

## Summary

Dr. Selanikio is an award-winning physician, epidemiologist, emergency responder, TED speaker, health and technology futurist, and innovator.

An emergency responder and former CDC epidemiologist and outbreak investigator, he served as a consultant epidemiologist to the Linux Foundation, the DC Department of Health, and FEMA for the COVID-19 response in 2020-22. In December 2014 - January 2015, he was the lead physician at the IMC Ebola Treatment Center at Lunsar, Sierra Leone. As an officer of the Public Health Service, Dr. Selanikio served as Chief of Operations for the HHS Secretary's Emergency Command Center after the 9/11 attacks. He has received awards from both his alma maters, Brown University and Haverford College, for his emergency and humanitarian work.

A founding member of the World Health Organization Digital Health Roster of Experts, and named as a “powerful innovator” by Forbes, he is a recipient of both the \$100,000 Lemelson-MIT Award for Sustainable Innovation and the Wall Street Journal Technology Innovation Award for Healthcare for his work in healthcare technology. This work includes the ongoing development of Magpi, the first cloud computing application created for global health purposes, and the first to use “freemium” tiered pricing to address access equity.

Dr. Selanikio is a frequent keynote speaker and consultant in the areas of health technology (including AI, big data, and mobile), disaster response, and the business of healthcare. He has consulted and/or spoken at Davos, Foo Camp, WHO, UNICEF, IFRC, Harvard, MIT, Stanford, Google, DARPA, CNN, Fox News, the Clinton Global Initiative, the Royal Society of Medicine, and for the pharmaceutical and healthcare industry – and has been profiled by the Guardian, Wired, Forbes, TED, The Economist, The Wall Street Journal, Fox News, the BBC, NPR, Information Week, and the Washington Post, among many other publications.

A board-certified pediatrician, Dr. Selanikio continues to practice pediatrics as an attending physician at Georgetown University Hospital. He lives with his wife and son in downtown Washington, DC, USA.

## Contents

Summary	1
Experience	2
Clinical Medical Career and Education	3
Selected Video Presentations	3
Selected Recent Public Presentations	3
Selected Press, Blogs, & Interviews	4
Selected Non-Magpi-Related Awards	4
Selected Magpi-Related Awards	5
Selected Publications	5
Patents	6

## **Experience**

**CEO and co-founder, Magpi (www.magpi.com) – 2003-present**

**Consultant Epidemiologist for COVID-19 Response, The Linux Foundation, March 2020 - 2022**

**Medical Lead, COVID-19 Mass Vaccination Site Assistance Teams, FEMA, March 2021 - April 2022**

**Consultant Epidemiologist for COVID-19 Response, DC Department of Health, March - May 2020**

**World Health Organization Digital Health Roster of Experts – 2019 to present**

**Attending Pediatrician, Georgetown Hospital – 2003-present**

**Advisor to DARPA and to the Chairman of the Joint Chiefs of Staff on Ebola – 2014-2015**

**Board Member, FrontlineSMS – 2012-2015**

Advised leading provider of SMS and other tech services to the international development community

### **CDC Positions 1995 - 2004**

**Senior Technical Advisor, American Red Cross, Washington DC – 2003-2004**

Provided technical expertise on data collection and analysis for public health and humanitarian operations in developing countries, with emphasis on mobile technology.

**Chief of Current Operations , HHS Secretary's Emergency Operations Center, Department of Health and Human Services, Washington, DC – 2001-2004**

Emergency assignment for response to September 11th and anthrax attacks. Provided daily briefs to HHS Secretary. Coordinated information collation and distribution to HHS Secretary from CDC, FDA, FBI and other agencies throughout anthrax emergency.

**Director of Medical Programs / Director of Research, Center of Excellence in Disaster Management & Humanitarian Assistance (a WHO collaborating center), Tripler Army Medical Center, Honolulu HI – 1998-2001**

Responsibilities included oversight of staff of 10 pursuing operational research in fields of refugee health and mass casualty care, including development of systems for mobile nutritional assessment and early warning outbreak recognition, and training and educational materials for US military mass casualty care and response-to-terrorism programs.

