Featured Technologies

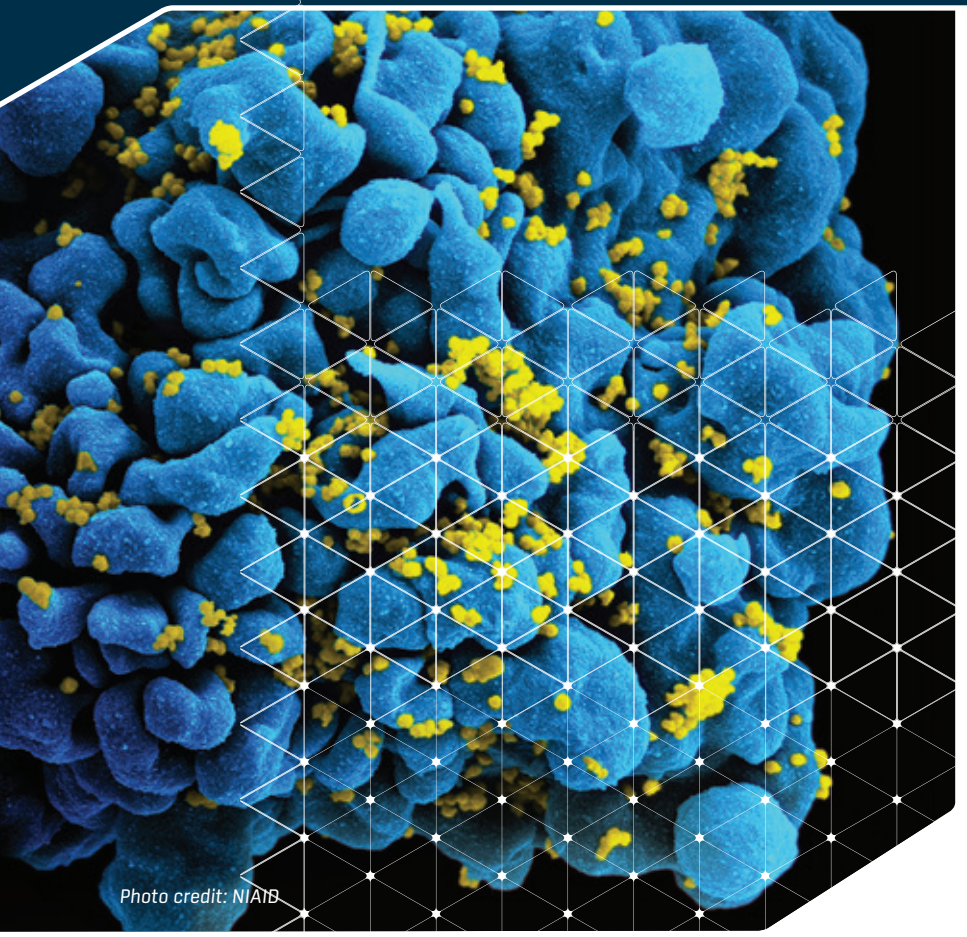

Photo credit: NIAID

Timing of HIV Treatments

By analyzing the blood of almost 100 treated and untreated HIV-infected volunteers, the NIAID Laboratory of Immunoregulation, Immunopathogenesis Section and colleagues have identified previously unknown characteristics of B cells in the context of HIV infection (pictured, HIV-infected T cell [blue]) B cells are the immune system cells that make antibodies to HIV and other pathogens. The findings augment the current understanding of how HIV disease develops and has implications for the timing of treatment.

NIH National Institute of Allergy and Infectious Diseases

Small Stream Mesocosms

The Experimental Stream Facility's eight innovative mesocosms allow EPA researchers to use organisms within artificial structures to simulate natural conditions in a controlled environment. Researchers chart changes to stream ecosystem structure and function that are not otherwise observable in field or lab studies. These mesocosms can revolutionize our understanding of how stream habitats are affected by pollutant loads.

