

Principal Investigator: Keith Whitener

Location: NRL (Washington, DC)

Research Description:

Our research is broadly based on the development of new materials and methods for chemical and biological sensing and manipulation. In particular, we focus extensively on both fundamental and applied aspects of 2D materials such as graphene and its chemical derivatives and their interactions with biological and biochemical systems. Currently, we aim to integrate carbon and phosphorus-based nanomaterials with cells and tissues. We also seek to facilitate the applicability of microfabrication techniques to biological systems. The goal of the present research is to develop robust methods for examining and understanding cell-cell interaction and to apply this understanding to advanced tissue engineering, force health protection, and developing chemical and biological warfare countermeasures. We are a highly interdisciplinary team of chemists, materials scientists, biophysicists, and biologists, with a wide variety of capabilities both within our group and across the laboratory, and we seek individuals who will further broaden our expertise.

Contact Information:

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