech

This talk will give you an overview of how and why our world gets faster and better every decade, and how to see and benefit from the next great steps in the human adventure. Specifically, I will tell you ten tales of the future, in Science and Nanotech, Communications and Computing, Media and Education, Wealth and Work, Cities and Urban Life, Health and Longevity, Politics and Laws, Privacy and Security, Resources and Environment, and Death and Afterlife. In each, we'll consider some predictable "developmental" futures, and a sampling of the many unpredictable "evolutionary" paths we could take to these inevitable futures. The developmental destinations aren't really in our control, they are predictable physical and informational processes likely to be very similar on all Earthlike planets in our universe. It is the evolutionary paths that we control, and where our greatest responsibility and moral choice lie.



**John Smart** is a professional futurist. He is president of the Acceleration Studies Foundation, curator of the popu-

lar Accelerating Change conferences, 2003-2005, co-founder of the Evo Devo Universe complex systems research community and the Foresight Education and Research Network, Futures Studies and Forecasting advisor at Singularity University, lecturer at the Naval Postgraduate School in Leadership and Technological Change, and vice president of the Brain Preservation Foundation, Mountain View, California, USA

#### Cultural Values versus Economic Activity



future sector: Governance

Governance is defined by cultural traditions, the current political system and economic model. The industrial age framed liberal representative democracy and the market economy. As the industrial age is being phased out so is its political system and economic model and by implication governance. A new kind of governance will emerge in the strongest and most dynamic economies and be steered by:

The need to manage information trying to reconcile the imperative of open access to information with the need for organizing societies – avoiding chaos and conflicts among cultures with different values, norms, and ethics.

The phasing out of economic incentives as the only or at least the dominating parameter for business activities replacing it with a more societal perspective looking at contribution to the evolution of societies also outside what can be measured by economic criteria.

The likelihood that more and more activities take place on the global level while the political control or steering mechanism stills seems firmly anchored in nation-states – how do we put in place some kind of global governance so that decisions by economic players (supranational companies) and political control takes place at the same level – globally or internationally.

This is especially difficult because most people see their identity anchored inside a national framework while economic activity is global or international presenting us with a clash between identity (cultural values) and economic activity.



Joergen Oerstroem Moeller is visiting senior research fellow, Institute of Southeast Asian Studies, Singapore; adjunct

professor, Singapore Management University and Copenhagen Business School; member of the World Future Society's Global Advisory Council; and former Danish ambassador to Singapore, Brunei Darussalam, Australia, and New Zealand, Singapore

#### Futuring in 2100



future sector: Futuring

It was futurists who turned *futuring* into a verb. In doing so, futurists took our most basic and ancient human capacities—to remember, to anticipate, to imagine, to dream, and to plan—and turned them into a vocation. Assuming that human civilization survives to the year 2100, as I do, it is likely that interest in the future will be greater than ever. Survival implies that we will have solved the next energy question, dealt with climate change, and continued our technological, cultural, and social develop-

ment, including new steps toward a true space-faring civilization. Thus, in 2100, we will have a greater capacity and likely a greater desire to understand and shape the future. Futuring will thrive, amplified by very high performance data analytics, but still, in the end, requiring people to decide on the future they want.

In this program, I will reflect on the history of futuring, embedded within the history of cultural images of the future, and then imagine what futuring, and future images, will be like as we turn into the next century.



**Glen Hiemstra** is the founder of Futurist.com. An internationally acclaimed expert on longrange trends and creating

the preferred future, Glen has advised professional, business, and governmental organizations for two decades and served as a technical advisor for futuristic television programs. He is the author of *Turning the Future into Revenue: What Businesses and Individuals Need to Know to Shape Their Future* and co-author of *Strategic Leadership: Achieving your Preferred Future*, Kirkland, Washington, USA

#### Healthy Aging in the 22nd Century: Envisioning Life in the Year 2100



future sector: Humanity

Just living longer without living better is not a goal. Discussions of longevity need to consider the quality of a longer life. What will the term "elder" mean in the future? And at what age will someone be considered an elder in 2100? Elders will be those who have lived triple-digit years and have been through several careers and cycles of education, career, and leisure. These elders will continue to be contributors to society. Technology will be a key element allowing individuals to age with more indepen-

dence and more choice. We will examine the four components of health—physical, social-emotional, spiritual, and intellectual—and how each will be manifested in 2100. The year 2100 will be an exciting time to be an elder. A scenario will be presented, and then there will be time for an exchange of ideas and adding to this forecast.



**Marta M. Keane** is chief operating officer, Jefferson Area Board for Aging, Earlyville, Virginia, USA

A Possibility Tour, Led by Heathervescent with Special "Guests" Philip K. Dick, Bina48, Samuel Delaney, Stanislaw Lem, and Donella Meadows



\$ future sector: Commerce

We will visit and view a variety of potential outcomes of our economy, as might be seen through the eyes of noted futurists of the past. Our tour will feature a balanced analysis of commerce possibilities, highlighting the seeds within our existing system that may lead to each prospective reality. Expect a wild romp through the future, with your guide Heathervescent's cacophonistic flair!



**Heather Schlegel** is a futurist, technologist, and cacophonist. Schlegel is most recently known for her design

futures video work with Innotribe, the Innovation Division of Swift. Known by her online presence, heathervescent, and her consultancy, The Purple Tornado, she explores the intersection of technology, culture, and identity. Schlegel's academic research focuses on the future of transactions and complementary currencies, including the impact of technology on identity creation, West Hollywood, California, USA

#### **Tax Deduction**

Conference expenses may be tax deductible. U.S. Treasury regulation 1.1625 permits an income tax deduction for educational expenses (registration fees, cost of travel, meals, lodging) undertaken to: (1) Maintain or improve skills required in one's employment or (2) Meet express requirements of an employer.

#### **Stepping Backwards into Eden**



future sector: Earth

Humanity is intervening in nature. From the Endangered Species Act through efforts to save coral reefs all over the world, we are managing an ever-growing array of habitat. In many cases, this amounts to mitigating the change that human presence has created, such as building wildlife corridors over freeways, removing invasive species, or setting aside land that cannot be developed. Climate change and population growth are adding new pressures.

By 2100, most of the remaining wild places in the developed world may be managed.

Humanity's record as a master gardener of the Earth is mixed as best. Some efforts succeed; others fail. What new skills may humanity need in order to manage the job of gardening the world? What ethical dilemmas will this create? What tools will we need in order to become successful?



**Brenda Cooper** is a technology professional, a science-fiction writer, and a public speaker who lives in the Pacific North-

west. She is associated with Futurist .com, Kirkland, Washington, U.S.A.

12:15-1:45 p.m.

#### **Keynote Luncheon**

#### Understanding Future Threats Through Analytical Gaming

War-gaming and red-teaming are common planning tools used by the military to evaluate and improve plans. By understanding the potential weaknesses in a plan, or the way a plan may be affected by complex and unpredictable interactions, military planners can be proactive in mitigating potential risks and understanding potential contingencies. Thought of in this way, these tools are intuitively beneficial in making a plan more robust. However, their use outside of the military is currently quite limited.

Noetic Corporation believes war-gaming and red-teaming have broad applicability as analytical tools across a wide variety of "problem spaces" to examine complex problems and understand the impact and influence of emerging technology trends and their impact in the coming decades (Wired's Danger Room). John Watts will explore the applications and benefits of war-gaming in understanding complex future challenges.



**John Watts** is a consultant working on U.S. and international security issues with Noetic Corporation. In this role, John has worked on a variety of research projects that seek to understand the potential impact of emerging future trends. Projects have included

analyzing the threat posed by armed sub-state groups in the urban littoral utilizing commercially available technologies; the impact of potentially game-changing technologies within a military context; the future role of the U.S. Marine Corps in interagency response to crises; and the use of modern intelligence, surveillance, and reconnaissance technologies in border security. In undertaking these projects, John has used tailored and innovative wargaming and red-teaming interventions to facilitate effective consideration of the future. Washington, D.C., USA

#### 2:00-3:00 p.m.

## Co-creating Foresight Culture in Government





**future sectors:** Futuring, Governance

Can science fictioning, co-creation, and other innovative, design-centered foresight techniques find fertile ground within the marble halls of government? Find out in this critical examination of strategies, methods and lessons from the project, Economic Futures for Ontario 2032 (EFO). Led by Strategic Innovation Lab (sLab) at OCAD University, in close collaboration with an interdisciplinary governmental working group, EFO explores challenging futures for Canada's most populous and diverse province. The project attracted hundreds of participants from public and private sectors.

Balancing creativity and surprise with evidence and policy relevance, EFO is a demonstration initiative designed to boost organizational learning through scanning, scenarios, and strategic implications. The joint sLab/ government team co-authored together, producing unexpected ideas and exceptional stakeholder ownership. As governments cope with shifting public sentiment, dwindling coffers, and rising complexity, need has never been greater for innovative anticipatory planning. In this session we'll interrogate a path with real risks and rewards.

## Participants will leave this session with an understanding of:

- Creative strategies and insights for effective foresight in government settings.
- Creative techniques for diverse recruiting, facilitation, stakeholder engagement, compelling narratives, and making scenarios tangible.



Relax and trade reactions to the day's events at the evening receptions.



**Greg Van Alstyne** is associate professor of design and co-founder of Strategic Innovation Lab at OCAD University, To-

ronto, Canada. On the EFO project, he was a member of sLab's team from OCAD U's Master of Design in Strategic Foresight and Innovation, Toronto, Ontario, Canada

#### Collaboration and Complexipacity: Personal Networks Trump Complexity



future sector: Humanity

Since the 1970s, futurists have been warning that modern society's basic decision-making institutions—free elections, representative government, an educated citizenry, etc.—will ultimately be overwhelmed by the multiple conflicted issues posed by our increasingly complex world. Conversely, computer scientists have assured us that artificial intelligence will be able to solve our most complex problems.

Recent studies, however, suggest that personal online networks are enabling people to resolve complex problems in the workplace, in communities, and in daily life. Employers now identify "networking" as an essential workplace skill. Moreover, the Pew Internet Research Project has found a high correlation between success in life and the number of online networks to which a person belongs!

The rapid global adoption of social networking has set the stage for a grassroots revolution that will depolarize partisan politics, transcend national boundaries, and transform how humankind will manage its way through an increasingly complex future.

This session will provide a practical working definition of complexity, specific skills and aptitudes for assessing complex problems, and a comparison of two strategies by which humankind is seeking to manage its way forward in an increasingly complex world: (1) artificial intelligence and supercomputers, and (2) collective intelligence and social networks.

## Participants will leave this session with an understanding of:

- How to explain to reluctant stakeholders the compelling need to supplant traditional rote curricula with the new common core standards of learning.
- The central role of personal networks in consumer decision making and in society's capacity to respond effectively to the complex realities of the future.



Networking opportunities are built into the conference schedule.