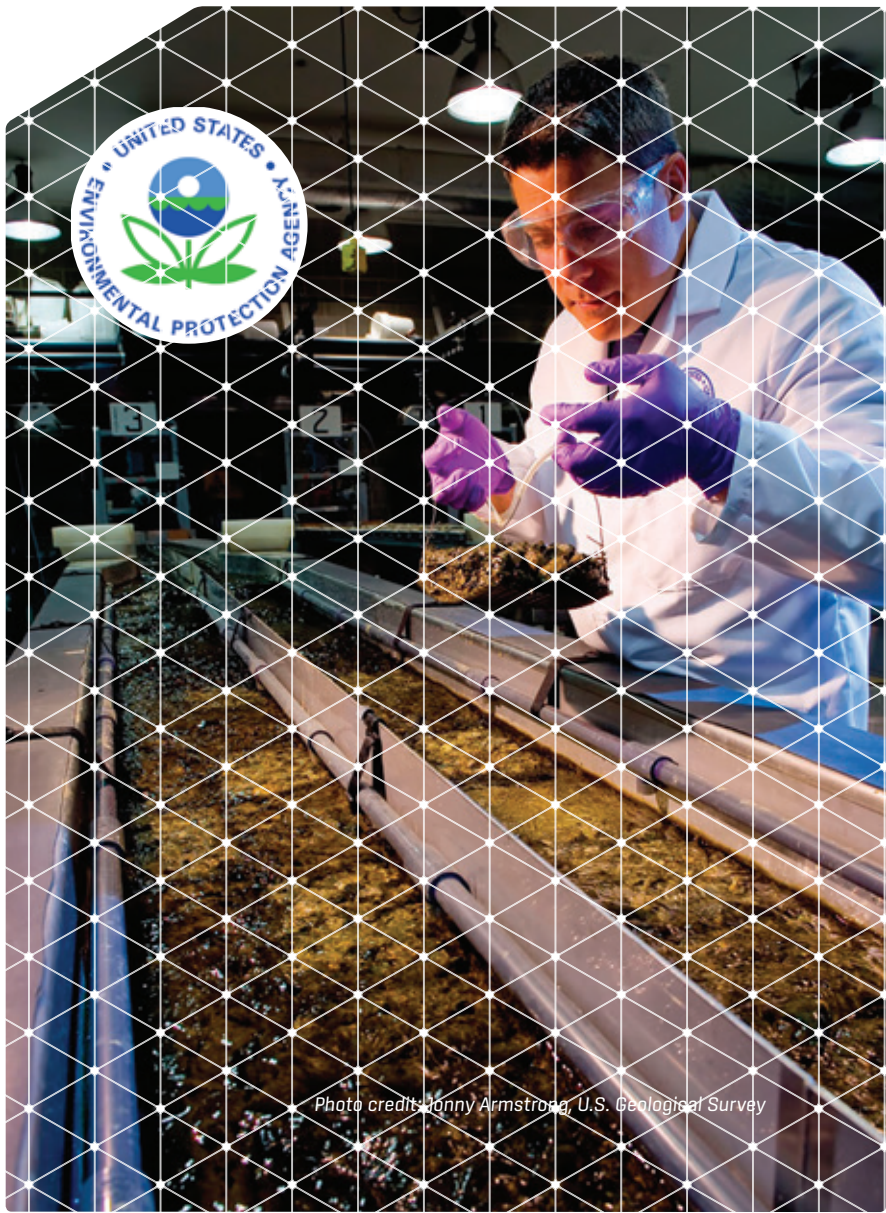

Photo credit: Jonny Armstrong, U.S. Geological Survey

HiCap Absorbents

The combination of high-capacity reusable adsorbents developed at Oak Ridge National Laboratory (ORNL) and high-surface-area fibers developed by Hills, Inc. creates HiCap, a material that can rapidly, selectively, and economically extract valuable dissolved metals from water. (Left: HiCap adsorbent after adsorption of dissolved metals. Right: HiCap adsorbent in water with no dissolved metals)

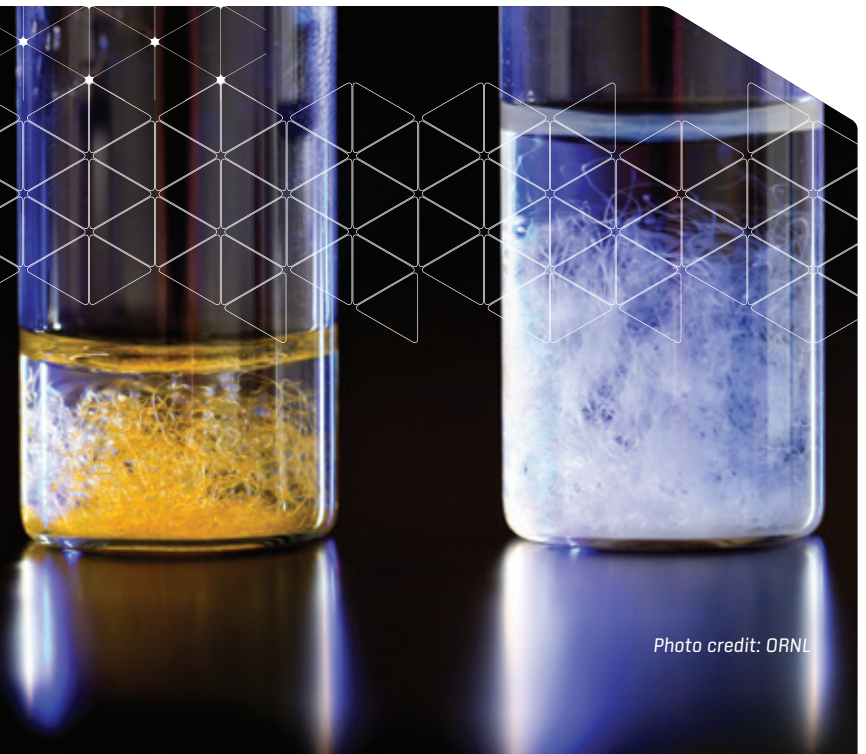

Photo credit: ORNL

OAK RIDGE National Laboratory