

**FOR IMMEDIATE RELEASE**

21<sup>st</sup> Future Health Technology Summit® 2019 at MIT, Bartos Theatre – Big Data/AI/Genomics to Uncover Origin of Disease, New Conditions, and New Cures

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FHTI Product Recognitions: Companion™

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**the 21<sup>th</sup> Future of Health Technology Summit®**

**Will Explore New Trajectories for Pharma and Health Industries**

**Driven by Quantum Computing, AI, Big Data, and Connected Drugs To Prevent Major Mental Health Episodes, Build Living Drug Factories, and Predict Results of Clinical Trials**

*The world's leading medical futurist technology conference featuring interviews with pioneers of connection science Alex (Sandy) Pentland and affective computing Rosalind Picard to be held at MIT, Bartos Theatre, Cambridge MA on May 22nd*

**HOPKINTON, Mass., May 20, 2019** – The world's leading scientists and investors in advanced medical technologies will gather at MIT, Bartos Theatre Cambridge, MA on May 22-23, 2019 for the 21<sup>th</sup> Future of Health Technology Summit™ produced by Renata Bushko, futurist and founder of the Future of Health Technology Institute in 1996.

Many of society's biggest technical and health questions will be addressed in a series of 40 short, TED talk-styled presentations. The 2019 FHTI Summit will touch upon all aspects of health systems, including the unprecedented technological revolution in healthcare which is manifesting itself in the convergence of molecular biology, computer and medical science, electrical, mechanical, genetic and biomedical engineering.

The 21<sup>st</sup> Future of Health Technology Summit® – Connected Drugs™ will bring together leaders in industry, government and academia to explore groundbreaking developments at the frontiers of medicine and technology and the role of AI-driven genomics, wearables, nano-sensors, and connection science in shaping tomorrow's healthcare. The Summit will help bring us closer to uncovering the origin of the disease and a fast development of new genetic, neuro-pharmacologic, nanotech-based, virologic, digital, and non-pharmacologic therapies.

“The 2019 FHTI Summit will reimagine the interaction between doctors, patients, drugs and pharmaceutical companies as mediated by AI/Big Data-driven apps, algorithms and devices providing base for a new era of CONNECTED DRUGS.” said Renata Bushko. The Summit will

also address critical AI-driven medical technology investment, legal, and IP frameworks for uncovering the origin of human disease initiation, and rapid discovery of new conditions and diagnostics, as well as digital, herbal, VR, musical, and pharmacological therapeutics in the pursuit of healthier, longer lives.

Pioneer of wearable computing and reality mining, Alex (Sandy) Pentland of MIT Media Lab and World Economic Forum Big Data and Personal Data initiatives will reimagine pharmaceutical industry using insights from connection science and his ground-breaking books "Honest Signals" and "Social Physics" during the much-awaited interview with Renata Bushko titled "From Connection Science to Connected Drugs" on May 22.

Day 2 of the FHTI Summit will be opened by Michael Fenn of Healthcare and Life Sciences Harvard Innovation Labs who will inspire junior scientists with his talk "Bridging the Gap: Healthcare Innovation & Academic-Entrepreneurs". Highly anticipated "Vision for a Sustainable Biocatalyst-based Pharmaceutical Industry" by MIT scientist Jing-Ke Weng of the Whitehead Institute will make us rethink pharmaceutical industry's basic assumptions. Luba Greenwood of Verily (Google Life Sciences) Google will provide "Strategic AI-driven Vision of the Future of Health and Drugs".

Subhrangshu Datta of CompanionMX, Peggy Coddling of Berklee College of Music, and Eran Orr of VRHealth USA Inc. will discuss the skyrocketing market for Nonpharmacologic Digital Therapeutics like behavior monitoring apps, VR, healing music, and sensors (USD 379 billion by 2024 market (Global Market Insights)).

Presentation on a digital way to "Prevent Major Mental Health Episodes" by Sub Datta will include Future of Health Technology Institute Product Recognition for Companion™ system. According to Renata Bushko "Companion™ will help millions of people with anxiety, PTSD, and depression avoid prolonged treatment and potential medication side-effects. Companion™ starts a new bright era in mental health, with personalized, secure and private monitoring to reduce stigma and avoid mental health episodes."

Renowned scientist, Rosalind Picard of MIT, Affectiva® and Empatica® Inc. will provide a vision of emotional AI and affective computing uses in healthcare. Affectiva's Embrace2™ FDA-approved watch for epilepsy management receives 2019 FHTI Product Recognition. "I wear this amazing life saving device. The Embrace has saved my life countless times by calling for help when I could not. Thanks to Empatica I am free to live!" reported a user of Embrace2. According to Renata Bushko "Embrace2™ by Empatica Inc. provides the most precious gift to caregivers and patients alike: the feeling of control over the disease that used to control them."