**David Pearce Snyder** is a consulting futurist and contributing editor for *The Futurist*, Bethesda, Maryland, USA

#### Faster Than You Think: Progress Toward Artificial General Intelligence

#### **Special Event**



future sector: Sci/Tech

The current state of research on Artificial General Intelligence will be surveyed, including computer-science-based and brain-based approaches. Plausible pathways from the current state of the art to Singularity-enabling advanced AGI will be outlined in detail. Examples will be drawn from the OpenCog project, an AGI-focused open source software system currently being used to control virtual world characters and robots.

## Participants will leave the session with an understanding of:

 current research on Artificial General Intelligence and how it relates to learning.



**Ben Goertzel** is chief scientist of financial prediction firm Aidyia Holdings; chairman of AI software company Nova-

mente LLC and bioinformatics company Biomind LLC; chairman of the Artificial General Intelligence Society and the OpenCog Foundation; vice chairman of futurist nonprofit Humanity+; scientific advisor of biopharma firm Genescient Corp.; advisor to the Singularity University and Singularity Institute, Hong Kong

#### The Future of Celebrations





**future sectors:** Commerce, Sci/Tech

Retirement. Weddings. Birthdays. What milestones will define the next horizon and how will we celebrate them? Technological innovations will intersect social changes to shift the way we highlight the extraordinary. Augmented reality, gamification, robotics, and virtual worlds will impact existing networks to drive new land-scapes of interaction.

Shifting worldviews, due in part to cultural or religious development, will fundamentally alter how those values are reflected in celebrations.

We may celebrate intimately with those we have never met in person.

Alternatively, we may interact with someone we love very much through independent objects. Eat, drink, and be merry in this session, as we party toward the future.

## Participants will leave the session with an understanding of:

- Celebrations of the future, through the use of future-based artifacts.
- Why celebrations reflect the transition from this horizon to the next.



**Emily Empel** is a trend spotter, marketing disciple and corporate futurist, Winter Park, Florida, USA

#### The Jobs Revolution

#### Special Event



\$ future sector: Commerce

A jobs and skills disconnect continues to widen across the United States and around the world. Technological advances that continue at an unrelenting pace and global demographic shifts are producing a jobs revolution that looms ominously over individuals, businesses, and governments.

Mr. Gordon will explore some promising initiatives for building a skilled twenty-first-century workforce especially through cross-sector community initiatives. He will offer a forecast for the coming decade and beyond on the demands of the U.S. and global labor markets.

What can be done regionally or locally to restructure the talent-creation system? Why are so many Americans sitting on the job sidelines, while more than 6 million jobs are vacant across the United States? How can we create more skilled talent urgently needed for the jobs of today and tomorrow?

#### **WorldFuture 2013 Sponsors and Cooperating Organizations**

- · Association of Professional Futurists (APF)
- Police Futurists International (PFI) Public Sector Foresight
- The Millennium Project
- World Network of Religious Futurists (WNRF)
- The Oracle Foundation

#### Participants will leave this session with an understanding of:

· The choices that will need to be made along the journey through this major employment crossroad.



Ed Gordon is president of Imperial Consulting in Chicago and Palm Desert, California. He is an economic historian,

noted expert on workforce development, and author of the forthcoming book Future Jobs: Solving the Employment and Skills Crisis (Praeger, September 2013), Chicago, Illinois, USA

#### Maximize the National and International Impact of Foresight Work



future sector: Futuring

Since its creation in 1994, the Foresight Programme has helped the UK government to think systematically about the future and has advised the government on how to ensure today's decisions are robust in light of future uncertainties. The speaker will discuss major foresight studies ranging from migration and global environmental change to global food and farming futures and their impact on policy and decision making.

#### Participants will leave this session with an understanding of:

- · What factors make a foresight program successful.
- · How to maximize the national and international impact of foresight work.

Sandy Thomas is the head of Foresight in the Government Office for Science, Department for Business, Innovation and Skills; former director, Nuffield Council on Bioethics, London, United Kingdom

#### **Nation-States Defunct or** Reinvented?



future sector: Governance

Falling costs of transportation and burgeoning communication have stimulated two decades of political collapses and reconfigurations. Observing vast migrations, money flowing across national boundaries, and struggles over cultural norms, futurists have reasonably predicted that the nation-state will be strained, even fractured, by stresses of globalization. I argue that the demise of the nationstate has been exaggerated and that global cooperation will be necessary, but will not subsume the nation-state as a political structure. Because people live their lives at the level of the local and the regional, the nationstate will remain the nexus of social and economic innovation and cultural negotiation. Globalization will not negate the nation-state but enhance it, as politically and economically allied people advocate for their own well-being on the global stage.

If the nation-state can evolve, particularly in terms of its core properties of sovereignty and the definition of boundaries, it will be revitalized, even as it shares power with macroregional and global governance structures, such as the International Monetary Fund and the European Union.

#### Participants will leave this session with an understanding of:

- · How to identify the key dimension of globalization, specifically flow of investments, revenues, finished goods, raw materials, personal messages, and cultural products (including films, music, and cultural statements), as well as the movement of human beings across nation-state boundaries.
- · How globalization will produce new patterns of behavior and meaning, as social allegiances are maintained and shaped across previously impractical distances.
- · How dimensions of globalization may be used in predicting and steering productive political structures-i.e., nation-state government in cooperation with necessary global decision making.



Adrienne Redd is author of the book Fallen Walls and Fallen Towers: The Fate of the Nation in a Global World (Nimble,

2010). Dr. Redd created and taught "Understanding Global News" and "The Sociology of American Whiteness" at Arcadia University, and a seminar on utopian thought at Cabrini College, Jenkintown, Pennsylvania, USA

#### The Promise and Perils of Personalization



future sector: Sci/Tech

The future promises a world where everything from Internet searches to medical treatments to education is personalized to the individual. While this vision is tantalizing from an individual experience, what will the effect be on society? What ethical questions will we grapple with? How will individuals cope with the parts of their life that are not personalized experiences? How will relationships

be affected by a world where we each live in our own personalized bubble?

## Participants will leave this session with an awareness of:

 Areas of everyday life where personalization is likely to be a growth industry.

#### Susan Echard Student Scholarship Program Contributors

Generous donors to the Society's Susan Echard Student Scholarship Program have helped boost the number of young people attending Society conferences and thus have helped strengthen the study of the future. You may also donate to this program! Contributions are tax-deductible. Just contact us at 800-989-8274 (or 301-656-8274) or by e-mail at info@wfs. org to donate. Remember your \$150 contribution, or any dollar amount, will make it possible for a student to attend.

We would like to acknowledge the following who donated.

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Kathleen Zellmer

• The potential consequences of these shifts.



**Maria H. Andersen** is the director of Learning and Research for Instructure, where she acts as a translator and anthropologist to

help bridge the gap between technologists who build canvas and the education tribe who use it. Prior to this position, she served as faculty at a community college, teaching traditional and online courses, Sandy, Utah, USA

## Trends in Agriculture: Sunrise and Sunset





**future sectors:** Earth, Commerce

This insider's look at the world's second-oldest profession will cover a wide-ranging list of trends affecting farming and agriculture as related to population, economies, and nation building across the globe. Today's farmers face unique challenges raising livestock and crops as infrastructure declines and grain prices soar. New expectations for feed, land and water hierarchy, food security, and moral responsibility are driving forces. Technologies such as 3-D printed confections and test-tube beef vie against the "localvore," slow-food movement, illustrating the dichotomy occurring on a much larger scale between technology and tradition. Explore the meat underground, why it will expand domestically, and the adverse affects on the supply chain.

The session will examine the continued conflict between protecting nature and raising food. Attendees will be challenged to consider where and how that next bite arrived on the plate, and how that changes in the future.

## Participants will leave this session with an understanding of:

- Trends affecting agriculture and farming now and in the future.
- Agriculture infrastructure dynamics and effects.

- Context with food production, technology insertion, and human expectations.
- The different options for food's future and production.



**Janice Bryant** is a farmer, futurist, orator, and a former special project manager for the U.S. Navy. For the last two years,

she has hosted hour-long sessions at the Mother Earth News Fair, Longbranch, Washington, USA

## Unleashing Human Potential Worldwide



future sector: Humanity

Brain research has shown the way for unleashing human potential. Now we have to completely change the old-fashioned techniques of education from birth to 100. Mr. Peter will describe the best ways for stimulating imagination, collaboration, and innovation in business, government, education, health care, not-for-profits, and families.

## Participants will leave this session with an understanding of:

- The six steps of all human learning.
- The four types of innovation.



**Bill Peter** is founder of Global Innovation Foundation, a philanthropic education organization, Edina, Minnesota, USA

#### Visionaries Have Wrinkles: Serving the Generation Who Will Change the World . . . Again





future sectors: Humanity, Futuring

Futurists and other like-minded professionals will have the opportunity to explore the impact that the "Big Gray" demographic trend will have on the field of foresight and the future of practicing futurists. We will explore why professional futurists need to know more about this megatrend to better advise clients, and answer a series of emerging critical questions as we guide our clients and our foresight professions. Attendees will participate in several exercises that will provide a cognitive jolt to our assumptions, opening the way to envisioning new alternative futures for those we serve. This presentation will provide an eye-opening connection between the study of the future and contemporary gerontology by illuminating the impact of the graying tsunami on how we live, work, buy, and serve this demographic, thereby the impact on futurology.

This promises to be an informative, experiential, hands-on session about reinventing your business and honing your skills to stay in sync with where your maturing clients are today and how you may guide them toward where they want to be tomorrow. This conversation offers unique insights into the needs and values of boomers and matures, as they age, transform, and reinvent themselves—needs that can be well served by innovative product developers, attuned marketers, savvy service providers, and future-forward employers.

## Participants will leave this session with an understanding of:

- A renewed and unique perspective on maturing boomers' current and future challenges, values, and needs.
- How to reimagine work after 50 to fuel your leadership impact, and ensure personal growth and professional reinvention for your clients and employees.
- The various applications of cutting-edge research findings, in terms of supporting/empowering/ leveraging your aging workforce.
- How demographic trends coupled with findings will positively influence your existing strategies for your future visionary leadership, business development, and succession planning.



World Future Review managing editor Lane Jennings (second from right) picks up new ideas at WorldFuture 2012.

**Karen Sands** is a practicing futurist, certified gerontologist, and author of *Visionaries Have Wrinkles* (2012), *Ageless* (2013), and recently released *A Glimpse of Tomorrow's Promise, The Everyday Futurist's Report.* Publisher of the monthly eletter *Future Works® Gazette* and regularly posts articles on her blog(s); member Association of Professional Futurists, Roxbury, Connecticut, USA.

#### **Vulnerability 2030**



#### future sector: Futuring

What is the future of social and economic vulnerability in the United States? The last century has seen wide swings in social and economic vulnerability, albeit with a general and persistent rise in conditions that support social and economic security. By 2030, how high will structural unemployment be? Will urban agriculture and home food production (e.g., aeroponics) be significant? Will advances in energy technology, particularly solar, hydrogen, battery storage, and other advances, make a difference for low-income households? How will conflicts in society, crime, and urban blight evolve?

