

# 5<sup>th</sup> National Congress of the Italian Society for Virology

*One Virology One Health*

[www.congressosivisv.com](http://www.congressosivisv.com)

**WEBINAR**  
**5-6 JULY 2021**

**Scientific Programme**

**FAD**

# PATRONAGE REQUESTED

MINISTERO DELLA SALUTE

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# SCIENTIFIC RATIONALE

The establishment of the germ theory and the identification of specific microbes as the causative agents of a wide variety of infectious diseases has led to enormous advances, particularly the development of vaccines and, ultimately, antimicrobials. Over 50 years ago, following the successes of the widespread use of penicillin, the development of polio vaccines and the discovery of drugs for tuberculosis, a general optimism pervaded many people with the famous urban legend describing the Surgeon General of the United States, William H. Stewart, declaring: "the war against infectious diseases has been won". Unfortunately, in the field of virology nothing is more wrong than that optimistic feeling, in fact, in an age of global air travel, climate change and ecological disturbances, we are constantly exposed to the threat of emerging infectious diseases. We are experiencing a viral pandemic with a devastating impact around the world that has changed our most basic rules of life. Due to the SARS-CoV-2 pandemic, the event was conceived as a digital version of the flagship annual meeting of the Italian Society of Virology SIV-ISV, whose symposia and activities are designed to achieve the same scientific and networking objectives.

The SARS-CoV-2 pandemic has obviously kept most of us very busy throughout 2020 and early 2021 and will continue to do so. The 2021 SIV-ISV Annual Meeting will therefore devote enough time to this topic for everyone to catch up with the latest developments and discuss burning issues with experts in this field. In fact, two specific sessions will be dedicated to analyzing different aspects of the pandemic: "COVID-19: evolution of a virus" and "COVID-19: pathogenesis, prevention and control".

Deepening the knowledge of SARS-CoV-2 will allow us to find effective 'weapons' against the COVID-19 disease. Clinical and scientific communities have made joint efforts to reduce the severe impact of the epidemic. However, it is important to generate new knowledge on the mechanisms of SARS-CoV-2 infection and the impact on its hosts, to guide the design of innovative therapies and specific vaccines for COVID-19. Understanding of individual and population immunity to SARS-CoV-2 remains incomplete and the development of reliable diagnostic has been the focus of the global scientific effort. Preventing new SARS-CoV-2 infections may be the most effective approach, not only to prevent COVID-19 but also to block the spread of the virus around the world.

The meeting will also feature sessions covering various aspects of general virology, from diagnostics to biotechnology as well as the latest research into innovative antiviral therapies and oncological virology. In addition, topics related to the virology of plants and the environment as well as veterinary virology are other topics of particular interest in the virological field and which deserve a dedicated space within the Congress.

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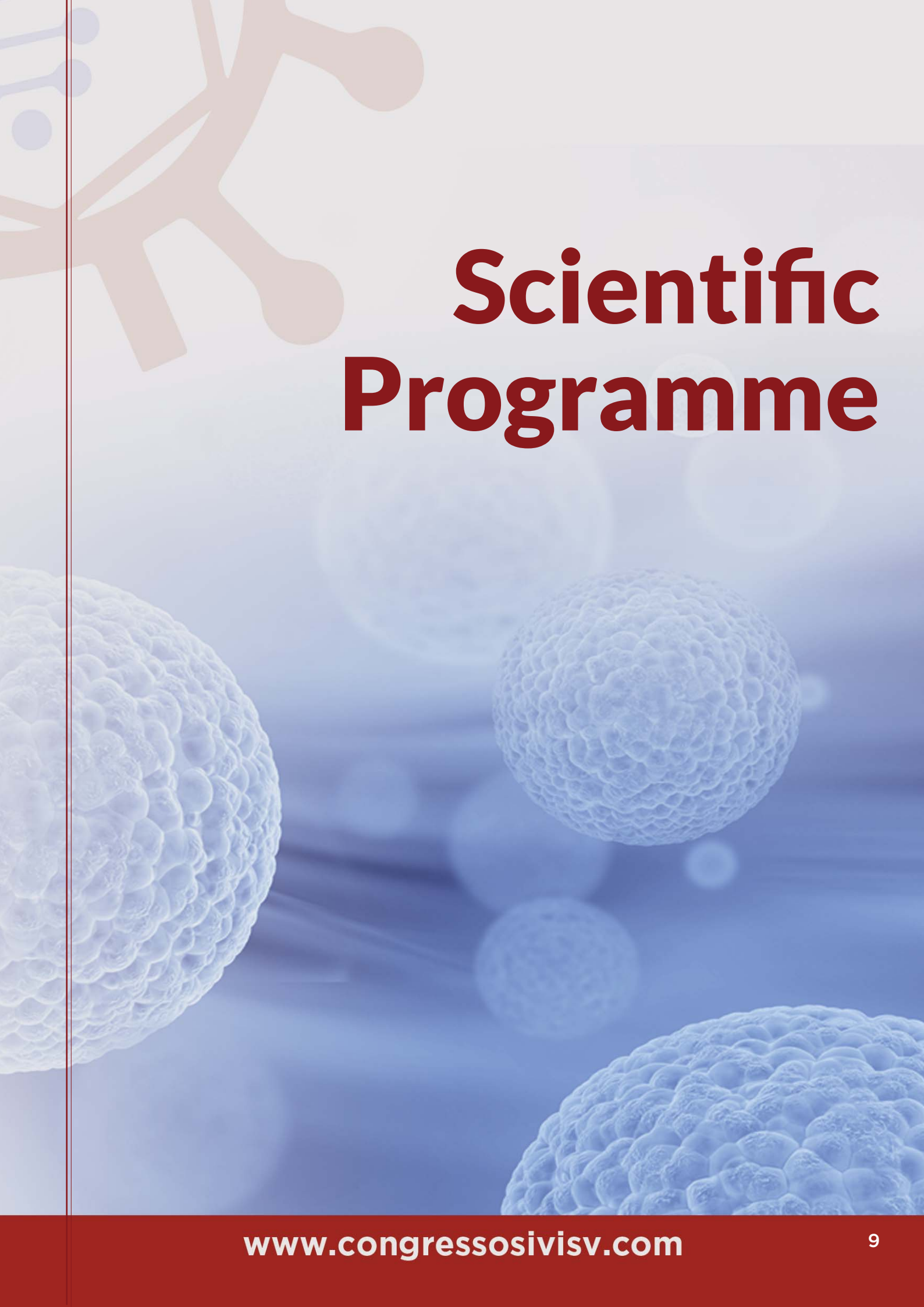
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| MONDAY, 5th JULY 2021 |                                                                      |                                                                                      |
|-----------------------|----------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 08.00-08.30           | OPENING OF POSTER SESSION AND SPONSOR EXHIBITION                     |                                                                                      |
|                       | Registration of participants (access and connection to web platform) |                                                                                      |
| 08.30-09.00           | PLENARY SESSION                                                      |                                                                                      |
|                       | 5TH NATIONAL SIV - ISV CONGRESS - WELCOME ADDRESS                    |                                                                                      |
| 09.00-11.00           | SESSION 1: COVID-19: EVOLUTION OF A VIRUS                            |                                                                                      |
| 11.00-12.00           | PARALLEL SESSIONS                                                    |                                                                                      |
|                       | VIRTUAL ROOM A                                                       | VIRTUAL ROOM B                                                                       |
|                       | SESSION 2:<br>VIRAL DIAGNOSIS                                        | SESSION 3: ENVIRONMENTAL<br>AND PLANT VIROLOGY                                       |
|                       |                                                                      | SPONSORED SYMPOSIUM 1<br>with the unrestricted<br>educational grant of<br>QIAGEN SRL |
| 12.00-13.00           | BREAK                                                                |                                                                                      |
| 14.00-15.00           | PARALLEL SESSIONS                                                    |                                                                                      |
|                       | VIRTUAL ROOM A                                                       | VIRTUAL ROOM B                                                                       |
|                       | SESSION 4:<br>GENETICS, BIOTECHNOLOGY<br>AND BIOINFORMATICS          | SESSION 5: FRONTIERS<br>IN GENERAL VIROLOGY 1                                        |
|                       |                                                                      | SPONSORED SYMPOSIUM 2<br>with the unrestricted<br>educational grant of<br>ADA        |
| 15.00-16.00           | PLENARY SESSION                                                      |                                                                                      |
| 16.00-18.00           | SESSION 6: VIRUS-HOST INTERACTION                                    |                                                                                      |
| 18.00-19.00           | SIV-ISV GENERAL MEMBER MEETING                                       |                                                                                      |
| 19.00-20.00           | POSTER SESSION AND SPONSOR EXHIBITION                                |                                                                                      |
|                       | END DAY 1                                                            |                                                                                      |

