

Future in Review 2022 • Feb. 28 – March 4

# Technology Driving a Brighter Future

# Monday, February 28

#### The New Future in Review

9:00am - 10:00am



**Mark Anderson** Pattern Computer Inc. Strategic News Service Strategic News Service CEO



*COO* 

# Solve for Ocean: Technologies Addressing Challenges to the Health of Marine Ecosystems



Aryé Elfenbein Wildtype Co-Founder & CTO



John Delaney University of Washington Professor of Oceanography

9:00am - 10:00am



Moderator: **Berit Anderson** Strategic News Service *COO* 



**Steve Sherman** BioLogiQ Inc. CEO

Our survival as a species depends on the health of marine ecosystems. Meet innovators who are leading the charge to protect the world's oceans. Understand the impacts of deep-sea mining, learn about the sushi of tomorrow, and meet the team transforming urban seas.

#### **Water-Level Critical: Anticipating Changes to Our Most Important Resource**



Peter Wadhams
University of Cambridge
Head of the Polar Ocean
Physics Group,
Department of Applied
Mathematics and
Theoretical Physics



Dahlia Kirschbaum NASA Chief of Hydrological Sciences Laboratory

11:00am - 11:45am



Moderator: Ed Butler BBC Business News Presenter

Explore cutting-edge research on the future of glacial melt, sea-level rise, and the global water supply. From NASA's most advanced sensors and satellites to Cambridge's field expert working on the glaciers of Greenland, hear what's really going on with the planet's most important resource.

15-Minute VIP Breakout: Water-Level Critical: Anticipating Changes to Our Most Important Resource

# **Lunch Break 12:00pm - 1:00pm**

# How to End a Pandemic: A Centerpiece Conversation with Dr. Larry Brilliant

1:00pm - 1:45pm



**Dr. Larry Brilliant**Pandefense Advisors
Founder & CEO and
CNN Consultant



Moderator:
Mark Anderson
Pattern Computer Inc.
Strategic News Service
CEO

Very few people can claim to have been instrumental in the outright eradication of an infectious disease. As the world enters the third year of the novel coronavirus pandemic, Dr. Larry Brilliant provides answers to the most pressing questions on how to end a global pandemic and what comes next.

#### **Tech Canceling Cancer**



Feyi Olopade Ayodele CancerlQ Co-Founder & CEO



Anthony Chang
BAMF Health
Co-Founder & CEO



Emi Gal Ezra Co-Founder & CEO



Moderator: Esther Dyson Wellville CEO

From gene sequencing to AI-enabled MRI and radiation therapy technology, meet the entrepreneurs changing the landscape of cancer for the better.

#### **15-Minute VIP Breakout: Tech Canceling Cancer**

#### 100% Renewable: A How-To Guide for the Grid



Richard Romanowski
eleXsys Energy
Co-Founder &
Executive Director



Joernn Tinnemeyer EnerSys CTO

3:00pm - 3:45pm



Moderator:
Berit Anderson
Strategic News Service
COO

How do we transition the electricity grid to 100% renewable energy? Hear from the entrepreneurs and innovators driving the technology and policy that will make it happen.

15-Minute VIP Breakout: 100% Renewable: A How-To Guide for the Grid

#### The Influence of Biology in Chip Design: A Centerpiece Conversation with Carver Mead



Carver Mead
California Institute of
Technology
Scientist, Engineer &
Professor Emeritus of
Engineering and
Applied Science



Moderator:
Mark Anderson
Pattern Computer Inc.
Strategic News Service
CEO

Ever since helping to launch the age of chips, Carver Mead has dreamed of incorporating bio design into computing. He was right -and now we can.

#### 15-Minute VIP Breakout: The Influence of Biology in Chip Design

#### **Hatty Hour**

5:00pm - 6:00pm

4:00pm - 4:45pm

In the age of Zoom, there's only so much opportunity for personal expression. Pants don't make the cut. So don your preferred topper and join us for "Hatty Hour" - a virtual Happy Hour designed to help you meet your fellow FiRe attendees, connect with FiRe speakers, and generally show off your fabulous hat game. Prizes will be awarded for "Most Original Headpiece" and "Most Futuristic Hat."