The Vulnerability 2030 Scenarios trace four pathways—an expectable, a challenging, and two visionary or surprisingly successful images. IAF has also updated the emerging forces that might shape personal and community self-reliance. This session will present the scenarios and recent developments leading to the various scenarios.

The scenarios were developed for the Robert Wood Johnson Foundation's Vulnerable Populations Portfolio and have been widely used in the nonprofit and philanthropic communities for their strategic planning.

## Participants will leave this session with knowledge of:

- Major forces shaping vulnerability, particularly jobs, income, safety, community, food, and housing.
- Innovative ways to reduce vulnerability and the pathways that could lead to greater resilience, equity, and sustainability.



**Clem Bezold** is chairman and senior futurist, Institute for Alternative Futures, and recipient of the World Future So-

ciety's Lifetime Achievement Award in 2011, Alexandria, Virginia, USA 3:30-5:00 p.m.

## Dark Future/Bright Future: Either, Neither, or Both?



future sector: Futuring

What appear to be intractable problems we face globally are making many people pessimistic about the future, as can be seen in the many gloom and doom forecasts currently prevalent. It seems as if more and more of us are subscribing to these dire forecasts. On the other hand, there are also a good number of underlying indications of progress and improvements in human beings, their societies, and their organizations.

In this era of rapid and often disruptive change, which direction will the world take? Futurists know that trends, like coins, have two sides—threats and opportunities. Which side, if any, is dominant now? Which side, if any, will determine the future? Futurists also know that apparent solutions to one difficulty often create other problems, requiring an objective and comprehensive view of the future.

## Participants will leave this session with better understanding of:

 How to effectively communicate a more objective and comprehensive perspective of the future we will all face.



**Edie Weiner** (moderator) is president, Weiner, Edrich, Brown, Inc., New York, New York, USA



**Arnold Brown** is chairman, Weiner, Edrich, Brown, Inc., New York, New York, USA



Jared Weiner is a vice president, Weiner, Edrich, Brown, Inc., and board member of the World Future Society,

New York, New York, USA

## From E-Learning to Everywhere Learning



future sector: Humanity

This session explores a vision of the future that moves education beyond the boundaries of the classroom, both physical and digital. By examining trends in locative media, education, social technology, analytics, and implications of the coming "Big Data" era, we show how the future of learning may very well be one that is both ubiquitous and personalized.

In "Everywhere Learning," schoolor what we think of as formalized K-12 education and higher educationleaves the bounds of both the brickand-mortar classroom and the bounds of cyber education. Many glimpses of the future of education seem to take education down the road of cyber education. One possible future is one in which education is not really bound by a classroom or a computer, but is ubiquitous in nature, unfolding in the real world as educational opportunities present themselves to the student, rather than only taking place during class time, or when the learner is logged into a computer for class.

Rather than discrete, bounded activities, learning and personal growth become continuous, guided practices meaningfully integrated into the experience of real life and the real world.

## Participants will leave this session with an understanding of:

 Trends driving ubiquitous computing and learning and how these may converge in the future.

**Josh Lindenger** is a futurist, analyst, computer scientist, and licensed Professional Engineer, Catonsville, Maryland, USA



**Jason Swanson** is a foresight professional and market-research analyst, Pennsylvania Leadership Charter School, Pitts-

burgh, Pennsylvania, USA

#### Integrating Technology Forecasts, Social Trends, and Wild Cards into a Strategic Whole





**future sectors:** Futuring, Sci/Tech

The developers of the TechCast system will present their latest advances in improving available forecasting systems. The present technology forecasts are being joined by social trends and wild cards, and a new strategic-planning service allows users to integrate these external factors into a productive whole. Users can evaluate their strategies against external factors, see which are most likely to impact them, pool items to form scenarios, and other useful analyses. Creating this platform for thinking strategically will automate the heart of good strategy and offer a powerful new way to help people use good forecasts and make sound strategy widely available.

## Participants will leave this session with an understanding of:

 How various forecasts and trends should be incorporated into strategic planning to handle challenges posed by the technology revolution.



**William E. Halal** is the founder of TechCast, a Web-based system that pools the knowledge of experts to forecast break-

throughs in all technical fields; professor emeritus of Management, Technology, and Innovation at George Washington University, Washington, D.C., USA



**Kenneth Harris** is a professional futurist, chairman of Consilience, secretary of the board of directors of the World

Future Society, former president and treasurer of the Washington, D.C., World Future Society Chapter, Bethesda, Maryland, USA

Ari Palttala is president and CEO of

Teamware, Inc., which builds sophisticated Web sites for governments, associations, and businesses, including the design of the Web site for the Finnish Parliament, Potomac, Maryland, USA

#### **Speed Futuring**



#### future sector: Futuring

Speed Futuring is a participant-driven discussion and networking session. Roundtables are organized around the conference's six principal tracks: Commerce, Earth, Futuring, Governance, Humanity, and Sci/Tech. Each "track team" is encouraged to explore the key trends affecting their subject area and offer speculations on how these trends will play out ("fearless forecasts"). Then, a reporter for each table will share a summary of the team's thoughts with the rest of the group, responding to questions and comments.

## Participants will leave the session with an understanding of:

- Diverse perspectives in exploring our common future and how trends in each sector impact all other sectors.
- New sources of networking opportunities, both among people who share their interests and among those whose work and perspectives they may never have otherwise had a chance to encounter.



**Cynthia G. Wagner** is editor of THE FUTURIST magazine and has been with the World Future Society since 1981.

Among her credits are a variety of articles and book reviews, as well as editorship of the e-mail newsletter *Futurist Update* and of several editions of the annual conference volume. Bethesda, Maryland, USA



**Erica Orange** is a vice president of Weiner, Edrich, Brown, Inc. (WEB), one of the world's leading futurist consulting



Crowd gathers around Futurists: BetaLaunch presenter Trevor Haldenby of ByoLogyc.

firms. WEB identifies social, economic, political and technological trends, and evaluates the implications of those trends for many of the world's largest companies, government agencies and trade associations, New York, New York, USA

#### **Reflections from Latin America**



#### future sector: Futuring

The panelists will present the process of promoting science, technology, and innovation in distinct productive sectors of the Brazilian economy and associated disciplinary areas.

Mexico faces challenges as it modernizes society and the economy to meet global competition. This increasingly middle-class society seeks to reform its education system, open up its energy sector, and develop an aerospace, automobile, and electronics manufacturing sector while continuing the struggle against drug trafficking organizations. How does a nation retain its strong cultural identity as economic trends draw Mexico into an integrated North American production platform?

## Participants will leave this session with an understanding of:

The future of Latin American culture looking across Latin America as a whole.

- The trends affecting the future of Latin America from three different perspectives:
  - Innovative Technology and the Interface of Public and Private sectors;
  - 2. Sustainability and National Planning; and
  - 3. The Impact of Culture on National Economies.

Marcio de Miranda Santos is the executive director of the Centre for Strategic Management and Studies in Science, Technology and Innovation at CGEE in Brasilia, Brasilia, Brazil

**Diana Villiers Negroponte** is a nonresident senior fellow at the Brookings Institution where she works on Mexico and Central America. Her forthcoming book, *The End of Nostalgia: Mexico Confronts the Challenges of Global Competition*, will be published by the Brookings Press in April 2013, Washington, D.C., USA

Esther Franklin (moderator) is executive vice president and director of Cultural Identities for Starcom MediaVest Group's (SMG) multicultural unit, SMG Multicultural, and a member of World Future Society Global Advisory Council, Chicago, Illinois, USA

#### 6:30-7:30 p.m.

## Digital Outcasts: Designing the Future of Health



#### future sector: Sci/Tech

The term "outcast" covers numerous demographic categories. It represents 54 million Americans currently living with a disability. It refers to those living in isolation with only a home-care nurse for company. It describes economically disenfranchised neighborhoods lacking access to the same commercial services as more privileged communities. And it covers any individual who relies on a product or service for basic life functions but is prevented access by poor design.

Digital outcasts make up an emergent culture of active, engaged participants in today's world, cultivating a personal incubator where passion and invention sustain life. Their efforts are predicting new ways of communicating and engaging with the world around us, as well as how we manage our health. Chances are, the next gadget we buy will have some imprint of accessibility built into its specifications—and it's the digital outcasts who are drawing the blueprints to our health-care future.

## Participants will leave this session with an understanding of:

- How people with disabilities and related conditions are innovating solutions to manage their life course, and how the technology and health-care industries are impacted by their efforts.
- Case studies in virtual reality, nutrition support, social design, robotics, cognitive computing, and pain management.
- A population who is designing the prototype of our future, despite often being left behind the innovation curve.



**Kel Smith** is a speaker, author, and practitioner on digital accessibility and technological innovation. He is the author

of Digital Outcasts: Moving Technology Forward Without Leaving People Behind (2013), Glenside, Pennsylvania, USA

# Envisioning the Future of Technology through "Sci-Fi Scaffolding"





**future sectors:** Futuring, Sci/Tech

DAN DOWNEY FOR WES

A whirlwind overview of how tech-

Question-and-answer segments during sessions are often a highlight of the WorldFuture experience.

nology is changing our lives. Mr. Zappa will explain how technology and humanity are fundamentally intertwined, the presentation establishes the imperatives and trends that will drive the near future. Using inspiration drawn from sci-fi, the presentation finally lays out a series of highly visual scenarios for the next decade, and invites the audience to reach similar visions for their own field of work.

# Participants will leave this session with an understanding of the proposed set of "scaffolds":

- The future of photography (what happens when cameras are always online, see what we see, identify what *matters* to us, and share everything in real time).
- The augmented self (technologies that have the capacity of extending our senses, such as using a swarm of brain-controlled flying nanobots sending what they are seeing back to artificial retinas).
- The future immune system (embedding a nanoscale 3-D printer in our bloodstream synthesizing drugs, responding to real-time biometric readings of how our body is reacting to the environment).
- The future of manufacturing (employing depth-perceiving drones to interpret the physical geography of a given location, then using parametric design algorithms to design an optimized construction for that space and deploying massive contour crafting 3-D printers to actually build houses. You'd end up with overnight, pop-up city blocks, which can be implemented as disaster relief, for example).



**Michell Zappa** is a global emerging technology strategist who publishes a project entitled Envisioning Technology. His

focus is on explaining futurism and technological scenarios using visualizations and creativity drawn from science fiction, London, United Kingdom



The onsite Futurist Bookstore is where you can browse and buy speakers' books, plus titles they recommend during their session.