| TUESDAY, 6th JULY 2021 |                                                            |                                                                                                   |
|------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|                        | OPENING OF POSTER SESSION AND SPONSOR EXHIBITION           |                                                                                                   |
| 09.00-11.00            | <b>PLENARY SESSION</b>                                     |                                                                                                   |
|                        | SESSION 7: VIRAL ONCOLOGY                                  |                                                                                                   |
| 11.00-12.00            | <b>PARALLEL SESSIONS</b>                                   |                                                                                                   |
|                        | VIRTUAL ROOM A                                             | VIRTUAL ROOM B                                                                                    |
|                        | SESSION 8:<br>VETERINARY VIROLOGY                          | SESSION 9:<br>IMMUNITY AND VACCINES                                                               |
| 12.00-13.00            |                                                            | SESSION 10:<br>UPDATES ON HIV                                                                     |
| 13.00-14.00            | BREAK                                                      |                                                                                                   |
| 14.00-15.00            | <b>PARALLEL SESSIONS</b>                                   |                                                                                                   |
|                        | VIRTUAL ROOM A                                             | VIRTUAL ROOM B                                                                                    |
|                        | SESSION 11:<br>ANTIVIRAL THERAPY                           | SESSION 12: FRONTIERS<br>IN GENERAL VIROLOGY 2                                                    |
| 15.00-16.00            |                                                            | <b>SPONSORED SYMPOSIUM 3</b><br>with the unrestricted<br>educational grant of<br>ABBOTT MOLECULAR |
|                        | <b>PLENARY SESSION</b>                                     |                                                                                                   |
|                        | VIRTUAL ROOMS A + B                                        |                                                                                                   |
| 16.00-18.00            | SESSION 13: COVID-19: PATHOGENESIS, PREVENTION AND CONTROL |                                                                                                   |
| 18.00-18.30            | CLOSING LECTURE                                            |                                                                                                   |
| 18.30-19.00            | LURIA AWARDS                                               |                                                                                                   |
| 19.00-19.15            | CLOSING REMARKS                                            |                                                                                                   |



# Scientific Programme

# MONDAY, 5th JULY 2021

## OPENING OF POSTER SESSION AND SPONSOR EXHIBITION

08.00-08.30 Registration of participants (access and connection to web platform)

## PLENARY SESSION

**ID ECM NR.: 265-322025 - NR. ORE FORMATIVE: 8 - NR. CREDITI: 12**

Lunedì, 5 Luglio - dalle ore 11.00 alle ore 13.00 - dalle ore 16.00 alle ore 18.00

Martedì, 6 Luglio - dalle ore 11.00 alle ore 13.00 - dalle ore 16.00 alle ore 18.00

08.30-09.00 5th National SIV - ISV Congress - Welcome Address

### SESSION 1: COVID-19: EVOLUTION OF A VIRUS

Chairs: **A. Caruso** (Brescia, Italy), **G. Palù** (Padua, Italy), **M. Tavio** (Ancona, Italy)