# Technology Driving a Brighter Future

# Tuesday, March 1

#### AI in Defense & National Security

9:00am - 9:45am



Angela Sheffield NNSA Sr. Program Mgr., Proliferation Detection; Defense Nuclear Nonproliferation R&D



Moderator Ed Butler BBC Business News Presenter

Angela Sheffield directs the National Nuclear Security Administration's efforts to develop next-gen AI methods and technologies.

Learn more about her work to detect early indicators of illicit nuclear weapons development and reveal insights about the sophistication of existing nuclear programs of other nations.

#### 15-Minute VIP Breakout: AI in Defense & National Security

#### The Role of Cryptocurrency in Cybercrime



John Reed Stark
John Reed Stark
Consulting LLC
President



U.S. DOJ

Director National

Cryptocurrency

Enforcement Team

10:00am - 10:45am



Moderator:
Jody Westby
Global Cyber Risk LLC
CEO

Learn about innovations in the use of cryptocurrency by cybercriminals, the challenges that presents to regulators and law enforcement, the consequences for business, and how to find a path forward.

#### **Workshop: How to Make Accurate Predictions**

11:00am - 12:00pm



**Evan Anderson**INVNT/IP
CEO

To solve novel global issues, we must also be able to see them coming. Join Evan Anderson, INVNT/IP CEO and author of "Theft Nation" and the SNS "Viral Economy" series, in an interactive group workshop focused on honing skills in predictive analysis to better see the future.

# Lunch Break 12:00pm - 1:00pm

#### AI at Exoscale on Global Networks

1:00pm - 1:45pm



Larry Smarr
California Institute for
Telecommunications
and Information
Technology, UCSD
Founding Director



Moderator:
Mark Anderson
Pattern Computer Inc.
Strategic News Service
CEO

The largest AI compute networks in the world today are not being made by Google or AWS. Rather, think Tesla, Starlink, the Pacific Research Platform, and many more.

15-Minute VIP Breakout: Al at Exoscale on Global Networks

#### **Computational Health**



Rajeev Singh Accolade CEO



Mike McSherry Xealth CEO

2:00pm - 2:45pm



Sara Vaezy
Providence Digital
Innovation Group
SVP, Chief of Digital
Digital and Growth Strategy



Moderator: Bill McAleer Voyager Capital Managing Director

Digitization of healthcare is revolutionizing the way we connect patients and care providers. Join top innovators in computational health for a discussion of how the patient experience is evolving and where it goes next.

# Whatever Happened to the Long Boom? 3:00pm - 3:45pm Peter Schwartz Salesforce SVP of Strategic Planning 15-Minute VIP Breakout: Whatever Happened to the Long Boom? Using Machine Learning to Create Visualizations 4:00pm - 4:45pm Chris Johnson SCI Institute, University of Utah Professor

15-Minute VIP Breakout: Data Visualization



# Technology Driving a Brighter Future

# Wednesday, March 2: Advanced AI Day

Brought to you by Pattern Computer



#### **New Pattern Discoveries from Pattern Computer:**

# **A Centerpiece Conversation with Mark Anderson**

9:00am - 9:45am



Moderator: Ed Butler BBC Business News Presenter



Mark Anderson
Pattern Computer Inc.
Strategic News Service
CEO

Five years ago, the BBC's Ed Butler interviewed Mark about his plans for using Pattern Computer to make Pattern Discoveries in many new fields. In this conversation, they will explore those already done and announce new discoveries that promise to change how we do science, with major impacts on healthcare and oncology, mining, manufacturing, new materials, aerospace, and finance.

15-Minute VIP Breakout: New Pattern Discoveries from Pattern Computer

# **Workshop: Driving Innovation Through Pattern Recognition**

10:00am - 11:00am



Mark Anderson
Pattern Computer Inc.
Strategic News Service
CEO



Meg Weber
Entrepreneurship
and Innovation
Program
Head Instructor

Join Mark Anderson, CEO of Pattern Computer and Strategic News Service, for an interactive workshop designed to help leaders in technology, research, and business use key pattern-recognition skills to improve innovation in their organization.