#### Fast-Scalable, Lifestyle-Preserving Survival Communities





**future sectors:** Commerce, Humanity

Disasters are part of human existence. Our technological civilization has made us less resilient and more vulnerable to high impact, low frequency events, possibly having global catastrophic consequences including economic upheaval, currency devaluation, breakdown of civil order and governmental collapse. We have created free-market efficiency with little tolerance for severe interruptions in basic services: energy, food, water, money and security. A downfall of our civilization could happen much faster and more severely than we are willing to acknowledge. Individual survival strategies are incapable of insuring our full recovery from a global disaster.

A well-planned network of fastscalable survival communities could enable the physical survival of a large portion of the population, the safe and speedy return to their previous lifestyles and the continuation of technological and scientific progress. Survival communities could become test beds for sustainable living without reduction of life quality.

## Participants will leave this session with an understanding of:

- Overview of realistic disaster scenarios.
- Overview of existing preparedness strategies..
- How to make civilization more resilient in view of major trends and increasing vulnerability.
- Survival of disasters through strategically planned communities.
- Methods to scale up and accelerate preparedness efforts.

**Erland Wittkotter** is a mathematician/physicist, investor, and inventorentrepreneur holding several European and American patents, Henderson, Nevada, USA

## Healthspital 4.0: Trillion-Dollar Paradigm Catapult





**future sectors:** Humanity, Sci/Tech

In the United States, unsustainable

health-care costs still only lead to variable and unpredictable outcomes. There is no true system and there is no worldwide model to emulate. Therefore, a system and model must be created. Concepts have been presented in Vancouver and Toronto and enhanced by work in eastern Connecticut, the Cleveland Clinic, and conferences like *Innovation Expedition 5* held in Boston, Massachusetts, in May 2012.

This presentation will have a laser-like focus on an actual prototype and an action plan for implementation and dissemination. The proposal will emphasize better health, prevention strategies, and ease of accessibility delivered one patient at a time with reliable, accountable, and trackable benefits and outcomes system-wide. The trillion-dollar savings that this plan will provide can then be reinvested into a learning feedback loop for continued quality and safety improvements.

## Participants will leave this session with an understanding of:

 How a true health ecosystem will correct the current fragmented, dysfunctional, and variegated nonsystem at the point of care, transforming it into a patient-centered, provider-friendly, and comparatively effective system.

**Frank W. Maletz** is a practicing orthopaedic surgeon and a former United States Naval military surgeon with Gulf War and hospital ship experience. He has 35 years of patient service as a physician, East Lyme, Connecticut, USA

## Hurricanes, Droughts, and the Global War Cycle



future sector: Governance

On October 29, 2012, Hurricane Sandy exceeded the 1960 modern record and 1821 all-time record for flooding in New York City's Battery

Park. The national drought of 2012 exceeded the droughts of 1988, 1934, and 1936. Science shows that the 55year moving average that was perfectly straight from 1936 to 2000 with a correlation of 0.998 suddenly doubled in rate to 2 degrees per century, over the last decade, with a new correlation of 0.997 for the 2001-2010 period. These new findings indicate both a proof of the existence of the 54-year cycle and the new threshold higher rate of warming due to manmade carbon dioxide in the atmosphere. What else do these findings show about the future? The presenter will discuss the 48 events used to measure the cycle and their future projections, including the 2024 average major war and the 2036 average next Depression.

#### Participants will leave this session with an understanding of:

· The nature of the long cycle, how temperature connects to the economy, and how the economy connects to the war cycle.



Bob Reuschlein is president of Reuschlein Peace Institute, has taught "Weather, Wealth, and Wars," and has written

on the temperature cycle, Madison, Wisconsin, USA

#### Prospective for Earth and Governance Forecasting for the Year 2033





future sectors: Earth,

The coastline of France is a laboratory link between earth and sea. It's a melting pot of great biologic and landscape diversity. It is subject to great constraints from human beings and nature (tourism, transport, and fishing). Urbanism is taking possession of nature, dunes, ponds and forest.

The French Coast Conservatory is dedicated to finding practical solutions to protecting natural spaces and to preserving and developing the natural French patrimony.

In the session, we will analyze a several important variables, such as sea level and geoclimatic, geostrategic, and economic factors. We will attempt to address questions about the future of the French Coast in 2033. Delphi methods will be used to shape different scenarios from experts from many scientific fields.

#### Participants will leave this session with an understanding of:

· How increased populations can exist in harmony with nature and not overwhelm the environment.



Roland Rizoulieres is a senior lecturer on prospective forecasting and is a development expert at Sciences Po Aix, Mar-

seille, PACA, France

#### The Workplace Manifesto: New **Rules for Work**





**future sectors:** Commerce, Futuring

More than 70% of the workplace is going through the motions or worse. You are better off paying up to 17% of the workforce not to come. These ratios have changed little since the dawning of the information revolution of the 1970s.

Organizations operate in much the same way they did 75 years ago. However, the world is incredibly different. The current convergence of technology, new media, a massive generational shift, and old social structures cracking under these pressures are forcing leaders to question some basic assumptions. What does the organization of the future look like and how do we get there?

The lack of engagement and outdated organizational structures, strategies, and cultures are related. What will engaged work and a highly engaged work culture look like in the future?

A consortium of twenty organizations called "case4space"-including Google, WL Gore, Marriott, the federal government, and leading-edge communities like Columbus, Indiana-asks the question, "What is the future context and nature of work and how do we support it?"

One of the key questions related to new work is, "How do you scale the magic?" Complexity, speed, and an ever-shifting horizon make it more difficult to scale innovation and riskier to make major investments in developing the next wave of growth.

The presentation will share why current organizational structures and management practices are declining in effectiveness. It will share the results of "future travelers"-leaders and organizations that are living into the future with great results. It will provide lessons learned and actions that leaders can take with their organizations to redesign their organizations to the current world of complexity, speed, and unpredictability.

#### Participants will leave this session with an understanding of:

- · Why many current organizational models and strategies are failing.
- · What emerging approaches are working and why.
- · How are organizations scaling the magic.
- How you can lead your organization or clients through the transformation.



Rex Miller is a nationally respected futurist, consultant, speaker, and architecture, engineering, and construction indus-

try expert; author, The Commercial Real Estate Revolution; founder, case4space initiative, Southlake, Texas, USA

#### 8:00-10:00 p.m.

#### **Poster Sessions**

Like the Futurist: BetaLaunch expo, these poster sessions will include meet-and-greet opportunities in a "petting zoo for ideas." The event will include a cash bar.

presented at numerous U.S. and international institutions on a variety of topics and has traveled widely, having been assigned, deployed to, or worked in over 35 countries on four different continents. He has served multiple combat tours. Florence, Alabama, USA

versity of North Alabama. He has

research, and predictive analytics firm Reach Advisors, facilitating learning about the future of museums as a teaching assistant in the Harvard Museum Studies Program, and facilitating creative mash-ups at historic sites through her company, Revitalizing Historic Sites. Lowell, Massachusetts, USA

#### Citizen, Soldier, First Responder



future sector: Governance

Protector and defender of the nation, but also oppressor, controller, and fomenter of rebellion: These are all roles that a military organization can fulfill given the particular circumstances germane to the nation it serves, particularly in the developing world and the nation-states on the continent of Africa. While most African militaries are nowhere near perfect organizations and are barely comparable in capability and professionalism to the modern militaries of developed nations, in many cases these organizations are in fact the most capable and professional institutions within their respective countries, or can be made that way. It makes sense, therefore, that nations develop the capability of their national military organizations to be trained and ready for the task. The benefits to the political government can be significant, but the benefits to the people of the nation can mean the difference between survival and destruction.

Wayne P. Bergeron retired as a lieutenant colonel from the United States Army in May 2011 after a 23-year career within the Military Police Corps and Special Operations Forces. His last assignment was as the battalion commander and professor of military science at the University of North Alabama Army ROTC program. Bergeron currently serves as the interim chair of the Department of Criminal Justice and teaches both criminal justice and security and emergency management at the Uni-

#### **Crowdsourcing the Future of** Leisure





future sectors: Commerce, Humanity

This poster will be a participatory project, using the power of the crowd. Each guest who visits the session will be given stickers to vote on questions about the future of leisure time. Questions may include, but are not limited to: Do you think Americans will have more or less leisure time over the next 20 years than they do today? Which area do you think Americans will focus their leisure time on in the next 20 years: Vacations & Travel, Hobbies, Informal Learning, Sports & Fitness, Entertainment, Social & Family, or Leisure Time Employment? What do you feel will be the biggest shift in leisure time developments over the next 20 years: Increase in Leisure Time, Decrease in Leisure Time, Encroachment of Work on Leisure Time, Trade in Value of Leisure Time, or Other? Participants will also be asked to share reading and research sources they follow on the future of leisure time. The results of the crowdsourcing activity will then be shaped into a final report, which will be available to those who participate if they leave their contact information.

#### Kate Laurel Burgess-Mac Intosh has a master's degree in museum studies from Harvard University Extension School, a BA in fine arts from Montserrat College of Art, and is currently taking graduate courses through the University of Houston Futures Studies program. Her present work includes working with strategy,

#### The Future of Infant Feeding 2025





future sectors: Commerce, Humanity

Four distinct forecasts of the future of infant feeding in the United States offer strategic insights about American culture and social patterns that affect the family, nutrition, consumers, and gender roles by examining two critical uncertainties: the outcome of social tensions among American mothers, known as the "Mommy Wars," and the role of the American household as either "producer" or "consumer." Four scenarios (Whole Milk, Half and Half, Crème De La Crème, and Lactose Intolerant) emerge from a Global Business Network (GBN) scenario process and sketch a range of alternative futures, raising awareness of the important role of breastfeeding to infant survival and human development.

Alexandra Whittington has taught futures-studies courses as an adjunct at the University of Houston and the University of Houston-Downtown. Her research focuses on the future of social issues, including education, families, communities, and gender roles. She has worked in a futurist capacity for nonprofits, corporate clients, community organizations, and small futurist consulting groups. Ms. Whittington has published forecasts and foresight-related articles, as author and co-author, in THE FUTURIST magazine, the journal Futures, and the young adult book series Tackling Tomorrow Today. She has also been a guest on Radio Saigon Houston (900

AM), KPFT Pacifica's (90.1 FM) radio program "Growing Up In Houston," and Houston Community College TV's talk show "Dialogue Houston." Houston, Texas, USA

## The Future of Recreational Athletics



#### future sector: Humanity

People of all ages, gender, nationality, race, ability, finances, and circumstance are recognizing the importance of a lifestyle that promotes health and wellness and that facilitates lifelong personal and career success and healthy aging. Recreational athletics promotes interpersonal, national, and international communication and understanding through the pursuit of excellence, mutual respect, sportsmanship, ethics, rules, acceptance of penalties, and respect for authority. Importantly, it reduces the burden to national accounts by reducing health-care costs.

This communication will focus on the futuring of recreational athletics for the benefit of all, challenges to be overcome, and benefits that will be realized. Innovative applied research information by the author will be presented. Realistic attainable future directions for recreational athletics to be discussed include: career/employment forecasts, childhood education, government policies rewarding participants, education, infrastructure, and technology directions, and others.