09.00-09.20 Lecture 1 - The crisis at the time of coronavirus: genomic evolution of SARS-CoV-2  
**M. Ciccozzi** (Rome, Italy)

09.20-09.40 Lecture 2 - Intra-host evolution of SARS-CoV-2 during persistent infection  
**S. Fiorentini** (Brescia, Italy)

09.40-10.00 Lecture 3 - Genetic variability of the SARS-CoV-2 genomes and its implications  
**F. Maggi** (Varese, Italy)

### ORAL COMMUNICATIONS

10.00-10.10 **OC1:** Early diffusion of SARS-CoV-2 infection in the inner area of the Italian Sardinia Island  
Presenter: **N. Grandi** (Cagliari, Italy)

10.10-10.20 **OC2:** Identification of highly recurrent SARS-CoV-2 haplotypes circulating worldwide and in Veneto region  
Presenter: **L. Manuto** (Padua, Italy)

10.20-10.30 **OC3:** Study of COVID-19 patients harboring variants of SARS-CoV-2: comparison with a population from the first pandemic wave  
Presenter: **L. Mazzuti** (Rome, Italy)

10.30-10.40 **OC4:** Usefulness of rt-PCR in SARS-CoV-2 variant surveillance  
Presenter: **A. Rizzo** (Milan, Italy)

10.40-10.50 **OC5:** Genomic characterization of the emergent SARS-CoV-2 lineage in two provinces of Campania (Italy): whole-genome sequencing study  
Presenter: **M. Scrima** (Ariano Irpino, Italy)

10.50-11.00 Discussion

# MONDAY, 5th JULY 2021

## PARALLEL SESSION

### ROOM A

#### SESSION 2:

#### VIRAL DIAGNOSIS

Chairs:

**R. Cavallo** (Turin, Italy), **S. Menzo** (Ancona, Italy)

ID ECM NR.: 265-323373  
NR. ORE FORMATIVE: 2  
dalle ore 11.00 alle 13.00  
NR. CREDITI: 3

11.00-11.20

Lecture 4 - A modern, integrated approach to molecular diagnostics of SARS-CoV-2  
**C.F. Perno** (Rome, Italy)

11.20-11.40

Lecture 5 - Immunologic response to SARS-CoV2 infected patients and vaccinated subjects  
**F. Baldanti** (Pavia, Italy)

11.40-12.00

Lecture 6 - Viral gastroenteritis: an overview of current diagnostic methods  
**G. Giammanco** (Palermo, Italy)

#### ORAL COMMUNICATIONS

12.00-12.10

**OC6:** Colorimetric test for fast detection of SARS-CoV-2 in nasal and throat swabs  
Presenter: **M. Cennamo** (Naples, Italy)

12.10-12.20

**OC7:** Analysis of anti-spike neutralizing antibodies titers and levels of circulating biomarkers in COVID-19 patients  
Presenter: **F. Frasca** (Rome, Italy)

12.20-12.30

**OC8:** Vaginal self-collected vs cervical clinicians collected samples for cervical cancer screening  
Presenter: **C. Sani** (Florence, Italy)

12.30-12.40

**OC9:** Exploratory analysis to identify the best antigen and the best immune biomarkers to study SARS-CoV-2 infection  
Presenter: **S. Najafi Fard** (Rome, Italy)

12.40-12.50

**OC10:** Serosurvey in BNT162B2 vaccine-elicited neutralizing antibodies against authentic SARS-CoV-2 variants  
Presenter: **A. Zani** (Brescia, Italy)

12.50-13.00

Discussion

# MONDAY, 5th JULY 2021

## PARALLEL SESSION

### ROOM B

#### SESSION 3: ENVIRONMENTAL AND PLANT VIROLOGY

Chairs: F. Di Serio (Bari, Italy), L. Rubino (Bari, Italy)

ID ECM NR.: 265-323375  
NR. ORE FORMATIVE: 1  
dalle ore 11.00 alle 12.00  
NR. CREDITI: 1,5

11.00-11.20 Lecture 7 - Metagenomics of plant-associated viromes  
T. Candresse (Bordeaux, France)

11.20-11.40 Lecture 8 - Environmental surveillance for early pathogen identification, epidemic trends and genomic variability: a focus on SARS-CoV-2  
G. La Rosa (Rome, Italy)

#### ORAL COMMUNICATIONS

11.40-11.50 **OC11:** A tripartite narna-like mycovirus reveals the existence of a split RNA-dependent RNA polymerase palm domain hosted by two distinct proteins  
Presenter: M. Forgia (Turin, Italy)

11.50-12.00 **OC12:** Transcriptomics to reveal the genetic basis of CMD2 resistance in cassava  
Presenter: A.V. Carluccio (Bari, Italy)

**SPONSORED SYMPOSIUM 1**  
**with the unrestricted educational grant of QIAGEN SRL**  
Chair: T. Lazzarotto (Bologna, Italy)

12.00-12.20 A changing respiratory infection diagnostic paradigm amidst the COVID-19 pandemic  
D. Manissero (London, UK)

12.20-12.30 Discussion

13.00-14.00 Break

# MONDAY, 5th JULY 2021

## PARALLEL SESSION

### ROOM A

#### SESSION 4: GENETICS, BIOTECHNOLOGY AND BIOINFORMATICS

Chairs: **G. Portella** (Naples, Italy), **M.C. Parolin** (Padua, Italy)

ID ECM NR.: 265-323378  
NR. ORE FORMATIVE: 2  
dalle ore 14.00 alle 16.00  
NR. CREDITI: 3