# Lunch Break 12:00pm - 1:00pm

#### **Future of AI in Computational Biology**



Daniel Jacobson
Oak Ridge
National Laboratory
Computational
Systems Biologist



Moderator:
Ben Brown
LBNL,
Deputy Director
of Environmental
Genomics & Systems
Biology

Daniel Jacobson will discuss the development of advanced computational science- and Al-based tools for better understanding the functional relationships -- as well as biosynthesis, signaling, transcriptional, translational, degradation, and kinetic regulatory networks -- at play in biological processes, especially as they pertain to improving the scientific and health enterprises.

15-Minute VIP Breakout: Future of AI in Computational Biology

# **Vision and Intelligence for Safe Autonomous Driving**



Mohan Trivedi
UC San Diego
Director,
Laboratory for
Intelligent and
Safe Automobiles



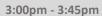
Moderator:
Ken Kreutz-Delgado
Electrical & Computer
Engineering, UCSD
Emeritus Prof. of
Intelligent Systems
& Machine Learning

Mohan Trivedi, PhD, will discuss the importance of nonintrusive and human-centered autonomous driving for enhancing safety and describe lessons learned that are transferable to general domains for intent and behavior predictions of intelligent agents.

2:00pm - 2:45pm

1:00pm - 1:45pm

#### **Advanced Al**





Eduardo Abeliuk TeselaGen Biotechnology Founder



Moderator:
Ben Brown
LBNL
Deputy Director
of Environmental
Genomics & Systems
Biology

Join Eduardo Abeliuk for a conversation about the importance of cloud-based collaborative tools for synthetic biology-based research and the development of advanced bioproducts for medicine, science, and a new bio-based economy.

#### 15-Minute VIP Breakout: Advancd Al

#### **Robotics and Automation in Service of Society and Economic Well-Being**

4:00pm - 4:45pm



Henrik Christensen
Director of Robotics,
Distinguished Professor,
U CSD & Co-Founder,
ROBO Global & Robust.Al



Moderator:
Ken Kreutz-Delgado
Electrical & Computer
Engineering, UCSD
Emeritus Prof. of
Intelligent Systems
& Machine Learning

Prof. Henrik Christensen will discuss the key efforts needed to ensure that the US maintains a leadership position in the research, development, and deployment of robotic and autonomous systems; and strategic technologies critical for national security systems, transportation systems, healthcare systems, and next-generation manufacturing.

15-Minute VIP Breakout: Robotics and Automation in Service of Society and Economic Well-Being

#### **Investor Evening: Pattern Computer Discoveries**

5:00pm - 6:00pm

For all friends and investors of Pattern Computer and all FiRe attendees: You are invited to a reveal of our latest pattern discoveries. An evening highlighted by the announcement of a new Explainable Al technology, the holy grail of all Al.



# Technology Driving a Brighter Future

# Thursday, March 3

Brought to you by BiologiQ

# **BioLogiQ**

#### **Greening Germany's Political Future**

9:00am - 9:45am



Sascha Mueller-Kraenner
Deutsche Umwelthilfe
Executive Director



Richard Teltschik MdB Knut Abraham Senior Foreign and Security Policy Advisor



Moderator: Steven Sokol American Council on Germany President

From foreign affairs to the environment,
Germany is undergoing a deep shift.
Germany after Merkel will help to define the
next era of European leadership. Join top
political minds from the continent's largest
economy in a discussion of the changing
political landscape.

#### 15-Minute VIP Breakout: Greening Germany's Political Future

# **Contagion & Denial**

10:00am - 10:45am



Heidi Larson
The Vaccine
Confidence Project
Director

Heidi Larson will talk about the power of emotions and beliefs in the COVID-19 response. Historic and current inequities breed distrust, which can fuel anxieties and fear around mass vaccination campaigns, while building trust can instill hope, compliance, and social cooperation.