According to Daniel G. Anderson of MIT and Koch Institute for Integrative Cancer Research, "Living drug factories for in vivo drug production" are the future. Talk on "Cancer Progression: Failure of Resolution of Inflammation" by Dipak Panigrahy of Harvard Medical School will unveil research that may lead to a new approach to prevent cancer recurrence as well as treatment by adding resolvins to existing chemotherapy of targeted therapy. "Future Asthma,

Eczema, and Food Allergy Herbal Medicines” research and development will be addressed by Xiu-Min Li of New York Medical College.

“Molecular NanoSystems and their Applications in Medicine” will be addressed by Guillermo Ulises Ruiz Esparza of Division of Engineering in Medicine, Brigham and Women's Hospital. His team will unveil state-of-the-art nanotechnology-based system for intracellular delivery of genetic material, nanostructured drug delivery preventing postoperative heart adhesions, and nanoparticle drug delivery for polycystic kidney disease.

Ketan Pranjabe of Roche Diagnostics Corp. will share new perspectives on future of drugs development with emphasis on accelerated diagnostic tests and drugs development for infectious diseases while Renna Bushko of Smith College will explore future diagnostics and drugs for neglected tropical diseases. Author of “Ending Aging”, Aubrey de Grey, of SENSE Foundation will address Rejuvenation Drugs while Kristin Knouse of the Whitehead Institute will share her research on learning from liver regeneration to “[Uncover Novel Approaches for Regenerative Medicine.](#)”

“Current medical knowledge is insufficient. Misdiagnosis or lack of diagnosis is common. Late diagnosis, after disease progressed too far, happens too often. Process of developing and testing new medications takes too long, is too expensive and too often results in serious side effects. We pay for this with both suffering and broken budgets.” said Renata Bushko.

This state of affairs may be changed by the use of Big Data analytics, AI, statistics, and quantum computing. Tom Chittenden’s of WuXi NextCODE Genomics lecture on “Statistical Classification of High-throughput Multi-omics Human Cancer Data on Classical and Quantum Computing Architectures” will uncover the unprecedented potential of these technologies to define molecular underpinnings of human disease. It will be followed by a panel on proposing a “New Trajectory for Pharma and Health Industries” with Renata Bushko, Gordon Winston of Inventive Capital, Mahala Burn of bioMerieux, and Haipeng Zhang of Brigham and Women's Hospital. “Future IP and Legal Issues in AI-driven Drug Development” will be covered by George Likourezos with extensive experience as an Intellectual Property counsel at Carter, DeLuca, Farrell & Schmidt LLP.

AI’s use in medicine will be further addressed on May 23 by Adam Yala from MIT who will talk about “Learning about Cancer from Images and Text” followed by Rebekka Burkholz of Harvard T.H. Chan School of Public Health - “Non-invasive Diagnosis of a Rare Heart Disease by Machine Learning”. “Federal and State Data Linkage Efforts to Address the Opioid Crisis” will be presented by Sylvia Demetra Hobbs, of the Massachusetts Center for Health Information and Analysis. Public health issues related to genomics, AI, and patient care will also be discussed by John Quackenbush of Harvard School of Public Health on May 23.

Presentation on “Preventive Genomics Now!” by Robert Green of Genomes2People, Broad Institute and Harvard Medical School will unveil a new personalized precision medicine paradigm. The Future of Stem Cell Engineering will be discussed by Dario Lemos of Harvard Medical School. Su-Ryon Shin of Brigham and Women's Hospital and Yu Shrike Zhang of Harvard Medical School will uncover the Future of 3D Bioprinting and Organs-on-a-chip.

Complete details of the program, which runs from May 22<sup>nd</sup> –May 23<sup>rd</sup> are available at

<http://fhti.org/doc/FHTI2019%20Program.pdf>

FHTI 2019 will be held at the Massachusetts Institute of Technology, Ames St, Cambridge, MA.

**About The Future of Health Technology Institute @FutureofHealth #FHTI2019**

The Future of Health Technology Institute in Hopkinton, Mass., is the leading health technology think-tank dedicated to defining the health technology agenda for the 21st century. The institute was established to identify the most promising technologies to improve the quality of health care and to define promising health technology research areas needed to meet future health challenges. MIT Alumnae, Renata Bushko ([Bushko@fhti.org](mailto:Bushko@fhti.org)) editor of World Health Strategy eBook, has chaired annual Future of Health Technology summits since founding the institute in 1996. These summits engage creative minds from the technology and health fields in envisioning the future of technology for global healthcare and happier, longer lives. For further information, visit [www.fhti.org](http://www.fhti.org) [www.FutureofHealth.org](http://www.FutureofHealth.org). Video from the summit will be available at the FHTI's Future of Health Technology Channel <http://www.youtube.com/user/FutureofHealthTech>

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