**Terrance Malkinson** is a researcher, editor, futurist, journalist, manager, and multisport athlete, has 460 publications to his name, and is a member of WFS, IEEE, ACSM, and BMES. Calgary, Alberta, Canada

#### The Future of Wildland Fire



future sector: Earth

The combination of hotter and drier conditions due to climate change, high

fuel loads resulting from many decades of fire suppression, the spread of exotic species affecting forest health, and rapid expansion of homes and communities in the wildland-urban interface have created a "perfect storm" contributing to more frequent, destructive, and costly fires, posing formidable dilemmas for fire management. This poster will describe trends and drivers of change related to wildland fire and present results from a study examining how different social, technological, economic, environmental, and political developments might interact to produce consequences for fire management in the future.

**David N. Bengston** is a research social scientist with the U.S. Forest Service, Northern Research Station, in St. Paul, Minnesota. He is also an adjunct professor in the Department of Forest Resources and the Graduate Program in Conservation Biology at the University of Minnesota. In 2004, Dr. Bengston was an Organisation for Economic Co-operation and Development (OECD) Research Fellow at Seoul National University, Republic of Korea. His current research focuses on environmental futures, St. Paul, Minnesota, USA

#### Co-researchers:

**Robert L. Olson,** senior fellow, Institute for Alternative Futures, Alexandria, Virginia, USA

**Leif A. DeVaney,** PhD candidate in conservation biology, University of Minnesota, St. Paul, Minnesota, USA

**Kristen C. Nelson,** professor, Department of Forest Resources and Department of Fisheries, Wildlife and Conservation Biology, University of Minnesota, St. Paul, Minnesota, USA

## How to Host a Futures Camp for Kids





How often are futures addressed in most school curricula today? At the most, students in science class may project technology into the future, or writing students may explore the genre of science fiction. While after-school and summer programs to engage children abound in the form of scouting, musical, and sports programs, few stoke the imagination about the possibilities for tomorrow. Planning not only for children's own futures but also for the future of the world they will inherit is a skill set lacking in most of our schools today. Hosting a futures camp provides an opportunity for children to imaginatively explore their future in a fun-filled and intellectually stimulating way.

This poster presentation will include an outline of the five half-day schedules for the camp and access to reproducible instructional activity sheets, handouts, and posters. You do not need to have specialized knowledge about studies of the future to conduct this camp.

**Vicki Stein** is an educator of gifted students. She is program director for Future Problem Solving International, Melbourne, Florida, USA

## Managing Personal Knowledge for the Creative Class Economy





future sectors: Commerce, Humanity

This poster introduces an innovative approach to Personal Knowledge Management (PKM) with a focus on supporting lifelong learning, resourcefulness, creativity, and teamwork of individuals throughout their academic and professional life and their role as contributors and beneficiaries of organizational performance. The systemin-progress adopts the concept of memes (Dawkins) and business genes (Koch) to keep one's recorded human capital relevant and open to accommodate new intellectual challenges. The heart of the system can be conceived as an eight-phase-process,

which the poster portrays and explains based on Boisot's three-dimensional I-Space model.

Ulrich Schmitt is establishing an enterprise for Educational Services and Personal Knowledge Management Solutions in Southern Africa. His professional background covers eight years as IT and management consultant in London and Basel, eight years as professor and vice president at two independent universities in Germany, and the recent eight years as vice rector at the Polytechnic of Namibia and dean of the School of Graduate Studies at the University of Botswana. Gabarone, Botswana

#### **Perspectives: Conflict versus** Agreement





future sectors: Humanity, Futuring

The value of scoring from at least two different perspectives will be displayed by looking at two different issues, including youth drug use. While focusing on conflicts in the scoring from different points of view, the session will also highlight the surprisingly high percentage of agreement on issues that are often seen as highly controversial.

James W. Schreier, PhD, is a management consultant and the director of training for Joel Barker's Strategic Exploration Tools. He's worked with the Implications Wheel® for over 12 years, serving as the master trainer, and developing new applications and methodologies for evaluating the results of the process. West Allis, Wisconsin, USA

#### Porta-School™ Education Anytime, Anywhere



future sector: Humanity

Porta School is new patented concept that allows students around the world to access basic education, high school diploma programs, or career technical courses via a solar powered hand held tablet anywhere in the world, with or without electricity and internet connectivity.

Let us show you how this was accomplished and the ways in which it can be applied to change the future of education and of people around the world.



Diana Muir is CEO of the World Virtual School, a pioneer in online education of more than 17 years. A former student

in Future Studies at the University Of Houston, Clear Lake, she is widely published, East Moline, Illinois, USA

#### **Social Media as Rumor Disseminators**



future sector: Governance

Social media such as Facebook and Twitter serve as conduits for everyday communications; they also play special roles in times of crisis. This poster will explore specific cases involving the spread of problematic emergency and medical information, as well as less-critical examples of rumor proliferation. It will analyze the power of social media, using various social network graphs, and demonstrate the need for health officials and emergency personnel to monitor various social media platforms for bad information. It also explores the potential for corporate sabotage, terrorism, and other such harmful behavior using rumor dissemination. Finally, the poster outlines some of the current and planned efforts of government agencies and medical institutions to monitor for rumors, along with related media literacy efforts targeted toward specific populations.

Jo Ann Oravec is an associate professor in the College of Business and Economics at the University of Wisconsin at Whitewater. She taught

computer information systems and public policy at Baruch College of the City University of New York and also taught in the School of Business and the Computer Sciences Department at UW-Madison, as well as at Ball State University. In the 1990s, she chaired the Privacy Council of the State of Wisconsin, the nation's first state-level council dealing with information technology and privacy issues. She has written books (including Virtual Individuals, Virtual Groups: Human Dimensions of Groupware and Computer Networking, Cambridge University Press) and dozens of articles on computing, emerging technologies, and publicpolicy issues. Whitewater, Wisconsin, USA

#### **Unemployment Crisis and the Lost Generation**





future sectors: Commerce, Governance

Gross national happiness (GNH) is an idea that was introduced by King Jigme Singye Wangchuk of Bhutan as an alternative to GDP. Several countries have already developed or are in the process of developing such wellbeing policies since then.

However, the expansion and recession of economic cycles continue to affect the happiness, satisfaction, and well-being of societies. After the recent global financial storm, many people pay close attention to some emerging issues such as inflation, unemployment and social policies. Now, the group of unemployed persons aged between 15 and 24 (or NEET, "not in education, employment or training"), is large, with nearly 75 million worldwide. This poster session explores future prospects for this so-called Lost Generation.

Yu-Ying Teng is a lecturer at the Department of International Business, College of Business and Management, Tamkang University, Taipei, Taiwan

# **Sunday, July 21, 2013**

7:30-8:45 a.m.

#### **Religious Futurists Meeting**



future sector: Humanity

Would you like to meet other futurists who are helping their churches, temples, mosques, or ministries lead from the future, not just the past? Religious Futurists first gathered at the World Future Society's conference in 1980. At WorldFuture 2013, we will again have an open gathering for anyone who serves at the intersection of spirituality and futures awareness, either as volunteers or as full-time leaders. Participants will meet each other and share ideas on the best practices of foresight within spiritual movements.

This 75-minute meeting is being hosted by the World Network of Religious Futurists, www.wnrf.org

9:00-10:30 a.m.

#### **Best of Houston Futures**



future sector: Futuring

This session highlights the best student products from the award-winning graduate program in futures studies at the University of Houston. The session will include the best essays, forecasts, scenarios, and plans from the next generation of professional futurists.

## Participants will leave this session with an understanding of:

- The students' view of topics that will be shaping the future.
- How futuring is developing in the business world today.



**Peter C. Bishop** is an associate professor of Strategic Foresight and director of the graduate program in Futures Stud-

ies at the University of Houston. He is co-author of *Thinking about the Future: Guidelines for Strategic Foresight* (2007) and *Teaching about the Future: The Basics of Foresight Education* (2012), Houston, Texas, USA

**Student participants** to be announced

## Cultural Shifts Among Global Youth: Part IV



future sector: Humanity

For the past three years, Erica Orange and Jared Weiner have covered a wide-ranging list of trends as it pertains to the future of global youth. Based on the popularity of these sessions, they are returning to do a Part IV. At the 2012 Toronto conference, they discussed their framework for the eight growth areas of the emerging economy, and how social, technological, economic, and demographic trends within each of those eight growth areas will greatly impact the future of global youth. Join them again this year for an update of how trends within those growth areas have evolved, along with a discussion of several other hot-button issues set to impact the future of young people around the world.

## Participants will leave the session with an understanding of:

 Changing trends and how new strategies will be needed to meet the challenges these changes will create.





Erica Orange and Jared Weiner are both vice presidents of

Weiner, Edrich, Brown, Inc., one of the world's leading futurist consulting firms. Erica and Jared sit on several boards, strategically advising groups about the importance of future trends, New York, New York, USA

## Homeland Security: Preparing for the Unknown





**future sectors:** Governance, Sci/Tech

How do you model local and global communities using highly sophisticated online simulations so that new ideas and policies can be piloted in virtual space before being implemented in the real world?

Preparing responders to work within a rapidly evolving, diverse, and multi-jurisdictional environment—with limited or quickly changing situational understanding—is a major challenge. Since actual emergencies are rare, maximizing preparedness requires a continuous cycle of activities, from pre-event planning and equipping, to training and exercises, to evaluation.

The U.S. Department of Homeland Security (DHS) and the Federal Emergency Management Agency FEMA are working to enhance the ability of the emergency management community to apply science-based tools to their activities. By creating a collaboration environment that allows linking of "best-in-class" modeling and simulation tools and underlying data, the aim is to decrease the time and cost needed to train for, analyze, and respond to real or potential incidents—while increasing preparedness effectiveness.

### Participants will leave this session with an understanding of:

- How DHS and FEMA are working to decrease the time and cost needed to train responders and increase preparedness effectiveness.
- How FEMA ensures a scientific grounding for exercises and other emergency management activities, while enabling a dynamic view of fast-moving events that allows for analysis of the "what if" trade-offs that are so crucial to effective response during an actual event.

**Christopher Stone** is CEO of Constellation Software Engineering (CSE), Lanham, Maryland, USA

Jalal Mapar is the division director at the Department of Homeland Security's Science and Technology Directorate Infrastructure Protection and Disaster Management Division (IDD) within its Advanced Research Projects Agency, Washington, D.C., USA

**Justin Legary** is the section chief of the Federal Emergency Management Agency's National Exercise and Simulation Center (NESC), Washington, D.C., USA

### Natural Foresight: Four Steps to a Futures Culture



future sector: Futuring

As more and more companies begin to recognize the importance of foresight and futures thinking in their increasingly complex organizations, there has been a strong call for tools and methods that can seamlessly integrate into their current processes and corporate cultures. Too often, companies have found it difficult to implement strategic foresight because of a lack of practical applicability and an overly academic approach.