#### **Catalogue Earth: Mapping the Planet's Microbiome**





J. Craig Venter Synthetic Genomics Co-Founder, Chair, CEO, and Co-Chief Scientific Officer



Moderator:
David Ewing Duncan
Arc Fusion CEO;
and Science Writer

The living Earth, like human beings 20 years ago, has never been genetically sequenced. Join legendary geneticist J. Craig Venter as he describes a massive undertaking to categorize the microbes that share our planet and identify the roles they play in shaping life on Earth.

15-Minute VIP Breakout: Mapping the Planet's Microbiome

# Lunch Break 12:00pm - 1:00pm

#### **Defending the Planet from Asteroids and Solar Flares**



**Mario Juric**DiRAC Institute,
UW, *Director* 



Nicola Fox NASA HQ Heliophysics Division Director, Science Mission Directorate



Moderator: John Wells NPR Producer and Host

15-Minute VIP Breakout: Defending the Planet from Asteroids and Solar Flares

#### **Capturing Carbon: Neutral or Negative by 2050**

2:00pm - 2:45pm

1:00pm - 1:45pm



**Grant Canary**DroneSeed
Founder & CEO



Moderator: Andy Himes UW, Director of Collective Impact CLF

When it comes to carbon capture, we're running out of time. Hear from two top minds in capture about the roles that new materials, reforestation, and land conservation can play in helping us build a carbon-neutral (if not negative) society by the year 2050.

#### **Redefining the Cosmos: The Resonance Approach**

3:00pm - 4:00pm



Mark Anderson
Pattern Computer Inc. &
Strategic News Service
CEO

A few months ago, SNS published three new papers on Resonance Theory, suggesting that both Einstein and Hubble were wrong about the Big Bang. Today, even NASA is starting to agree.

# **Building a Real-World Ministry of the Future**

4:00pm - 4:45pm



Kim Stanley Robinson Science-Fiction Author



Moderator: David Brin Futures Unlimited Author, Scientist, and Chief Visionary

Kim Stanley Robinson's latest book, *Ministry* for the Future, explores a world in which a new global governing body is tasked with navigating global climate emergency. Join him and moderator David Brin for a conversation about what it would take to create such a thing and how to go about doing it.

15-Minute VIP Breakout: The Ministry of the Future



# Technology Driving a Brighter Future

# Friday, March 4

#### **Reductive Design & the Power of Less**

9:00am - 9:45am



Amory Lovins
Rocky Mountain Institute
Co-Founder, Chair
Emeritus, and (fmr.)
Chief Scientist



Leidy Klotz
University of Virginia
Copenhaver Associate
Professor

Every day, across challenges big and small, we neglect a basic way to make things better: we don't subtract. Amory Lovins and Leidy Klotz discuss the science of less and how we can use it to revolutionize our products and businesses and shift how we move through the world.

15-Minute VIP Breakout: Reductive Design & the Power of Less

#### **China & Disengagement**

10:00am - 10:45am



Josh Rogin The Washington Post Columnist



Moderator: Evan Anderson INVNT/IP CEO

Now, with an ascendant autocrat and an increasingly aggressive stance, China is waging a hybrid war against those who would oppose its vision of the future. Global democracies must stem the tide of corporate capture, economic warfare, and influence campaigns emanating from Xi Jinping's new China. To do so, an intelligent, strategic policy of disengagement will be necessary. What will it look like?

15-Minute VIP Breakout: China & Disengagement

# **Future Hybrid Warfare Encounters**



**Paul Wolfowitz** Former US Deputy



Moderator **Mark Anderson** Secretary of Defense Pattern Computer Inc. & Strategic News Service CEO

15-Minute VIP Breakout: WAR

# **Closing Wrapup & Comments**

12:00am - 12:45pm

11:00am - 11:45pm



**Mark Anderson** Pattern Computer Inc. & Strategic News Service CEO



**Berit Anderson** Strategic News Service COO

Onward!