- 14.00-14.20 Lecture 9 - Network medicine in infectious diseases  
**G. Ippolito** (Rome, Italy)
- 14.20-14.40 Lecture 10 - CRISPR: diagnosis and treatment of viral infections  
**M. Pistello** (Pisa, Italy)
- 14.40-15.00 Lecture 11 - Clinical applications of viral vectors for gene therapy  
**N. Brunetti Pierri** (Naples, Italy)

#### ORAL COMMUNICATIONS

- 15.00-15.10 **OC13:** In silico and in vitro combined approaches identified promising candidates as SARS-CoV-2 and HCoV-OC43 inhibitors  
Presenter: **I. Arduino** (Turin, Italy)
- 15.10-15.20 **OC14:** Genomic characterization of SARS-CoV-2 variants in Campania, Italy  
Presenter: **A. Grimaldi** (Naples, Italy)
- 15.20-15.30 **OC15:** Plant-produced VP2-based particles provide protection against very virulent Infectious Bursal Disease Virus  
Presenter: **C. Marusic** (Rome, Italy)
- 15.30-15.40 **OC16:** Identification of the nuclear proteome from all human viruses by a comprehensive analysis of classical nuclear localizations  
Presenter: **H. Ghassabian** (Padua, Italy)
- 15.40-15.50 **OC17:** High-throughput platforms to assess neutralizing antibodies and antiviral molecules against SARS-CoV-2  
Presenter: **D. Stelitano** (Naples, Italy)
- 15.50-16.00 Discussion

# MONDAY, 5th JULY 2021

## PARALLEL SESSION

### ROOM B

#### SESSION 5:

#### FRONTIERS IN GENERAL VIROLOGY 1

Chairs:

**A. Calistri** (Padua, Italy), **G. Franci** (Salerno, Italy)

ID ECM NR.: 265-323380  
NR. ORE FORMATIVE: 1  
dalle ore 14.00 alle 15.00  
NR. CREDITI: 1,5

14.00-14.20

Lecture 12 - Viral respiratory pathogens: direct and indirect mechanisms of lung injury  
**N. Mancini** (Milan, Italy)

#### ORAL COMMUNICATIONS

14.20-14.30

**OC18:** Molecular features of the measles fusion complex: infection and spread in the central nervous system  
Presenter: **F.T. Bovier** (Naples, Italy)

14.30-14.40

**OC19:** Nrf2 and G6PD as key players in modulating cell antioxidant response and influenza virus replication  
Presenter: **M. De Angelis** (Rome, Italy)

14.40-14.50

**OC20:** Analysis of adaptive immune response to SARS-CoV-2 infection and the acquired immune response after COVID-19 vaccination with different assays  
Presenter: **F. Bossi** (Trieste, Italy)

14.50-15.00

**OC21:** The expression of the truncated ACE2 isoforms only is related to the interferon response in airway epithelial cells from young adults  
Presenter: **G. Oliveto** (Rome, Italy)

#### SPONSORED SYMPOSIUM 2

#### with the unrestricted educational grant of ADA

Chairs: **G. Scalia** (Catania, Italy)

15.00-15.20

Active Surveillance of Asymptomatic SARS-CoV- Infection  
**E. Borghi** (Milan, Italy)

15.20-15.40

The impact of automation in the COVID-19 pandemic management  
**Marc Lütgehetmann** (Hamburg, Germany)

15.40-16.00

Discussion

# MONDAY, 5th JULY 2021

## PLENARY SESSION

### SESSION 6:

### VIRUS-HOST INTERACTION

Chairs:

**E. Affabris** (Rome, Italy), **G. Gribaudo** (Turin, Italy)

16.00-16.20

Lecture 13 - The SERINC enigma in viruses and cells  
**M. Pizzato** (Trento, Italy)

16.20-16.40

Lecture 14 - ACE2: a key factor in regulating SARS-CoV-2 and influenza virus infection  
**A.T. Palamara** (Rome, Italy)

16.40-17.00

Lecture 15 - Identification of a novel getaway for SARS-CoV-2 entry into human endothelial cells  
**F. Caccuri** (Brescia, Italy)

### ORAL COMMUNICATIONS

17.00-17.10

**OC22:** The first high detailed human nuclear proteome and the HPV16 genome interaction  
Presenter: **G. Franci** (Salerno, Italy)

17.10-17.20

**OC23:** Parallel G-quadruplexes recruit the HSV-1 transcription factor ICP4 to promote viral transcription in infected human cells  
Presenter: **I. Frasson** (Padua, Italy)

17.20-17.30

**OC24:** Dissecting lyssavirus-host interaction in the syrian hamster model  
Presenter: **M. Castellani** (Legnaro, Italy)

17.30-17.40

**OC25:** The US21 viroporin of human cytomegalovirus regulates cell adhesion and migration  
Presenter: **A. Luganini** (Turin, Italy)

17.40-17.50

**OC26:** The innate immunological response mediated by PKR is counteracted by herpes virus tegument proteins  
Presenter: **R. Pennisi** (Messina, Italy)

17.50-18.00

Discussion

18.00-19.00

**SIV-ISV GENERAL MEMBER MEETING**

18.00-20.00

POSTER SESSION AND SPONSOR EXHIBITION

# TUESDAY, 6th JULY 2021

OPENING OF POSTER SESSION AND SPONSOR EXHIBITION

## PLENARY SESSION

### SESSION 7: VIRAL ONCOLOGY

Chairs: **F.M. Buonaguro** (Naples, Italy), **P. Marconi** (Ferrara, Italy)

- 09.00-09.20      Lecture 16 - The oncogenic role of HPV in the pathogenesis of orofaryngeal and genital cancers  
**M.L. Tornesello** (Naples, Italy)
- 09.20-09.40      Lecture 17 - Oncolytic viruses for cancer therapy  
**P. Malatesta** (Genoa, Italy)
- 09.40-10.00      Lecture 18 - Therapeutic vaccines for virus-associated tumors  
**A. Venuti** (Rome, Italy)

