Sanofi Pasteur is interested in potential partnering opportunities in the field of active and passive human immunization, as well as technologies supporting product development and industrial performance, including:

- **Vaccines, monoclonal antibodies, and supporting technologies for prevention and treatment of infectious diseases**
  - Novel antigens and methods for antigen discovery and characterization
  - New ways to administer vaccines, including mucosal routes
  - Nanoparticles, carrier proteins, and methods of conjugations proteins and polysaccharides
  - mRNA vaccine technologies, including mRNA production and formulation methods
  - Novel vectors for delivering antigens

- **Agents to enhance vaccine immune responses**
  - Adjuvants and immunomodulators

- **Characterization and assays of immune responses and disease markers**
  - Animal models, including of human diseases
  - Biological and immunological studies to characterize adjuvants and immunomodulators
  - Biological markers for evaluating the efficacy of prophylactic or therapeutic interventions
  - *In vitro, ex vivo*, and 3D models of human tissues, including the immune system
  - B-cell immunology, and immunosenescence
  - Imaging/bioimaging
  - Epidemiological studies relevant to the use of vaccines and immunotherapeutics

- **Tools for improving vaccine and monoclonal antibody research, development and production**
  - Prokaryotic or eukaryotic cell lines for antigen production
  - Upstream and downstream processes optimization technologies
  - Process automation
  - Preservatives and stabilizers
  - Bioinformatics techniques for modeling, data handling and analysis
  - *O*omics approaches related to biomarkers, safety, and correlates of immunity/protection
  - AI, machine learning and machine vision
  - Nonionic detergents
  - Anti-counterfeiting technology

- **Vaccines for disease areas that are of particular interest to us:**
  - Nosocomial infections like *S. aureus* and *P. aeruginosa*, and others, including those that cover multiple pathogens
  - Viral infections: CMV, HSV, Influenza, Norovirus, Rotavirus, Rhinovirus, RSV, Bacterial infections: B. pertussis, Lyme disease, Meningococcal B, *S. pneumoniae*, Acne, Periodontal, E. coli (UTI)
  - Pathogens exacerbating COPD or asthma