**Medical Epidemiologist, US Centers for Disease Control and Prevention (CDC), various locations – 1997-2004**

**Epidemic Intelligence Service Officer, US Centers for Disease Control and Prevention (CDC), Atlanta GA – 1995-1997**

Led environmental outbreak investigations in Haiti and Borneo, post-disaster rapid needs assessments in the Caribbean, and field research in malaria in support of WHO Integrated Management of Childhood Illness (IMCI) program.

## **Clinical Medical Career and Education**

**Attending Pediatrician, Georgetown University Hospital, Washington DC— 2002-present**

DC medical license initially granted 2002. VA medical license initially granted 2004.

**Pediatrician, Mary's Center, Washington DC – Jan 2023 - present**

**Lead Physician, IMC Ebola Treatment Center, Lunsar, Sierra Leone – Dec 2014 - Jan 2015**

**Lead Physician, IRC Field Medical Team, Aceh, Indonesia – Dec 2004 - Jan 2005**

**Pediatric Resident, Emory University Medical School, Atlanta, GA – 1992-95**

**M.D., Brown University School of Medicine, Providence RI – 1988-1992**

**B.A., Haverford College, Haverford PA – 1982-1986**

## **Selected Video Presentations**

[Collaboration and Science clip \(2018\)](#)

[TED \(2013\)](#)

[Ivey Global Health Conference \(2013\)](#)

[Royal Society of Medicine Lecture \(2011\)](#)

[World Economic Forum “Tech for Society” Panel, Davos \(2010\)](#)

[Lemelson-MIT Innovation Prize Lecture \(2009\)](#)

## **Selected Recent Public Presentations**

Keynote at Google Health (San Francisco, 2022): Surviving the Consumerization of Health

Keynote at Optum Annual Clinicians Conference (Palm Springs, 2022): From Healthcare to Selfcare

Keynote at HFMA annual meeting (Denver 2022): The Future of Healthcare

The Ruth B. Sauber Distinguished Alumni Lectureship (Brown University, 2021): Doctor You: How Technology Will Give Us More Health with Less Health Care

Keynote at Portuguese Cardiology Congress (virtual, 2021): Collaboration and Medicine in the Time of COVID

Keynote at AAO Annual Conference (virtual, 2020): Pandemics, Science & Medicine: Challenges, Science, and Medicine, 1918-2020

Keynote at Genentech Annual Meeting (California 2019): Artificial Intelligence and Health

Keynote at Mercy Health Annual Meeting (California 2019): Disruption, Health, and Healthcare

Keynote at Health Research Board of Ireland (Dublin 2018): Artificial Intelligence and Health Research

Presentation at EAPS Paris (Paris 2018): AI, Big Data, and Global Health

Keynote at Bayer MS Conference (Porto 2018): Collaboration in Science and Medicine

Keynote at Bayer Heart Conference (Lisbon 2018): Collaboration in Science and Medicine

Keynote at Biogen HackIT conference (Boston 2018): The Disruption of Healthcare

Keynote at ZS Associates Annual Meeting (Santa Barbara, 2017): Coming Changes to Healthcare

Keynote at Genentech Annual Principals Retreat (Sonoma, 2017): AI and Healthcare

Keynote at CHIME/HIMMS CIO Forum (Orlando, 2017): "The Coming Collapse of the Healthcare System"

Keynote at Pharmaceutical Management Society Association annual conference (Orlando, 2017): "The End of Healthcare? / How Information Technology Will Rapidly Change Healthcare and Increase Health"

Keynote at BeWell Conference (Lisbon, 2016): "Big Data and Healthcare"

Keynote at Orthopedic Research Society Annual Meeting (Orlando, 2016): "Big Data, Healthcare, and Research"

Keynote at Novartis MS Days (Istanbul, 2016): "Big Data and Health"

### **Selected Press, Blogs, & Interviews**

[Coronavirus Journalism: What They Put In, What They Leave Out](#)

[CoronaGeddon 2020: Why Every Map You've Seen of the Outbreak is Wrong](#)

[Consumerization Hits Health, in a Big Way](#)

[CGTN: Fusion of Artificial Intelligence and Healthcare \(2018\)](#)

[Fox Business: Ebola](#)

[NPR: "Death Becomes Disturbingly Routine: Diary of an Ebola Doctor" \(2015\)](#)

[The Guardian \(2013\)](#)

[The Economist \(2011\)](#)

[Voice of America \(2010\)](#)

[Wired \(2010\)](#)

[The Washington Post \(2005\)](#)

### **Selected Non-Maggi-Related Awards**

**Brown University Medical School Ruth Sauber Distinguished Alumni Award — 2020**

**Haverford College Award — 2005**

For "exemplary service to humanity" in responding to the tsunami disaster in Sumatra, Indonesia, in January 2005.

