

# SPOKE 5

## Inflammatory and infectious diseases

**10.00 Registrazione e coffee break di benvenuto**

**10.30 Welcome e saluti istituzionali**

**Introduzione e breve report dei primi due anni |**

F. Dotta, UNISI

**11.00 WP1** Coordinatore e moderatore Francesco Annunziato, UNIFI

**Novel mRNA Vaccines, prophylactic drugs design and immune response profiling**

**Task 1.1 |** UNISI (MG.Cusi/Montomoli) **Preclinical study of a new replication deficient SeV-based viral vector vaccine against SARS-CoV-2 |** Gabriele Anichini

**Task 1.3 |** Humanitas (Garlanda) **Use of the RNA technology for the therapy of infectious diseases based on humoral innate immunity molecules |** Virginia Cianchi

**Task 1.4 |** UNIFI (Annunziato) **Effect of immunosuppressive regimen on cellular and humoral immune response to SARS-CoV-2 vaccination in anti-CD20 treated hematological patients and in solid organ transplant recipients |** Anna Vanni

**Task 1.5 |** UNIPD (Brusatin) **Injectable Synthetic Hydrogel Niches for Localized Therapies Delivery |** Torresan Veronica

**12.15 WP2** Coordinatore e moderatore, Giuseppe Novelli, UNIROMA2

**Innovative strategies to counteract novel antimicrobial resistant bacteria and viral infections**

**Task 2.1 |** Uniroma2-(Sarmati): **Characterisation of bacteriophages targeting multi-drug resistant Klebsiella pneumoniae strains to design a phage cocktail for therapeutic use |** Elisa Fausti

**Task 2.2 |** Uniroma2 (Novelli) **CRISPR-CAS mediated viral genomes degradation |** Michela Murdocca

**Task 2.3 |** UNIMI (Centanni) **RNA/DNA Aptamers |** Jessica Dellavedova

**13.30 Light Lunch**

**20 settembre 2024  
ore 10.00**

Aula Magna Rettorato  
Piazza San Marco 4  
Firenze

**14.30 WP3** Coordinatore e moderatore Francesco Dotta, UNISI

**Circulating RNA therapeutic target discovery and delivery strategies in autoimmune and inflammatory diseases**

**Task 3.1 |** UNISI (Dotta) **miR-150-5p and miR-375-3p are increased in plasma of young children (<7y) with recent onset stage 3 type 1 diabetes |** Giuseppina Emanuela Grieco

**Task 3.2 |** UNISI/UNINA (Bargagli/Ungaro) **Exploiting the role of the CD105/Endoglin pathway in lung fibrosis with tailored siRNA-loaded nanoparticle: from target validation to the in vivo model development |** Miriana d'Alessandro

**Task 3.3 |** UNIPD (Gherardi) **RNAi therapeutics to target innate immune inflammation |** Gaia Gherardi

**Task 3.4 |** UNIFI (Berti) **Smart nanostructured non-viral vectors for precision delivery of small RNAs to modulate autoimmune and inflammatory diseases |** Laura Conti

**15.45 WP4** Coordinatore Stefano Ugel, UNIVR; moderatore Agnese Magnani, UNISI

**RNA-based drug design**

**Task 4.1 |** UNIVR (Ugel) **FLIP mRNA-based engineering of Dendritic Cells: a new strategy for the treatment of autoimmune diseases |** Eliana Urbini

**Task 4.2 |** UNINA (Rinaldi) **Identification and characterization of non-coding RNA involved in different parasitic stages of echinococcus granulosus |** Elena Ciccone

**Task 4.3 |** UNISI (Magnani) **High-throughput screening and optimization of microfluidic-synthesized lipid-based nanocarriers for targeted drug delivery |** Ilaria Clemente

**Task 4.4 |** UNIFI (Nassini) **Schwann Cell C5aR1 co-opts Inflammasome NLRP1 to Sustain Pain in a Mouse Model of Endometriosis |** Mustafa Titiz

**Task 4.5 |** UNIFI (Aloisi) **Role of extracellular vesicles in the modulation of nociception |** Sofia Passaponti

**17.00 Conclusioni**



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Da un secolo, oltre.