Vaccine Activities Update
National Institute of Allergy and Infectious Diseases, National Institutes of Health

Claire Schuster, MPH
Division of Microbiology and Infectious Diseases
NIAID, NIH, DHHS

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Differences in Immune Responses to Vaccination

- Assessed race, sex and immune response to rubella vaccine
- 2 large racially diverse cohorts
- Individuals of African descent have significantly higher antibody response compared to individuals of European descent and/or Hispanic ethnicity

Haralambieva IH et al. Associations between race, sex and immune response variations to rubella vaccination in two independent cohorts. Vaccine. (2014).
Differences in Immune Responses to Vaccination

- Assessed sex differences and immune response to seasonal influenza vaccine
- 53 women and 34 men
- Women produced antibodies that more effectively neutralized the influenza virus in laboratory tests
- Testosterone-regulated genes may affect vaccine-induced immunity

WHO/NIAID Call to Action: Vaccines for Sexually Transmitted Infections

Sexually transmitted infections: Vaccine development for global health

http://www.sciencedirect.com/science/journal/0264410X/32/14
Vaccine-related examples:

- Dengue
- HIV
- Malaria
- RSV
- Universal flu vaccine

http://www.niaid.nih.gov/about/Pages/2013.aspx
NIAID’s Antibacterial Resistance Program: Current Status and Future Directions

Accelerating Medicines Partnership (AMP)

- Collaboration between NIH, industry, non-profit organizations
- Goal:
  - Increase number of new diagnostics and therapies
  - Reduce time and cost of developing them
- For more information, see http://www.nih.gov/science/amp/index.htm
Meetings

- Global Vaccine and Immunization Research Forum (GVIRF): March 4 – 6, 2014
  - Convened jointly by WHO, NIAID, and Bill & Melinda Gates Foundation

- NIAID Meeting Reports