To overcome this implementation hurdle, Kedge has created a four-step process (Explore, Discover, Map, and Create) that mimics natural growth curves. By presenting the critical skill set of futuring through more organic approaches that echo those found in product development and business planning, foresight can be more readily adopted. Corporate foresight practitioners will be exposed to a straightforward, action-based approach to building a foresight competency in their organization.

The Kedge Natural Foresight Method includes foresight tools like environmental scanning, assumption/bias modeling, and scenario development, organized in a straightforward, adaptable approach that has been successfully implemented in large, multinational firms.

### Participants will leave this session with an understanding of:

- How a practical foresight approach that mimics natural growth curves can be seamlessly integrated into their existing strategic processes and corporate culture.
- How the Kedge approach integrates key strategic foresight tools in an adaptable toolkit with a bias towards action.
- How this approach can work for them, demonstrated through actual case study examples.

**Yvette Montero Salvatico** has over 15 years of corporate experience with large, multinational firms such as Kimberly-Clark and the Walt Disney Company, Kissimmee, Florida, USA

Frank Spencer is founder of Kedge. For five years, he has been a leader-ship coach and developer with entrepreneurs, social communities, networking initiatives, and SMEs, helping them in areas such as development, innovation, and networking, Savannah, Georgia, USA

### Power of Campuses in a Digital World



future sector: Humanity

If the twentieth-century campus

was a pastoral college town, the twenty-first is located in the urban core, a hybrid of real and digital worlds. The vertical campus engages communities, generates economic prosperity, and becomes a central element of thriving cities. The vertical campus is very different than its rural counterpart. The urban college's campus is the city street. The urban fabric defines and connects the isolated high-rises. Twenty-second-century campuses will become incubators of innovation and learning by doing.

Emerging futures can be found globally in design build, well-being, and governance models that integrate education, work, and lifestyles.

### Participants will leave this session with an understanding of:

- Future higher-education environments as energy producers and incubators of ideas and economics.
- How future cities will be shaped by integrated vertical education networks, cutting-edge locations that are exploring future models, and visions that vault universities into valued urban places.



**Cindy Frewen** is board chair of APF, architect, founder of Frewen Architects, and adjunct professor of strategic foresight

at University of Houston Futures Studies graduate program, Leawood, Kansas, USA

**David Broz** is education and culture practice leader for Gensler, a global architecture and planning firm, Chicago, Illinois, USA

### The Promise and Unintended Consequences of Technology



future sector: Sci/Tech

Accelerating technological developments are creating unprecedented levels of change for the future in all aspects of human activity. Change, combined with the ensuing chaos that many times follows, is now the norm.

Unfortunately, in responding to change, individuals and organizations in both the private and public sectors tend to be reactive, rather than proactive, particularly in visioning future scenarios that integrate both the promise and the unintended consequences of technology. For example, with the possibility of driverless trucks dominating the roads in about 10 years, is anyone prepared for the unintended consequences that the new technology will create?

This technology offers the promise of cost reductions and increases in safety, effectiveness, and efficiencies in the transportation of goods and products. But at the same time, how many truck drivers will lose their jobs? How many companies that support the current trucking infrastructure will disappear? This session will examine this type of predicament.

#### Participants will leave this session with an understanding of:

- The unanticipated consequences of accelerating change and how future visioning could help create an intended future.
- · How to investigate the resulting chaos of past technologies and explore examples of future technologies currently in field trials.



Rodney Hill is a professor in the Department of Architecture at Texas A&M University, College Station, Texas, USA



Jorge Vanegas is dean of the College of Architecture at Texas A&M University, College Station, Texas, USA

### **Rival Universities Collaborate To Advance Student** Entrepreneurship

\$ future sector: Commerce

An unprecedented collaboration between The University of Texas-Austin (UT) and Texas A&M University-College Station (TAMU) is designed to support and advance student entrepreneurship, innovation, and collaboration within our state and beyond. In September, TAMU launched a studentcentric, student-managed initiative on campus that is open to all majors, all classifications. Called Startup Aggieland, the new student business accelerator and eLab serves 50,000+ TAMU students.

UT students assisted TAMU students during the planning phase because UT already has a faculty-managed student business incubator off-campus. UT's Student Government just legislated establishment of the Longhorn Entrepreneurship Agency (LEA), a long-term initiative designed to serve as a support system for UT's 51,000+ student entrepreneurship community.

The panel will explain how entrepreneurial students at both universities are collaborating on student job creation and shared student programming, plus formation of a collegiate eNetwork.

### Participants will leave this session with an understanding of:

- · How university students overcome artificial, administrative constraints and traditional interpersonal limitations to collaborate on achievement of the shared UT & TAMU student objectives of creating value and jobs through student start-up ventures and development of innovative technology in order to accomplish a common student vision for the opportunity to define one's own future.
- · What is involved in establishing a collegiate network of student entrepreneurs and mentors, both formal and informal, to spur statewide economic development at the velocity necessary to achieve global competitiveness and leadership in innovation.

Shelly Brenckman is a former engineering major, now business major. Employed by Aggie Angel Network, and also as a student worker in Startup Aggieland, College Station, Texas, USA

Nick Spiller Nick is an English major. Mr. Spiller has who has launched two start-ups in Austin as a student and created the successful UT Entrepreneurship Week, Austin, Texas, USA

#### What Future Awaits for **Europe? Avoiding Ambiguity!**





future sectors: Gover-nance, Commerce

The European Union was designed to avoid hostility and wars and to promote discussions and negotiations over strength and domination. But today Europe lacks hope and focus in a growing identity crisis. Where is the dream that the founders saw?

After the Second World War, leaders like Jean Monet were convinced that we must act to stop the millions of deaths and destruction of the European continent. A "Coal & Steel" deal among a restricted group of countries was a timid start for actors who were enemies not long before. But step by step, the collaboration was extended to more countries and the nucleus of six and has now reached 27. Jacques Delors, chairman of the Committee for the Study of Economic and Monetary Union, wanted to centralize power in Brussels, but ambiguity arose between federalism and range of nations, which has yet to be solved. Then came the unsatisfactory Maastricht and Lisbon agreements, plus the euro-which was a creation of technocrats and did not consider the realities of local economies.

The euro eased exchange between European states, but performance of each economy was very different, with different social legislation. It became impossible for countries to adjust: The northern countries are serious and cautious about budgets while

southern countries are not. Even though many countries desperately would like to join the EU, their institutions are obsolete and incompatible. The United Kingdom is happy to be playing both for and against the EU, which remains in crisis. It is time to believe in the Future of Europe.

#### Participants will leave this session with a better understand of:

· How the leaders are attempting to clarify the future of this potential utopia.



Ramez Naam (left) mingles during the WorldFuture 2012 opening reception. He will give the Sunday keynote luncheon presentation in Chicago. See page 41.



Mylena Pierremont is a board member of the World Future Society and president of Ming Pai Consulting BV, Amster-

dam, The Netherlands



Robert Salmon is a member of the Global Advisory Council, World Future Society; former vice president, L'Oreal;

and author, Valais, Switzerland

Annette Nijs is executive director of the Global Initiative, and a macroeconomist China Europe International Business School (CEIBS), Amsterdam, The Netherlands



Carine De Meyere is a social entrepreneur with a special focus on education and talent development, Geneva, Switzerland



Christopher H. Cordey is CEO of Futuratinow.com, Versoix, Switzerland

#### What Kind of Future Do We **Need: Reflections from China**





future sectors: Futuring, Humanity

Even as growing numbers of global citizens come to recognize the need for sustainability, others, unconcerned about threats to humanity's long-term survival, continue to pursue narrow, short-term interests that leave the world increasingly dirty, chaotic, and vulnerable.

This session will explore exactly what knowledge, skills, and values futurists should possess to fairly and responsibly design future visions for the people of our planet. The presenters will offer examples and warnings drawn from projects currently under way in China and the West to formulate and bring to reality communities where people of widely differing cultures, beliefs, and values are able to co-exist and attain lasting happiness.

### Participants will leave this session with an understanding of:

- · The essence of sustainable development.
- · The importance of supplementing technological know-how with an

- understanding of those factors that led to the rise and fall of previous civilizations.
- · How it is possible to combine Western initiative and personal responsibility with Eastern ideals of community loyalty and oneness with nature.
- · The need for uniting ancient wisdom with the latest achievements of research in natural science to formulate scenarios and envision futures that appeal to a diverse citizenry and are able to inspire widespread public support.



**Ken Hunter** (moderator) is chair of the World Future Society Board, senior fellow, Maryland China Initiative, Univer-

sity of Maryland, College Park, Maryland USA



**Zhouying Jin** is director, Center for Technology Innovation and Strategic Studies, Chinese Academy of Social Sciences,

Beijing, China



**Eric Meade** (respondent), a board member of the World Future Society, is vice president and senior futurist at the Institute

for Alternative Futures and serves on the board of directors of Counterpart International, Alexandria, Virginia, USA



**Riel Miller** (respondent) currently works for the directorates of economics, OECD; he is a former senior manager of On-

tario public service (Ministry of Finance, Universities, and Industry) and is the founder of *xperidox*, Paris, France, and Toronto, Ontario, Canada

#### Young Professionals for Community Transformation



future sector: Governance

We live in a time of true transformation, when older local leadership struggles to understand that traditional experience and traditional knowledge no longer provide the templates and skills necessary to prepare for a world that is in constant change. It is becoming more and more evident that young leaders are needed to help local communities prepare for a different kind of future.

With this in mind, the World Future Society and the Center for Communities of the Future are pleased to announce the creation of a self-organizing national network of young professionals under 45 who are developing the knowledge and skills of "comprehensive community transformation." The intent of this network is to build "capacities for transformation" and to create interlocking networks of young professionals who have skills and understanding to utilize "futures thinking and transformational action" to prepare local areas for a different kind of future that is increasingly fast-paced, interconnected and complex.



Keep connected during WorldFuture 2013: The session rooms will feature complimentary Wi-Fi.

# Participants will leave this session with an understanding of:

- The use of the ideas of "comprehensive community transformation" to insure healthy communities in the future.
- How interlocking networks of people, ideas and processes can be designed and implemented effectively.
- How to utilize systemic thinking and action for the future vitality and sustainability of communities.



