### **World Health Strategy**



### Edited by Renata G. Bushko

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### Introduction and Overview Renata Bushko

# 46 Big Questions. New World Health Strategy: What fundamental changes and dramatic shifts do we need to prepare for? Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### How do we treat patients like valued customers? Sanjay Sarma MPH

Managing Partner, Prosperata LLC **Rahul Ghate**Managing Partner, Prosperata LLC

### Can terabytes of new data deepen our knowledge of the state of health care in the Commonwealth of Massachusetts?

### **Sylvia Demetra Hobbs**

Manager of Services and Strategy Massachusetts Center for Health Information and Analysis

### What are novel strategies for enhanced predictive modelling and deep learning in the biosciences?

### Tom Chittenden Ph.D., DPhil

Vice President of Statistical Sciences WuXi NextCODE Genomics Lecturer on Pediatrics , Division of Genetics and Genomics Boston Children's Hospital, Harvard Medical School Visiting Lecturer , Department of Biomedical Engineering Massachusetts Institute of Technology

### Big Data and Health - how can it help you in work and life? Professor Alex (Sandy) Pentland

Author of "Honest Signals" and "Social Physics"
Director, Human Dynamics Group, MIT Media Laboratory
Co-leader the World Economic Forum Big Data and Personal Data initiatives
Most quoted computational scientist in the world

### How can Big Data make a big difference in the end-of-life care? Shari Heath

Vice President, Product Management Medalogix

### How can we build trustworthy, secure and transparent HealthApps?

Urs-Vito Albrecht M.D. MPH Deputy Director (Hannover)/
PI PLRIMedAppLab Peter L. Reichertz Institute for Medical Informatics
University of Braunschweig - Institute of Technology and Hannover Medical
School

### How to cure almost everything in brain disorder with light?

### **Newton Howard DPhil OXON INSERM, PHP Sorbon**

Professor of Computational Neuroscience and Functional Neurosurgery University of Oxford,
Director, Computational Neuroscience Lab
Chairman, Brain Sciences Foundation

### How should we communicate to the public about health technology? Shelagh Maloney BSc, CPHIMS-CA

Vice President, Consumer Health, Communications and Evaluation Services Canada Health Infoway

### How should we honor and build upon Marvin Minsky's work?

### Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy" **Aubrey de Grey Ph.D.** 

Chief Scientific Officer SENS Foundation Author of "Ending Aging"

Joshua Feast MBA

CEO, Cogito Corporation

Glenn Fields M.S.

Principal, Fields Consulting Services, LLC

#### Michael McDonald Dr.PH

Coordinator, Global Health Response and Resilience Alliance Chairman ,Oviar Global Resilience Systems, Inc.

#### **Remarks**

#### Dr. Ray Kurzweil

Inventor, Author, and Computer Scientist Author of "Singularity is Near" and "How to Create a Mind" Recipient of National Medal of Technology National Inventor's Hall of Fame

### Will healthcare be delivered by George Jetson in the future? Nick van Terheyden M.D.

Chief Medical Officer,

Dell Services, Healthcare

### 2016 Future of Health Technology Award Lecture: Can Chinese herb-based medicines heal the immune system and cure allergies?

**Xiu-Min Li M.D., M.S.**, Honoree Future of Health Technology Award 2016 Professor of Pediatrics, Division of Allergy and Immunology Icahn School of Medicine at Mount Sinai, Jaffe Food Allergy Institute Director, Center for Integrative Medicine for Allergies and Wellness Icahn School of Medicine at Mount Sinai

### How can we chart the future for digital health information systems? Gary Kreps Ph.D., FAAHB

University Distinguished Professor, Department of Communication Director, Center for Health and Risk Communication George Mason University

### What are seven secrets to staying young?

### Aubrey de Grey Ph.D.

Chief Scientific Officer SENS Foundation Author of "Ending Aging"

### Why do we age and what can we do about it?

David Sinclair Ph.D.
Professor, Genetics Department
Harvard Medical School

### How can we harness healing power from plants?

### Jing-Ke Weng Ph.D.

Member, Whitehead Institute for Biomedical Research Assistant Professor of Biology, Massachusetts Institute of Technology

### Future of Brain's Health: How can we prevention neural inflammation with Traditional Chinese Herbal Medicine?

### Renna Bushko

Neuroscience Program, Smith College Research Intern, Department of Pediatrics, Icahn School of Medicine at Mount Sinai

### Can we forecast changes in mood and mental health, like we forecast a storm?

#### **Rosalind Picard ScD**

Professor, MIT Media Laboratory, Co-founder & Chief Scientist, Empatica Inc. and Affectiva Inc.