### ORAL COMMUNICATIONS

- 10.00-10.10      **OC27:** Immunotherapeutic efficacy of an oncolytic HSV retargeted to prostate specific membrane antigen  
Presenter: **T. Gianni** (Bologna, Italy)
- 10.10-10.20      **OC28:** dl922-947 adenovirus and G-quadruplex binder combination against breast cancer  
Presenter: **A.M. Malfitano** (Naples, Italy)
- 10.20-10.30      **OC29:** The cellular deacetylase SIRT1 contributes to p53 curbing by HPV16 and 18 and its targeting inhibits cancer cell proliferation  
Presenter: **I. Lo Cigno** (Novara, Italy)
- 10.30-10.40      **OC30:** The unprecedented wide interaction of HTLV-1-encoded HBZ protein with the RNA splicing and stability machineries in leukemic cells  
Presenter: **M. Shallak** (Varese, Italy)
- 10.40-10.50      **OC31:** Bovine Delta papillomavirus E5 oncoprotein interacts with TRIM25 and hampers antiviral innate immune response  
Presenter: **S. Roperto** (Naples, Italy)
- 10.50-11.00      Discussion

# TUESDAY, 6th JULY 2021

## PARALLEL SESSION

### ROOM A

#### SESSION 8:

#### VETERINARY VIROLOGY

Chairs:

**C. Buonavoglia** (Bari, Italy), **G. Vaccari** (Rome, Italy)

ID ECM NR.: 265-323382  
NR. ORE FORMATIVE: 2  
dalle ore 11.00 alle 13.00  
NR. CREDITI: 3

11.00-11.20

Lecture 19 - SARS-CoV-2, a threat to marine mammals: One Health, One Ocean, One Virology  
**C. Casalone** (Turin, Italy)

11.20-11.40

Lecture 20 - Hepadnavirus in cats: the discovery of a human hepatitis B-like virus  
**G. Lanave** (Bari, Italy)

#### ORAL COMMUNICATIONS

11.40-11.50

**OC32:** Avian reovirus P17 suppresses angiogenesis by promoting DPP4 secretion  
Presenter: **E. Manocha** (Brescia, Italy)

11.50-12.00

**OC33:** SARS-CoV-2 virus dynamic in a mink farm in Italy: lessons learned  
Presenter: **A. Moreno** (Brescia, Italy)

12.00-12.10

**OC34:** Unrevealed genetic diversity of GII norovirus in the swine population of north east Italy  
Presenter: **L. Cavicchio** (Padua, Italy)

12.10-12.20

**OC35:** Identification of different cross DNA viruses in lizards and geckos  
Presenter: **P. Capozza** (Bari, Italy)

12.20-12.30

**OC36:** Isolation of HEV-3 strains from swine fecal samples on human A549 cell line  
Presenter: **G. Ianaro** (Rome, Italy)

12.30-13.00

Discussion

# TUESDAY, 6th JULY 2021

## PARALLEL SESSION

### ROOM B

#### SESSION 9:

#### IMMUNITY AND VACCINES

Chairs:

**D. Gibellini** (Verona, Italy), **M.G. Cusi** (Siena, Italy)

ID ECM NR.: 265-323388  
NR. ORE FORMATIVE: 2  
dalle ore 11.00 alle 13.00  
NR. CREDITI: 3

11.00-11.20

Lecture 21 - Innate immune response: at the forefront of viral infections  
**R. Rizzo** (Ferrara, Italy)

11.20-11.40

Lecture 22 - Caspase 8-virus interplay and innate immunity to HSV-1 infection  
**A. Mastino** (Messina, Italy)

#### ORAL COMMUNICATIONS

11.40-11.50

**OC37:** Robust and persistent B and T-cell responses after COVID-19 in immunocompetent and transplanted patients  
Presenter: **F. Zavaglio** (Pavia, Italy)

11.50-12.00

**OC38:** SARS-CoV-2 N protein target TRIM-25-mediated RIG-I activation to suppress innate immunity  
Presenter: **G. Gori Savellini** (Siena, Italy)

#### SESSION 10:

#### UPDATES ON HIV

Chair:

**A. Manzin** (Cagliari, Italy)

12.00-12.30

Lecture 23 - New therapeutic strategies against HIV  
**A. Antinori** (Rome, Italy)

#### ORAL COMMUNICATIONS

12.30-12.40

**OC39:** Binding to P1(4,5)P2 is indispensable for secretion of B cell clonogenic HIV-1 matrix protein p17 variants  
Presenter: **A. Bugatti** (Brescia, Italy)

12.40-12.50

**OC40:** Potential of latency reversing agents in NK cell-mediated eradication of the HIV reservoir  
Presenter: **D.A. Covino** (Rome, Italy)

12.50-13.00

Discussion

13.00-14.00

Break

# TUESDAY, 6th JULY 2021

## PARALLEL SESSION

### ROOM A

ID ECM NR.: 265-323390  
NR. ORE FORMATIVE: 2  
dalle ore 14.00 alle 16.00  
NR. CREDITI: 3

#### SESSION 11: ANTIVIRAL THERAPY

Chairs: **M. Galdiero** (Naples, Italy), **E. Tramontano** (Cagliari, Italy)

- 14.00-14.20 Lecture 24 - Oxysterols: a promising class of broad spectrum antivirals  
**D. Lembo** (Turin, Italy)
- 14.20-14.40 Lecture 25 - Advanced development of filovirus medical countermeasures yields insights into viral pathogenesis  
**A. Griffiths** (Boston, USA)
- 14.40-15.00 Lecture 26 - Intranasal fusion inhibitory lipopeptide prevents direct contact SARS-CoV-2 transmission in ferrets  
**M. Porotto** (Naples, Italy)