**HHS Secretary's Award for Outstanding Service — 2003**

For response to the terrorist attacks of 2001.

**US Public Health Service Meritorious Service Medal – 2003**

For meritorious service as Chief of Current Operations in the Secretary's Command Center during the anthrax attacks of 2001 and subsequently as the first acting director of the Office of Planning and Emergency Response Coordination.

**US Army Meritorious Service Medal – 2002**

For "meritorious service as director of Public Health and Research, Center of Excellence in Disaster Management and Humanitarian Assistance, Tripler Army Medical Center, Hawaii".

**HHS Secretary's Award for Outstanding Service – 1998**

For response to the Haiti epidemic in 1996.

**CDC Mackel Award – 1997**

For best investigation combining field epidemiology and laboratory work, as co-investigator of renal failure epidemic in Haiti in 1997.

**Selected Magpi-Related Awards**

**ComputerWorld 21st Century Achievement Award - 2012**

For "visionary applications of information technology promoting positive social, economic and educational change".

**FRIDA Award – 2010**

For contributing to the development of the information society in Latin America.

**FastCompany magazine "Social Enterprise of the year" award – 2009**

**Wall Street Journal Award for Technological Innovation in Healthcare – 2009**

For development of the Magpi (nee EpiSurveyor) mobile electronic data collection system.

**Lemelson-MIT \$100,000 Award for Sustainable Innovation – 2009**

For development of the Magpi (nee EpiSurveyor) mobile electronic data collection system.

**Knight News Challenge \$300,000 Award – 2008**

For creation of innovative SMS-based system for distribution of news in developing countries.

**Tech Museum award for Health – 2008**

**Stockholm Challenge: "Best use of ICT for health" – 2008**

For implementation, with WHO, of the Magpi (nee EpiSurveyor) mobile electronic data collection system throughout sub-Saharan Africa.

**Selected Publications**

Selanikio, Joel. "Mobile Electronic Health Surveys and Data Collection: History and Practical Points to Consider." *Global Health Informatics: Principles of EHealth and MHealth to Improve Quality of Care*. Ed. Leo Anthony G. Celi et al. Boston: MIT Press, 2017.

Selanikio, Joel. "Bringing the Silicon Valley Revolution in Technology and Business to Global Health." *Social Entrepreneurship and Innovation: International Case Studies and Practice*. Ed. Ken Banks. London: Kogan Page, 2016.

Selanikio, Joel. "Data-Powered Development." *Rise of the Reluctant Innovator*. Ed. Ken Banks. London: London Publishing Partnership, 2013

Selanikio, Joel. Mobile Phones and the Power of Data Collection, National Geographic Newswatch, 2011, <http://newswatch.nationalgeographic.com/2011/11/17/mobile-phones-and-the-power-of-data-collection/>

Selanikio, Joel. The Invisible Computer Revolution, BBC News, 2008, <http://news.bbc.co.uk/2/hi/technology/7106998.stm>

Smith S, Joshi U, Grabowsky M, Selanikio J, et al. Evaluation of Bednets After 38 Months of Household Use in Northwest Ghana. *Am. J. Trop. Med. Hyg.*, 77(Suppl 6), 2007, pp. 243–248

Grabowsky M, Nobiya T, Selanikio J. Sustained high coverage of insecticide-treated bednets through combined Catch-up and Keep-up strategies. *Trop Med Int Health* 2007, 12 (7) pp 815-22

## **Patents**

**Pharmaceutical Compositions and Methods for Verifying Dosing Compliance (Patent 13/095,834 Pending)**

**Wearable Wireless Electronic Patient Data Communications and Physiological Monitoring Device (Patent 12/208,540)**