Director, Affective Computing Research Faculty Chair, MIT Mind+Hand+Heart

How can we reduce opioid misuse among chronic pain patients and what is the role of risk assessment and innovative technology?" Robert Jamison Ph.D.

Professor of Anesthesia, Psychiatry, and Physical Medicine and Rehabilitation, Harvard Medical School & Chief Psychologist, Pain Management Center, Brigham and Women's Hospital

### **Future. Computation. Health.**

### Stephen Wolfram Ph.D.

Founder & CEO of Wolfram Research, creator of Mathematica & Wolfram|Alpha and author of A New Kind of Science

### Future Care: How will healthcare look like in 10-20 years?

#### Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### Xing Jijun Ph.D.

Counselor Consul for Science and Technology, Consulate General of P.R. China in New York

### Joseph Kvedar M.D.

Vice President, Connected Health, Partners HealthCare System, Inc. Associate Professor of Dermatology Harvard Medical School

### **Guergana Savova Ph.D.**

Associate Professor, Harvard Medical School and Children's Hospital Informatics Program (CHIP) Boston Childrens Hospital

### What is the healing story of Dr. Xiu-Min Li?

### **Barbara Winston**

President, Bruce Winston Gem Corporation

### **FHTI Award Ceremony**

#### Xiu-Min Li M.D., M.S.

Honoree Future of Health Technology Award 2016
Professor of Pediatrics, Division of Allergy and Immunology
Icahn School of Medicine at Mount Sinai,
Jaffe Food Allergy Institute, Director, Center for Integrative Medicine for Allergies and Wellness, Icahn School of Medicine at Mount Sinai

#### Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### New Book Announcement: Traditional Chinese Medicine, Western Science, and the Fight Against Allergic Disease.

#### **Henry Ehrlich**

Editor asthmaallergieschildren.com Co-author Traditional Chinese Medicine, Western Science, and the Fight Against Allergic Disease.

#### Renata Bushko's Interview with Dr. Xiu-Min Li

**Xiu-Min Li M.D., M.S.**, Honoree FHTI Award 2016 Professor of Pediatrics, Division of Allergy and Immunology Icahn School of Medicine at Mount Sinai **Renata Bushko M.S.** 

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### World Health Strategy: What is the road from Artificial Intelligence to Intelligent Health?

#### Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### Why Minsky's Ideas are Important for Medicine? From Society of Mind to Society of Body

### **Henry Lieberman**

Visiting Scientist MIT Media Laboratory

### What are new innovative offerings to the consumer in the cancer treatment area?

#### Lorraine Gudas Ph.D.

Chairman, Department of Pharmacology, and Revlon Pharmaceutical Professor of Pharmacology and Toxicology, Weill Cornell Medical College of Cornell University Founder, Sveikatal, Inc.

# What would best catalyze 100% renewable energy distributed collectively through intelligent grids globally? Energy, Collective Intelligence, and Health Status Under Climate Change

#### Michael McDonald Dr.PH

Coordinator, Global Health Response and Resilience Alliance Chairman, Oviar Global Resilience Systems, Inc.

### Can we repair a broken brain with movement therapy approach? Hermano Igo Krebs Ph.D.

Principal Research Scientist & Lecturer, MIT Co-founder, Interactive Motion Technologies

### Is a hospital a place? The future of hospital care.

### **Robert Teague M.D.**

Vice President, Medical Transformation Quorum Health Resources

### How can we accelerate formation and success of biotechnology startups?

#### **Albert Di Rienzo**

Panel Moderator

President, CEO & Founder at Radicle Innovation, LLC

### **Adam Greenspan**

Director, Business Incubation University City Science Center, Philadelphia

#### Eric Elenko Ph.D.

**Executive Vice President** 

Pure Tech

### New Book Announcement: Traditional Chinese Medicine, Western Science, and the Fight Against Allergic Disease.

### **Henry Ehrlich**

Editor asthmaallergieschildren.com

Co-author Traditional Chinese Medicine, Western Science, and the Fight Against Allergic Disease.