#### ORAL COMMUNICATIONS

- 15.00-15.10 **OC41:** Antiviral therapeutics from amphibian skin peptides  
Presenter: **C. Zannella** (Naples, Italy)
- 15.10-15.20 **OC42:** Identification of inhibitors of SARS-CoV-2 3CLpro enzymatic activity using a small molecule in vitro repurposing screen  
Presenter: **F. Esposito** (Cagliari, Italy)
- 15.20-15.30 **OC43:** In vitro investigation of the mechanism of action of two broadly neutralizing human monoclonal antibodies against rabies virus  
Presenter: **M. Zorzan** (Padua, Italy)
- 15.30-15.40 **OC44:** Antiviral and antioxidant activities of *artemisia annua* against SARS-CoV-2  
Presenter: **M. Baggieri** (Rome, Italy)
- 15.40-15.50 **OC45:** Antiviral activity against HSV-1 and SARS-CoV-2 of leaf extract derived from *vitis vinifera*  
Presenter: **F. Dell'Annunziata** (Naples, Italy)
- 15.50-16.00 Discussion

# TUESDAY, 6th JULY 2021

## PARALLEL SESSION

### ROOM B

#### SESSION 12: FRONTIERS IN GENERAL VIROLOGY 2

Chairs: **E. Riva** (Rome, Italy), **V. Martella** (Bari, Italy)

ID ECM NR.: 265-323392  
NR. ORE FORMATIVE: 1  
dalle ore 14.00 alle 15.00  
NR. CREDITI: 1,5

14.00-14.20 Lecture 27 - MALDI-ToF mass spectrometry as innovative tool for viruses identification  
**A. Calderaro** (Parma, Italy)

#### ORAL COMMUNICATIONS

14.20-14.30 **OC46:** Role of extracellular vesicles in propagating HSV-1 induced brain neurodegenerative damage  
Presenter: **V. Protto** (Rome, Italy)

14.30-14.40 **OC47:** SARS-CoV-2 sensing by TLR3 enhances immune response and hACE2 expression  
Presenter: **S. Rizzo** (Ferrara, Italy)

14.40-14.50 **OC48:** Molecular dynamics simulations to investigate the antiviral effect of heparin in SARS-CoV-2 spike infection  
Presenter: **G. Paiardi** (Heidelberg, Germany)

14.50-15.00 **OC49:** Isolation and characterization of monoclonal antibodies specific for SARS-CoV-2 and its major variants useful for developing innovative diagnostic assays and immunotherapy  
Presenter: **S. Mariotti** (Rome, Italy)

#### SPONSORED SYMPOSIUM 3

with the unrestricted educational grant of ABBOTT MOLECULAR

Chairs: **V. Svicher** (Rome, Italy)

15.00-15.20 Innovative approaches to control current and future viral diseases  
**J. Dhein** (Wiesbaden, Germany)

15.20-15.30 Discussion

# TUESDAY, 6th JULY 2021

## PLENARY SESSION

### SESSION 13: COVID-19: PATHOGENESIS, PREVENTION AND CONTROL

Chairs: **G. Antonelli** (Rome, Italy), **M. Clementi** (Milan, Italy), **A. Lazzarin** (Milan, Italy)

16.00-16.20 Lecture 28 - Clinical Characteristics and Treatment of COVID-19 patients: an update  
**M.C. Mastroianni** (Rome, Italy)

16.20-16.40 Lecture 29 - SARS-CoV-2 diagnostics: a critical review of the current assays  
**M.R. Capobianchi** (Rome, Italy)

16.40-17.00 Lecture 30 - SARS-CoV-2 and antiviral interferon response:  
who wins at tug-of-war?  
**C. Scagnolari** (Rome, Italy)

### ORAL COMMUNICATIONS

17.00-17.10 **OC50:** Oral microbiome and local immune/inflammatory response  
in COVID-19 patients: a cross-sectional study  
Presenter: **M. D'Accolti** (Ferrara, Italy)

17.10-17.20 **OC51:** The pathogenic HERV-W envelope protein is associated  
to the hyper-inflammation and lymphocytes exhaustion in COVID-19  
Presenter: **S. Grelli** (Rome, Italy)

17.20-17.30 **OC52:** Study of entry checkpoints and kinetics of SARS-CoV-2 variants  
in VeroE6 cells  
Presenter: **P. Quaranta** (Pisa, Italy)

17.30-17.40 **OC53:** A real-life use of remdesivir in patients with coronavirus disease 2019:  
a retrospective case-control study  
Presenter: **F. Cogliati Dezza** (Rome, Italy)

17.40-17.50 **OC54:** Single-dose BNT 162B2 mRNA COVID-19 vaccine significantly boosts  
neutralizing antibody response in health care workers recovering from  
asymptomatic or mild natural SARS-CoV-2 infection  
Presenter: **I. Vicenti** (Siena, Italy)

17.50-18.00 Discussion

### CLOSING LECTURE

Introduction: **G. Antonelli** (Rome, Italy)

18.00-18.30 Closing Lecture 31 - SARS-CoV-2 and COVID-19: what has been done  
and what remains to do  
Presenter: **G. Silvestri** (Atlanta, USA)

18.30-19.00 **LURIA AWARDS** - Chair: **A. Caruso** (Brescia, Italy)

