



## **Academy of Prosthodontics 2026 Annual Scientific Session The Boca Raton Hotel, Boca Raton, FL | May 27-30, 2026**

### **Program Speaker – Dr. Mark Esposito**

#### **Title**

Artificial Intelligence: The 4th Industrial Revolution

#### **Abstract**

Artificial intelligence is no longer a distant promise but a present force reshaping how healthcare is designed, delivered, and experienced. This keynote addresses why AI is often described as the “fourth industrial revolution” and explores what that means for prosthodontics and dentistry more broadly. It examines how data, algorithms, and new forms of human-machine collaboration are transforming diagnosis, treatment planning, digital workflows, and patient communication. The session highlights both the opportunities and limits of current technologies, with concrete examples of how AI can enhance precision, efficiency, and personalization of care, while emphasizing where clinical judgment and ethical reflection remain irreplaceable. Finally, it considers the skills, mindsets, and organizational choices that will help clinicians and practices thrive in an AI-enabled future, ensuring that this revolution strengthens rather than disrupts the core values of the profession.

#### **Biography**

Dr. Mark Esposito is an internationally recognized expert on the Fourth Industrial Revolution and a leading global thought leader in artificial intelligence. He is affiliated with the World Economic Forum as a member of the Global AI Alliance and the Fostering the Converging Technologies group, contributing to the forefront of AI and technology discussions. Since 2011, Dr. Esposito has been an instructor with Harvard DCE Professional & Executive Development, where he teaches the highly rated program Artificial Intelligence in Business: Creating Value in Machine Learning.

He also serves as a faculty associate at the Berkman Klein Center for Internet and Society at Harvard Law School and the Harvard Kennedy School’s Center for International Development (CID). His roles extend to being a social scientist at the Institute for Quantitative Social Science (IQSS) and the Davis Center for Eurasian Studies at Harvard. Additionally, he leads a seminar on AI and international development at the Harvard Kennedy School for graduate students in policy and public administration.

Previously, Dr. Esposito was an affiliate faculty member and co-leader of the Institutes Council on Microeconomics of Competitiveness at Harvard Business School, working under the mentorship of Professor Michael E. Porter for over a decade. He also served as the Founding Fellow of the Circular Economy Research Center at the Judge Business School, University of Cambridge, where he continues to hold a Senior Associate role.

Dr. Esposito is currently a Professor of Economics and Strategy at Hult International Business School, where he directs the Futures Impact Lab, and an Adjunct Professor of Public Policy at Georgetown University’s McDonough School of Business.

As a public policy practitioner, he advises governments in the Gulf Cooperation Council and Eurasia regions and serves as an appointed fellow at the Mohammed Bin Rashid School of Government for the Government of Dubai.

Dr. Esposito is a co-founder of Nexus FrontierTech, a machine learning research firm, and The Circular Economy Alliance, an EdTech venture. He also co-founded The Chart ThinkTank and The AI Native Foundation, reflecting his commitment to advancing innovation and education in AI and technology.

He is the author or co-author of over 150 publications and 13 books, including two Amazon bestsellers. His recent works include *The Emerging Economies under the Dome of the Fourth Industrial Revolution* (Cambridge University Press, 2022), *The Great Remobilization: Strategies and Designs for a Global Smarter World* (MIT University Press, 2023), and *Digitizing the Emerging Economies* (Cambridge University Press, 2024). His forthcoming books are *Tectonic Shifts: How Technology is Remaking Global Power Dynamics* (Penguin Random House, 2025) and *Becoming AI Native: A Playbook for Businesses* (Routledge, 2025).

Dr. Esposito holds a doctorate from École des Ponts Paris Tech, the world's oldest civil engineering school.