### What's next in the Application of Nanotechnology-based Molecular Delivery Systems?

### Guillermo Ulises Ruiz Esparza MD, PhD, FRSA

Post-Doctoral Associate

Harvard-MIT Division of Health Sciences and Technology Brigham and Women's Hospital.

### Does your smartphone know more about your mental health than your doctor?

#### Skyler Place Ph.D.

Vice President, Digital Health, Cogito Corporation

### How can Google Glass remotely integrate with microfluidic biosensors and actuators?

#### Yu Shrike Zhang Ph.D.

Instructor of Medicine, Associate Bioengineer Brigham and Women's Hospital, Harvard Medical School Harvard-MIT Division of Health Sciences and Technology Wyss Institute for Biologically Inspired Engineering

### How will fashion industry change healthcare? How will high-tech fashion and wearable technology market impact consumers' health? Will garment be a new health app development platform?

### Renata Bushko M.S.

Founder, Future of Health Technology Institute Editor, "Strategy for the Future of Health" & "World Health Strategy"

### Beauty Technology: When Technology meets Cosmetics Katia Vega Ph.D.

Postdoc Associate & Designer MIT Media Lab

### Are exoskeletons a solution to physical disparity?

### **Ernesto Rodriguez Leal Ph.D.**

Professor in Robotics at Tecnologico de Monterrey, Mexico CEO, WeaRobot

### Can you imagine cities that feel, understand, and take care of your wellbeing?

#### Agnis Stibe Ph.D.

Changing Places Research Group MIT Media Lab

# How can network science be applied for an expanded understanding of large online network information structures and behaviors to modernize public health communication strategies for improved health outcomes?

### **Brittany Seymour, DDS, MPH**

Department of Oral Health Policy and Epidemiology Harvard School of Dental Medicine

### Can herbal flavonoids reduce inflammation? How does Arctigenin isolated from Arctium lappa L. inhibit IgE production?

#### Renna Bushko

Neuroscience Program, Smith College Research Intern, Department of Pediatrics, Icahn School of Medicine at Mount Sinai

### How can we implement personalized positive psychology interventions in the form of interactive journaling?

#### **Sooyeon Jeong**

Research Assistant, Personal Robots Group

### How can we reduce the economic burden of Type 2 Diabetes management through smartphone technology and Big Data?

#### **Todd Reid ScD MBA MPH MSc**

CATCH, Massachusetts General Hospital

MIT Connection Science

#### **Ian Pentland**

Computer Science

Northeastern University

### What is the future of depression prediction based on self-report diary via smartphone applications?

#### Yoshihiko Suhara

MIT Media Lab

Recruit Institute of Technology

### How can 3-D printing help with epithelial wound healing?

#### Luis Alonso Pastor Ph.D.

Research Scientist

at Changing Places, MIT Media Lab

#### Remarks

James Maxwell M.D.

### **How can Art and Science Unite?**

### Wally Gilbert Ph.D.

Nobel Prize, Chemistry

Photographic Artist

### **Christopher MacDonald**

Instructor, Graphic & Web Design

New England Institute of Art

### **Jehan Said**

Graphic Designer

New England Institute of Art

#### **Remarks**

### **Christopher Previte**

**Dean of Academic Affairs** 

The New England Institute of Arts

### Picture Collage - Original Dance Performance Illustrating Ideas in the FHTI Summit

Talented dancer and genius of choreography - Maria Caruso is using dance as a platform to communicate scientific, medical, and educational advances.

#### **Maria Caruso**

Founding Artistic Director, Bodiography

Chair, La Roche College Performing Arts Department

#### Musical Award to Dr. Xiu-Min Li

Shepherd's Song based on a Chinese folk song by Sa Han-Quan by amazing violinist Yuan Mei Xing celebrating 20th performance at FHTI Summits.

## **Yuan Mei Xing** Violin