

FLORIDA ATLANTIC UNIVERSITY DIVISION OF RESEARCH

Biomedical Scientist Awarded NIH Grant to Study HIV Replication, Develop Novel Therapeutic Drug

Boca Raton, Fla. (Nov. 4, 2015) – Massimo Caputi, Ph.D., associate professor of biomedical science, was recently awarded a \$448,500 grant from NIH to study HIV replication and develop a novel type of therapeutic drug. Caputi's grant titled, "Inhibition of HIV-1 replication by delivery of the SRSF1 RNA Recognition Motifs," builds on his prior HIV research.

The majority of the available drugs target viral proteins. However, because HIV mutates, the virus develops drug resistant-strains. Caputi's lab has identified a cellular factor called SRSF1, which can prevent viral replication.

Caputi's research proposes to create a truncated version of SRSF1 in bacteria, purify it, and deliver it to infected cells using cell-penetrating peptides with high efficiency. This approach will inhibit viral replication ex-vivo in lymphocytes purified from healthy donors and infected by a number of viral strains.