



# Peter Emanuel, Ph.D.

Senior Research Scientist for Bioengineering, Edgewood Chemical Biological Center

Dr. Peter Emanuel is currently the Senior Research Scientist (ST) for BioEngineering at the US Army's Edgewood Chemical and Biological Center. In this role he advises Army leadership on emerging technologies in synthetic biology and bioengineering and exploitation of these new fields for applications that support national defense.

He maintains active research programs focusing on developing a fundamental understanding of the synthesis, directed self-assembly, and hierarchical organization of naturally occurring materials. This understanding is used to engineer new biologically-enabled artificial materials for applications in chemical biological agent detection, protection and remediation.

Previously he served six years as the chief of ECBC's BioSciences Division where he led the biological research program for the nation's premier non-medical research institute for chemical and biological defense. Prior to assuming this role, he served three years in the Bush and Obama administrations as the Assistant Director for Chemical & Biological Countermeasures within the Office of Science and Technology Policy in the Executive Office of the President. There, he managed the chemical and biological defense and medical countermeasures portfolio and coordinated research and development efforts across the federal government. In this position, Dr. Emanuel advocated for the role of science and technology at policy coordinating bodies within the White House and throughout the inter-agency community.

With more than 50 papers and presentations, Dr. Emanuel's research interests have consistently focused on finding practical solutions to real-world problems facing the first responder and military communities. He continues to be active in science and technology policies and their implications for society, and maintains an active role in the coordinating inter-agency efforts in national defense.

Dr. Emanuel received a B.S. in Microbiology from the University of Maryland at College Park in 1988, and a Ph.D. in Molecular and Cellular Biology from Penn State University in 1994.



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