**Rick Smyre** is president, Center for Communities of the Future, Gastonia, North Carolina, USA



**Nicole Garzino** is executive director of the Center for Photographic Art. As a consultant, she leads transformative planning

and program management for nonprof-

its, with a special emphasis in cultural organizations, creative projects, and grassroots start-ups, Salinas, California, USA



**Eduardo Millet** is vice president of business development, McAllen Chamber of Commerce. He is pursuing his PhD in

Local Management at the University of Granada, McAllen, Texas, USA



**Wade A. Den Hartog** is director of affiliates and charitable partners Community Foundation of Greater Des Moines. He

works with affiliates promoting philanthropy in counties and communities throughout the state. He also assists corporate donors, nonprofit organizations, and professional advisors with gift transactions and planned giving, Sheldon, Iowa, USA

#### 11:00 a.m.-12:00 noon

#### **22nd Century Lecture Series**

#### Learning and Creativity in 2100



future sector: Humanity

Because everything a person does is counted and recorded, there is no privacy, nor any need for it. Indeed, the ages of privacy and privacy rights are regarded as ridiculous wastes of human and other resources.

Learning is achieved through a system of bartering one's mistake quotients (MQs). When people are brought to life, they are granted a number of mistakes to use throughout their learning cycles. The more they risk, learn, and apply the learning, the more they can increase their MQ for which there is a black market trade.

Communities of risk assessors and success prognosticators time travel to assess the true costs and rewards of new initiatives prior to their implementation. In 2100, there is a global competition for the algorithm that correctly can predict the future.

The relationship between light, sound frequencies, and mood is well understood and practiced. In wealthy nations, each home and vehicle is outfitted with a series of colored lenses that can be manually operated or set to run automatically as mood influencers and intelligence/creativity enhancers.

Light boxes begin to appear in shopping malls that immediately heal emotional trauma not brought about by poor nutrition. Practicing creative arts amateurs and professionals protest, wanting to go back to the Golden Age of productive angst.



**Marci Segal** is president of creativityland Inc., Toronto. She strives to free people's thinking so they can create exciting new

futures. She does this through blog-



Futurists: BetaLaunch participant Anastasia Kilani (Cyberhero League) gets ready for her close-up.

ging, consulting, speaking, and writing. Her areas of expertise include creativity, innovation, and psychological type, with specific focus on people, methods, processes, and environments, Toronto, Ontario, Canada



**Megan Mitchell** is director of Happen North America, an insight-based innovation company and is also program

director for York University's Schulich's Centre of Excellence in Innovation. She advocates soaking up every opportunity to grow and believes we are all creative; and her passion is helping people discover their unique gifts and ways of contributing for greater business success and personal fulfillment, Toronto, Ontario, Canada

### A Monetary System for the 22nd Century



\$ future sector: Commerce

We may want to envision a world without money, but it is highly unlikely that such a world will come about. So key questions remain: What will money be like in the year 2100, who will issue it, and who will regulate it? Who will store it, and how it will be used? These are the core components of a monetary system. After a brief examination of the nature of money, we will address all of these issues and then draw some tentative conclusions about what a monetary system for the twenty-second century might look like.



**Stephen Aguilar-Millan** is director of research at the European Futures Observatory, a member

of the World Future

Society Global Advisory Council, a former board member of the Association of Professional Futurists, and president of the WFS Europe Chapter, Ipswich, Suffolk, United Kingdom

### Moving Toward the Predictable Future with Big Data



future sector: Sci/Tech

Computer science, data-mining, and a growing network of sensors and information collection software programs are giving rise to "big data," data sets so enormous that scientists



don't yet know how to manage them. These information treasure chests of data can be use to model future actions with ever-increasing precision.

Predicting aspects of the future is spreading as quickly as the Internet, because they are inexorably linked, thus turning prediction into an equation. In a host of widespread research centers, sensors, software programs, and informational collection devices are plotting ever more detailed forecasts and scenarios.

Computer-aided prediction ranges from potential flu outbreaks to riots to whether two people are compatible. But the mechanical prediction process is similar to what happens when the human brain makes a guess about what's going to happen next—analyzing "sensed" data in the light of memory to extrapolate a pattern.

Drawing from his forthcoming book, *A Future Ever Certain* (Current, 2014), the presenter will discuss the dangerous future of humanity's greatest invention, the future itself.



Patrick Tucker is the deputy editor of THE FUTURIST magazine and content director for the magazine's Web site. He

is also the director of communica-

tions for the World Future Society, Baltimore, Maryland, USA

#### No Limits to Growth



#### future sector: Earth

This presentation will address a range of forecasts, including: the widespread adoption of vertical urban agriculture will enable an area the size of Ireland to provide enough food for 10 billion people. The rewilding of vast areas of the planet will result. Forests and rain forests will re-conquer Europe, China, India, and Brazil. This will absorb 50 gigatons of carbon dioxide a year.

Artificial photosynthesis will absorb  $\mathrm{CO}_2$  1,000 times faster than plant life. Engineers will develop economical ways to extract this  $\mathrm{CO}_2$  and combine it with hydrogen to make artificial petroleum as the feedstock for thousands of useful products (plastics, medicines, cosmetics, etc.).  $\mathrm{CO}_2$  will thus be recycled.

Nanotechnologies will enable the advent of energy-autonomous vehicles and buildings. Cars will be built out of buckypaper, which will also function as a hyper-efficient photovoltaic skin providing electric energy to run the car. Buildings will be outfitted with mini-depolymerization units that will convert human waste, garbage, and trash to gas to provide all the electricity, heating, and cooking the building needs.



**Tsvi Bisk** is director of the Center for Strategic Futurist Thinking and author of two books and over 100 articles and es-

says, Kfar Saba, Israel

### The Wisdom Web: Global Governance in 2100



#### **future sector:** Governance

In 2100, a "wisdom web" of enlightened leaders oversees an inclusive network of global citizens who collaboratively anticipate challenges and formulate visionary goals. Leaders compassionately place each individual in a position where he or she can contribute to those goals. Researchers model local and global communities using highly sophisticated online simulations so that new ideas and policies can be piloted in virtual space before being implemented in the real world. At the dawn of the twentysecond century, a robust understanding of and appreciate for the human experience in all its dimensions has provided for wiser and more compassionate governance.

In this presentation, Institute for Alternative Futures vice president and senior futurist Eric Meade will describe how this future will have come to pass.



**Eric Meade,** a member of the World Future Society board of directors, is vice president and senior futurist at the Institute

for Alternative Futures and serves on the board of directors of Counterpart International, Alexandria, Virginia, USA



KAZ OKADA FOR WES

#### 12:15-1:45 p.m.

#### **Keynote Luncheon**

#### **Innovating Our Way Past Global Crisis**

Humanity is at the peak of its accomplishments and well-being. But we also face the largest challenges we've ever seen: climate change, finite fossil fuels, disappearing fish and forests, dwindling freshwater supplies, and the pressures of meeting the needs of billions rising out of poverty. Against these challenges of a finite planet, our most powerful resource is our ability to innovate to produce new solutions, to replace physical resources that have been depleted, and to multiply the power and effectiveness of the physical resources that remain. To tap into our ability to innovate, however, we must make key changes.

In a whirlwind tour, Ramez Naam dives into the challenges that face us, how we've overcome similar challenges in the past, and the steps we have to take now to maximize our odds of coming out of the twenty-first century richer and better off than when we entered it.



**Ramez Naam** is a computer scientist and author. He's the H.G. Wells Award–winning author of *More Than Human: Embracing the Promise of Biological Enhancement* (Broadway/Random House, 2005). His first novel, *Nexus*—a story about a nanotechnology that links minds and the struggle to control it—was published in December 2012. Ramez

spent 13 years at Microsoft, where he led teams working on e-mail, Web browsing, Internet search, and artificial intelligence. His most recent nonfiction book, on accelerating innovation to overcome environmental and natural resource challenges, is *The Infinite Resource: The Power of Ideas on a Finite Planet* (University Press of New England, March 2013), Seattle, Washington, USA

#### CN2: A Marcom Model for Emerging Markets



future sector: Sci/Tech

Advertising, marketing, and marketing communication programs, which have been developed and used successfully in established Western markets, often don't work in emerging markets. Factors such as culture, technology, interactivity, reciprocity, networks, and channels all combine to prevent the transfer of very successful programs to new commercial centers.

Professor Schultz offers a new approach designed specifically for emerging markets. Termed the "CN2" (Customers, Networks, and Negotiation) model, it is an approach on how to succeed in emerging markets. He presents a system that recognizes the differences and the commonalities in emerging markets and provides all senior managers with a new way to think about, plan, and implement marketing and communication programs in emerging markets-which contain more than 80% of the world's population. Filled with examples and illustrative scenarios, the session will inspire and frighten you in what is coming.

# Participants will leave this session with an understanding of:

 A system that recognizes the differences and the commonalities in emerging markets and provides all senior managers with a new way to think about, plan and implement marketing and communication programs in emerging markets.



**Don Schultz** is a marketing professor at Northwestern University, globally recognized consultant, speaker, and devel-

oper of Integrated Marketing Communications, Chicago, Illinois, USA



Participants get to test the Necomimi brain-wave reading "cat ears" at WorldFuture 2012.

#### From Highly Centralized to Highly Decentralized Society



future sector: Sci/Tech

Modern society depends on centralized food and energy production. But distribution is a critical link, vulnerable to natural disasters, devastating pandemics, war, and other events unlikely in the short term but risky to assume will never happen. Then modern society and many millions of people would be in serious trouble.

Present trends foretell a future in which gardening and farming robots will mitigate the brittleness of the food distribution system by enabling highly localized food production, giving new life to suburban population densities. Such bots would enable people to grow much of their own food, organically or any other way they wish, without significant effort. These veggiebots—which are already beginning to be built—would safeguard communities from disruptions in food distribution.

Solar energy is gradually reaching "grid parity" and will localize elec-

tricity production, as well. Ultimately, people will save money, and modern society will become much more resilient.

# Participants will leave this session with understanding of:

- Trends and examples in "agribots," as well as in solar energy.
- The exciting, positive impacts of these technologies on society that will eventually affect their lives and the lives of their children.



**Daniel Berleant** is a professor, University of Arkansas, author of *The Human Race to the Future: What May Hap-*

pen—and What to Do, Little Rock, Arkansas, USA

# How to Build a Conscious Machine



future sector: Sci/Tech

Military and commercial activities two decades ago have led to a new form of totally self-organizing and conscious artificial intelligence. Herein, its creator reveals the nature and history of this watershed AI development, thereafter considering both the benefits and risks it presents.

#### Participants will leave this session with an understanding of:

• The underlying theory of what is called Conscious Artificial Intelligence (CAI), while learning of both past and future plans to implement it on extremely ambitious computational platforms, at the 100-billion-neuron level and beyond.



Stephen Thaler, PhD, is president and founder of Imagination Engines, a company that has harnessed its self-aware, cre-

ative artificial intelligence to conceptualize myriad products, services, and strategies over the last two decades. Dr. Thaler's CAI has been utilized by major defense companies such as Booz-Allen-Hamilton, Raytheon, Boeing, General Dynamics, General Electric, and Pratt & Whitney, all in the context of world-changing events, St. Charles, Missouri, USA

#### Life Imitates Art: Cyborgs, **Cinema, and Future Scenarios**



future sector: Humanity

The Caves of Lascaux, Blade Runner, World of Warcraft, transhumanist fine art: We rely on art and media to understand the human condition, from power and ownership to love and conflict.

