



OREGON PUBLIC BROADCASTING

NANOTECHNOLOGY: THE POWER OF SMALL Program & Episode Descriptions

Nanotechnology could make us safer. It could make our cities greener, our food healthier, and even help us live longer. But these potential advances could also be compromised by the trade-offs that new technology often brings in its wake. When scientists work at 80 thousand times smaller than a human hair, there are great promises ... and critical concerns. NANOTECHNOLOGY: THE POWER OF SMALL is a three-part series of Fred Friendly Socratic Dialogues exploring the societal, personal, ethical and practical implications of advances in nanotechnology. Hosted by John Hockenberry, public radio news anchor and former NBC News Correspondent, the programs ask policymakers, scientists, journalists and community leaders to wrestle with difficult but essential issues that will have an impact on our privacy and security, our health and our environment. Produced by ICAN Productions and Fred Friendly Seminars, Inc. in association with Oregon Public Broadcasting.

Episode 1: Watching Me, Watching You

Nanotechnology will enable easy, ubiquitous and convenient sensor, surveillance and tracking technologies to be employed by almost anyone. Its applications range from keeping track of grandpa on his more befuddled days to tracking teen buying behavior to the identification and background retrieval of potential terrorists as they enter an airport or visit a "critical" part of a major city. With such technologies cheap and available to anyone, the key question is who gets tracked? Who has the right and the authority to engage in such activities? Do we have the right to be informed if we're being watched? And who has access to the information?

Episode 2: Forever Young

Over the next two decades, nanotechnology will enable major advances in our abilities to detect, treat, and prevent disease. Our distinguished panel explores issues raised by these new technologies. How do we prepare for the probable progression of medical practice from disease treatment to prevention and finally to enhancement of the human body? What are the ethical implications of "improving" on humanity and how will that influence how we think about who we are? If we go beyond disease to delay or even subvert the aging process, what are the implications to society and to our understanding of human nature? Who will have access to these new technologies? Should such activities be limited or forbidden?

Episode 3: Clean, Green and Unseen

Nanotechnology seems poised to deliver urgently needed advances in sustainable and clean energy technologies and environmental cleanup. However, there are still uncertainties about the health and environmental impact of the tiny engineered

particles that enable these technologies. How persistent are these particles in the environment? What kinds of interactions do they have with living things, including us? Are our laws and regulations adequate to protect us and protect our environment? With all new technologies and new materials, information is never perfect, but do we have enough knowledge to make sensible decisions? And who gets to decide?