19.00-19.15 Closing Remarks



# Poster & Oral Communications

- P01** **Circulation of new SARS-CoV-2 variants in central Italy: characterization by deep -sequencing of the full-length spike**  
M.C. Bellocchi<sup>1</sup>, R. Scutari<sup>1</sup>, L. Carioti<sup>1</sup>, M. Iannetta<sup>2</sup>, L. Piermatteo<sup>1</sup>, M. Botticelli<sup>1</sup>, M. Alkhatib<sup>1</sup>, S. Tedde<sup>2</sup>, L. Duca<sup>1</sup>, V. Malagnino<sup>2</sup>, A. Crea<sup>2</sup>, L. Ansaldo<sup>2</sup>, S. D'Anna<sup>1</sup>, A. Bertoli<sup>1,2</sup>, P. Paba<sup>2</sup>, A. Di Lorenzo<sup>2</sup>, R. Salpini<sup>1</sup>, V. Svicher<sup>1</sup>, L. Sarmati<sup>2</sup>, M. Andreoni<sup>2</sup>, F. Ceccherini-Silberstein<sup>1</sup> for the PTV-ID-COVID Group  
<sup>1</sup>University of Rome Tor Vergata, Rome, Italy - <sup>2</sup>University Hospital of Rome Tor Vergata, Rome, Italy
- P02** **Lineage B.1.525 SARS-CoV-2 infection in vaccinated patients**  
L. Cardillo<sup>1</sup>, L. Cozzolino<sup>1</sup>, M. Viscardi<sup>1</sup>, E. De Carlo<sup>2</sup>, C. de Martinis<sup>1</sup>, G. Fusco<sup>1</sup>  
<sup>1</sup>Istituto Zooprofilattico Sperimentale del Mezzogiorno - Portici, Naples- Italy - Department of Animal Health-Unit of Virology - <sup>2</sup>Istituto Zooprofilattico Sperimentale del Mezzogiorno - Portici, Naples- Italy - Scientific Director
- P03** **Metatranscriptomic characterization of COVID-19 to identify co-infections, altered upper respiratory tract microbiome and host functional responses**  
C. Ferravante<sup>1,2</sup>, E. Alexandrova<sup>1</sup>, Y. D'Agostino<sup>1</sup>, J. Lamberti<sup>1</sup>, O. Strianese<sup>3</sup>, D. Memoli<sup>1,4</sup>, T. Rocco<sup>4</sup>, A. Sellitto<sup>1</sup>, I. Terenzi<sup>1</sup>, D. Palumbo<sup>1,3</sup>, V. Mirici Cappa<sup>1</sup>, G. Nassa<sup>1,3</sup>, R. Tarallo<sup>1,3</sup>, G. Franci<sup>1,5</sup>, P. Pagliano<sup>1,6</sup>, M. Cennamo<sup>7</sup>, G. Portella<sup>7</sup>, G. Fenza<sup>8</sup>, A. Saccomanno<sup>9</sup>, M. Galdiero<sup>10,11</sup>, F. Rizzo<sup>1,3</sup>, A. Weisz<sup>1,3,4</sup>, G. Giurato<sup>1,3</sup>  
<sup>1</sup>Department of Medicine, Surgery and Dentistry 'Scuola Medica Salernitana' and Laboratory of Molecular Medicine and Genomics, University of Salerno, Baronissi (SA), Italy - <sup>2</sup>Department of Veterinary Medicine and Animal Production, University of Napoli 'Federico II', Napoli, Italy - <sup>3</sup>Genome Research Center for Health, Campus of Medicine, Baronissi (SA), Italy - <sup>4</sup>Program of Medical Genomics, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>5</sup>Program of Clinical Microbiology, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>6</sup>Unit of Infectious Diseases, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>7</sup>Dept of Medical Translational Sciences, University of Napoli 'Federico II', Napoli (Italy) - <sup>8</sup>Department of Management & Innovation Systems, University of Salerno, Fisciano (SA), Italy - <sup>9</sup>Centre for Research in Pure and Applied Mathematics, University of Salerno, Fisciano (SA), Italy - <sup>10</sup>Department of Experimental Medicine, University of Campania 'L. Vanvitelli', Napoli, Italy - <sup>11</sup>Unit of Virology and Microbiology, AOU University of Campania 'L. Vanvitelli', Napoli, Italy
- P04** **SARS-CoV-2 complete genome sequencing from the Italian Campania Region using a highly automated next generation sequencing system**  
M. Fiorenza<sup>1</sup>, M. Cennamo<sup>1</sup>, E. La Civita<sup>1</sup>, A. Liotti<sup>1</sup>, A. Furno<sup>1</sup>, L. Conte<sup>1</sup>, S. Di Somma<sup>1</sup>, F. Napolitano<sup>1</sup>, L. Vallefucio<sup>1</sup>, R. Sorrentino<sup>1</sup>, E. A. Molinari<sup>1</sup>, N. Normanno<sup>2</sup>, D. Terracciano<sup>1</sup>, G. Portella<sup>1</sup>  
<sup>1</sup>Department of Translational Medical Sciences, University of Naples "Federico II", 80131 Naples, Italy - <sup>2</sup>Cell Biology and Biotherapy Unit, Istituto Nazionale Tumori-IRCCS-"Fondazione G. Pascale", Naples, Italy
- P05** **A platform for spatial and temporal monitoring of COVID-19 genetic evolution in Campania**  
G. Fenza<sup>1</sup>, A. Saccomanno<sup>2</sup>, O. Strianese<sup>3</sup>, V. Mirici Cappa<sup>4</sup>, D. Memoli<sup>4</sup>, C. Ferravante<sup>5</sup>, E. Alexandrova<sup>4</sup>, Y. D'Agostino<sup>4</sup>, J. Lamberti<sup>4</sup>, G. Pecoraro<sup>4</sup>, V. Melone<sup>4</sup>, V. D'Amore<sup>4</sup>, G. Nassa<sup>3,4</sup>, R. Tarallo<sup>3,4</sup>, G. Franci<sup>4,6</sup>, P. Pagliano<sup>4,7</sup>, A. Weisz<sup>3,4</sup>, F. Rizzo<sup>3,4</sup>, G. Giurato<sup>3,4</sup>  
<sup>1</sup>Department of Management & Innovation Systems, University of Salerno, Fisciano (SA), Italy - <sup>2</sup>Centre for Research in Pure and Applied Mathematics, University of Salerno, Fisciano (SA), Italy - <sup>3</sup>Genome Research Center for Health, Campus of Medicine, Baronissi (SA), Italy - <sup>4</sup>Department of Medicine, Surgery and Dentistry 'Scuola Medica Salernitana' and Laboratory of Molecular Medicine and Genomics, University of Salerno, Baronissi (SA), Italy - <sup>5</sup>Department of Veterinary Medicine and Animal Production, University of Napoli 'Federico II', Napoli (Italy) - <sup>6</sup>Program of Clinical Microbiology, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>7</sup>Unit of Infectious Diseases, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy
- P06** **Early diffusion of SARS-CoV-2 infection in the inner area of the Italian Sardinia Island**  
N. Grandi<sup>1\*</sup>, G. Piras<sup>2\*</sup>, M. Monne<sup>2</sup>, R. Asproni<sup>2</sup>, T. Fancello<sup>3</sup>, M. Fiamma<sup>4</sup>, G. Mameli<sup>4</sup>, G. Casu<sup>3</sup>, I. Io Maglio<sup>4</sup>, A.D. Palmas<sup>2</sup> and E. Tramontano<sup>1,5</sup>  
<sup>1</sup>Laboratory of Molecular Virology, Department of Life and Environmental Sciences, University of Cagliari, Cagliari, Italy - <sup>2</sup>UOC Ematologia, P.O. "San Francesco", Azienda Tutela Salute, ASSL Nuoro, Italy - <sup>3</sup>UOC Cardiologia, P.O. "San Francesco", Azienda Tutela Salute, ASSL Nuoro, Italy - <sup>4</sup>UOC Laboratorio Analisi clinico-chimiche e Microbiologia, P.O. "San Francesco", Azienda Tutela Salute, ASSL Nuoro, Italy - <sup>5</sup>Istituto di Ricerca Genetica e Biomedica, Consiglio Nazionale delle Ricerche, Cagliari, Italy - \* = equally contributors
- P07** **Impact of PD-L1 checkpoint in COVID-19 patients**  
G. Greco<sup>1</sup>, F. Sabbatino<sup>2</sup>, V. Conti<sup>2</sup>, G. Franci<sup>2</sup>, P. Pagliano<sup>2</sup>, C. Zannella<sup>1</sup>, C. Vecchione<sup>2</sup>, M. Ciccarelli<sup>2</sup>, A. Filippelli<sup>2</sup>, S. Pepe<sup>2</sup>  
<sup>1</sup>Department of Experimental Medicine, University of Campania "Luigi Vanvitelli", Naples, Italy - <sup>2</sup>Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana", University of Salerno, Baronissi, Italy