Ray Kurzweil says, "We are the species that creates tools, and those tools expand our reach." But not only do we create tools, we also create stories, and those narratives shape the future. We are in a new renaissance; technologists promise a future of smart machines, but it is artists who envision the human experience in the next horizon.

At a crossroad of utopian and dystopian scenarios where man and machine are intertwined, we rely on creative minds to envision a future we want to inhabit, and create a blueprint for the centuries to come.

The "blueprints for tomorrow" materialize as super realist fine art, science-fiction film, and multiplayer online games, all creative frontiers through which we shape an unknown future.

The visually engaging rich media presentation will examine the role of artists in envisioning the next horizon, from ancient times through to the twenty-second century and beyond, with a deeper look at three contemporary case studies:

- MMORPGs (massive multiplayer online role playing games), exploring group dynamics, relationships, and success in World of Warcraft, based on Ramona Pringle's Avatar Secrets-real world wisdom from virtual worlds.
- · Superrealism and Fine Art, featuring the series Cyborg: The Human Condition by artist Michaele Jordana Berman, whose work is housed in several prestigious permanent collections, including the National Gallery of Canada and Art Bank.
- Science-Fiction Film, exploring a selection of science-fiction films, including Blade Runner and District 9.

#### Participants will leave this session with an understanding of:

- The cyclical relationship of art imitating life, and in turn life imitating art, making art an ideal catalyst for envisioning a sustainable future.
- · How, through creative practices, we see the parallel between man's primordial origins and our evolution as entities in the next horizon.
- · How we can create an inhabitable future by first envisioning it and then reverse engineering it. In this way, art and media are the "blueprints for the future."
- · The importance of interdisciplinar-

ity-art meets technology-in this new Renaissance age.



Ramona Pringle is a new media professor at Ryerson University and a multiplatform producer currently working on Avatar

Secrets and Rdigitalife.com, Toronto, Ontario, Canada

#### The Power of Science Fiction **Narratives To Boldly Go...**





future sectors: Commerce, Futuring

This session will demonstrate that, in this exponentially evolving and disruptive business environment, science fiction narratives can be successfully leveraged to inspire and implement radically disruptive innovation and business strategies. The session will show how science fiction storytelling helps align key stakeholders, creates high levels of engagement and excitement, builds motivation to help overcome inertia and fear of change, and generates genuinely transformative ideas. Two recent case studies with Fortune 500 firms will be shared.

### Participants will leave session with an understanding of:

• The theory and a philosophy of why science fiction narratives are powerful change agents.

**Ari Popper** is the CEO of SciFutures, a creative futures agency that uses SF storytelling to help companies manifest disruptive long-term innovations, Ojai, California, USA

#### **Productivity and the Future of Interest Rates**



\$ | future sector: Commerce

How does productivity affect inflation and interest rates? The speaker will discuss the future of productivity globally and how it impacts interest

rates. He will show how surplus productivity has and will affect everything from the cost of labor, to the evolution of monetary policy, to how we realize our potential as an economy and world community.

### Participants will leave this session with a better understanding of:

 The factors that influence future rates of productivity and interest rates.



**Paul Winghart** is a senior fixed income strategist for a global wealth management company and serves as adjunct profes-

sor of business for Bethel University, St. Paul, Minnesota, USA

#### Rateocracy: When Everyone and Everything Is Rated



\$ future sector: Commerce

Rateocracy, a future in which everyone and everything has a rating, is quickly approaching. Today we rate people, products, restaurants and places in a fragmented way. But, there are strong commercial reasons for a peer-generated, numeric rating system that allows cross-comparison. How will Rateocracy evolve and what are its implications?

How will this impact corporations and organizations? What will life in the Rateocracy era feel like? Come explore these questions in a session built on the outline published in THE FUTURIST and *ResearchWorld* magazines.

# Participants will leave this session with an understanding of:

Current rating systems, developments in this space, Rateocracy scenarios, and future implications.

**Robert Moran** is partner in the Brunswick Group and leads Brunswick Insight in the Americas. He frequently speaks and writes on market research and data-driven decision making, Fairfax, Virginia, USA

### Resurrection: The Disaster in the Tohoku Area in Japan



future sector: Governance

The triple punch of earthquake, tsunami, and the nuclear power plant disaster that Japan suffered on March 11, 2011, will be discussed from the point of view of the complex dynamics of the situation. Dr. Mizuta will examine first the Tohoku earthquake, second the tsunami, and third the Fukushima Nuclear Power Plants.

He will discuss the complexity of the destruction and how the aftermath of the destruction is interrelated with politics, economy, local governments, evacuees, and environmental issues, and will show some designs, planning, and infrastructural solutions that may lead to a better future from a complex dynamics view.

He will show that memes are a key concept for developing a better future for all humankind.

# Participants will leave this session with an understanding of:

- A complex yet basic chain of memes that can create an outlook that may go on beyond disappointment and helplessness.
- How to be able to manage future disasters or come up with a number of innovative ideas for safety and prosperity in the future.



**Kazuo Mizuta** is vice president of the Japan Future Research Center, and professor emeritus, Kyoto Sangyo University,

Kyoto, Japan

#### The Rise of Citizen Science



future sector: Sci/Tech

Thousands worldwide participate

in citizen science projects, from counting backyard birds to searching for extraterrestrial communication. In-person and online, this popular pastime is evolving from hobby to serious science. Uncertain future grant funding, the growing backlog of raw unexamined data, and an emerging scientific philosophy of inclusion trend to a new reliance on these amateur scientists to increasingly assume professional roles. From initiating crowdsourcing ventures through articulating hypotheses, conducting research, interpreting results and anticipating real-world applications, these citizen scientists will provide quality, cost-effective scientific inquiry while democratizing and reinvigorating disciplines once seen as elitist. Collaborating through social media, citizen scientists will evolve from a scattered collection of amateurs to established members of academic and corporate research teams.

Challenges to the primacy of credentialed scientists and the integrity of the scientific process can be mitigated through formalized training provided by local community or technical colleges.

### Participants will leave this session with an understanding of:

- Trends that have created current citizen science projects.
- The use of citizen science in academic and corporate research.
- Anticipates challenges arising from the expansion of "crowdsourced" science.
- The framework for training, credentialing, and management of citizen scientists.

**Kathleen Toerpe** teaches social sciences at Northeast Wisconsin Technical College and is a citizen scientist, Baileys Harbor, Wisconsin, USA

3:30-4:45 p.m.

#### **Closing Plenary**

#### **Confessions of a Corporate Futurist**

Most people laugh when I tell them I am a professional futurist. I don't blame them. I am fully aware it is an unlikely job title with an unusual job description. But once people realize that I am not kidding—that I really am a futurist and not the crystal ball, tarot card, tea leaf reading type futurist—they invariably ask, "Well, how did one become a futurist?" It's not an easy question for me to answer, as I am not even sure how it happened. In this session, I will share my unlikely journey to becoming a corporate futurist and finding the job of my dreams.



**Sheryl Connelly** has worked for Ford Motor Company for 17 years, the last nine of which has been as the Global Consumer Trends and Futuring Manager. As the corporate futurist, she identifies global trends that feed into functions across the entire company, includ-

ing design, product development, and corporate strategy. Prior to joining the trends team, she spent eight years working in a variety of field positions for Ford Division, including wholesaling product to over 140 dealers to assisting in the execution of new franchising agreements.

Before working for Ford, she practiced law. In addition to a Juris Doctorate, she holds a bachelor's degree in finance and an MBA. She teaches design research at the Center for Creative Studies in Detroit, Michigan; has been a guest lecturer at MIT, the University of Michigan, and Wharton School of Business; and has been a featured speaker at TEDX Grand Rapids, Traverse City, and Detroit. Her proudest professional accomplishment occurred when Apple co-founder Steve Wozniak told her that her ability to understand societal trends and the consumer perspective was like that of the late Steve Jobs. She lives in Birmingham, Michigan, USA.

# Monday, July 22, 2013

9:00 a.m.-3:30 p.m.

#### **Professional Members Forum**

#### **Expanding The Futures Community's Core Capabilities**

Last year's professional forum was built on the premise that the futurist community needs to reformat its purposes and find ways to live with ambiguity and uncertainty. This year's forum will examine the capabilities needed to provide actionable knowledge about the future for direction-setting decisions. This forum will inform participants about ways to strengthen our capabilities, with the goal of mobilizing collaboration networks, upgrading methods and tool kits, and integrating foresight into the next generation of institutional governance.

9:00-9:10 a.m.—Welcome and the arrangements for the day by moderator **Tim Mack,** president, World Future Society

9:10-9:30 a.m.-Charge for the Day

**Kenneth Hunter,** chair of the World Future Society Board, will summarize the observations made at last year's forum, suggest a framework for working on the futures community's capabilities at this forum, and begin the discussion of work for the years ahead.

9:30-10:45 a.m.—Reports by Practitioners

We have asked three of our members to share their ideas and experiences to get our work started:

**Robert Moran,** partner, Brunswick Group, Washington, D.C., USA—The Fork in the Road: How Accelerating Change Is Remaking Consumer Insights and Leading to Anticipation or Iteration

**Timothy Persons,** chief scientist, U.S. Government Accountability Office, Washington, D.C., USA—Complex, Adaptive Systems: The Challenge and Opportunity of Big Data

**Sandy Thomas,** director of foresight, Government Office for Science, United Kingdom—The United Kingdom Foresight Program, Flooding and Coastal Defence Project: The Evidence and the Impact

10:45-11:00 a.m.-Break

11:00 a.m.-12:15 p.m.—Respondents and Questions and Comments

**Zhouying Jin,** president, World Future Society China Chapter, Beijing, China

**Marcio de M. Santos,** executive director, Center for Strategic Studies and Management in Science, Technology and Innovation, Brasilia, Brazil

**Fabienne Goux-Baudiment,** director, Progective, Paris, France

**Clement Bezold,** chairman, senior futurist, and founder, Institute for Alternative Futures, Alexandria, Virginia, USA

Open forum

12:15-1:15 p.m.-Buffet Luncheon

1:15-2:15 p.m.—Working Session

Small group discussions of the futures community's capabilities and development and suggestions for action by the community. This is also the time to volunteer to work on the initiatives you and others are proposing.

Rapporteurs for the small group discussions will include **Nancy Donovan**, **Joyce Gioia**, **Tim Mack**, and others. **Lane Jennings**, managing editor of *World Future Review*, will cover these discussions and seek contributions to the journal.

2:15-2:30 p.m.-Break

2:30–3:30 p.m.—Reports from working sessions and ideas from an open forum.

Led by Tim Mack, Ken Hunter, and Zhouying
Jin

Cost: \$115 for Professional Members. You may become a Professional Member of the World Future Society when you register for WorldFuture 2013.

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