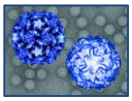
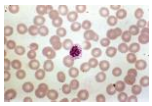
50th Annual Fall MACUB Conference

Saturday, October 28, 2017, 8:30 A.M.-4 P.M.

New Jersey City University, Jersey City, NJ

Conference theme with speakers below:

Mosquitos as Vectors → Zika and Malaria

Vincent Racaniello, Ph.D.

Higgins Professor, Department of Microbiology and Immunology

Columbia University College of Physicians and Surgeons


Vincent Racaniello today (left) and as a Ph.D. student in the laboratory of Peter Palese, Mt.

Dr. Racaniello studies the infection of humans with viruses ranging from Zika to the common cold. Dr. Racaniello completed both his undergraduate and his Ph.D. studies at Cornell University where he studied genetic reassortment of influenza virus. As a post-doctoral fellow in David Baltimore's laboratory at MIT (1979–1982), Racaniello used recombinant DNA technology to clone and sequence the genome of the small RNA animal virus poliovirus. He produced the first infectious clone of an animal RNA virus, which helped to greatly advance the field of modern virology.

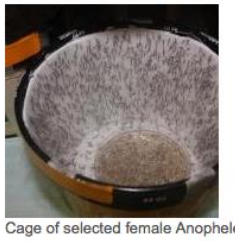
With the global decline of poliovirus, Racaniello's lab has taken a particular interest in Zika virus. Racaniello's virology blog and podcasts *This Week in Virology*, help scientists and non-scientists alike learn more about viruses. He is a co-author of *Principles of Virology*, a textbook used by many students.

Ana Rodriguez, Ph.D.

Associate Professor, Department of Microbiology

Co-Director, Anopheles Insectary

New York University Medical Center

Cage of selected female Anopheles mosquitoes

Dr. Rodriguez's lab studies two different parasites, Plasmodium, which causes Malaria, and *Trypanosoma cruzi*, which causes Chagas disease. Malaria is a devastating disease that causes about 400,000 deaths per year, mainly among children in Africa. There is an urgent need for new strategies to control malaria, but there is a lack of detailed knowledge of the basic biological processes of Plasmodium, that would allow faster development of anti-malaria drugs and vaccines. A main interest of her laboratory is the study of malaria-induced inflammatory pathology and its implications in the pathology of disease, including cerebral malaria and severe anemia. The laboratory is attempting to develop effective drugs against Chagas Disease. In collaboration with GSK, her lab team has performed high through-put screenings of intracellular *Trypanosoma cruzi*, to find compounds with anti-trypanosomal activities. Selected compounds are now being tested for efficacy in mice.