- P08  
OC 2** **Identification of highly recurrent SARS-CoV-2 haplotypes circulating worldwide and in Veneto region**  
L. Manuto, M. Bado, G. Mazzotti, A. Crisanti, E. Lavezzo, S. Toppo  
University of Padova, Department of Molecular Medicine (DMM)
- P09** **Evaluation of SARS-CoV-2 infection on a sample of population of the Campania Region**  
C. Maiello<sup>\*\*</sup>, M. Ferrigno<sup>\*</sup>, R. Angrisani<sup>\*\*</sup>, A. Rainone<sup>\*</sup>, M. A. Sorrentino<sup>\*</sup>, N. Occhiati<sup>\*</sup>, L. Di Maio<sup>\*</sup>, L. Lovriso<sup>\*</sup>, E. Policano<sup>\*</sup>, L. Folliero<sup>\*</sup>, M. Aloisio<sup>\*</sup>, P. Petrosino<sup>\*</sup>, E. Mocerino<sup>\*\*</sup>, M. D'Orazio<sup>\*</sup>, M. Ametrano<sup>\*\*</sup>, C. Furfaro<sup>\*</sup>  
(<sup>\*</sup>) Azienda Aianitaria Locale Napoli 3 sud Presidio Ospedaliero "Cav. R. Apicella" Pollena Trocchia (NA) Laboratorio Di Patologia Clinica  
- (<sup>\*\*</sup>) Azienda Sanitaria Locale Salerno Presidio Ospedaliero Di Agropoli (Sa) Laboratorio Di Patologia Clinica
- P10** **Genomic analysis of SARS-CoV-2 variants in Lombardy: a single-center perspective**  
A. Mancon<sup>1</sup>, F. Bracchitta<sup>1</sup>, L. Rizzuto<sup>1</sup>, A. Rizzo<sup>1</sup>, D. Mileto<sup>1</sup>, S. Giubileo<sup>1</sup>, A. Romeo<sup>1</sup>, A. Tamoni<sup>1</sup>, L. Fiori<sup>1</sup>, C. Tonielli<sup>1</sup>, C. Bossi<sup>1</sup>, S. Grosso<sup>1</sup>, A. Lombardi<sup>1</sup>, M.R. Gismondo<sup>1</sup>, V. Micheli<sup>1</sup>  
<sup>1</sup> Laboratory of Clinical Microbiology, Virology and Bioemergencies, ASST Fatebenefratelli Sacco, University Hospital L. Sacco, Milan
- P11  
OC 3** **Study of COVID-19 patients harboring variants of SARS-CoV-2: comparison with a population from the first pandemic wave**  
L. Mazzuti<sup>1</sup>, M.A. Zingaropoli<sup>2</sup>, P. Pasculli<sup>2</sup>, G.M. Masci<sup>3</sup>, R. Campagna<sup>1</sup>, G. Oliveto<sup>1</sup>, F. Iafrate<sup>3</sup>, C. Catalano<sup>3</sup>, P. Ricci<sup>3</sup>, M.R. Ciardi<sup>2</sup>, C.M. Mastroianni<sup>2</sup>, A. Pierangeli<sup>1</sup>, G. Antonelli<sup>1</sup>, O. Turriziani<sup>1</sup>  
<sup>1</sup> Department of Molecular Medicine, Sapienza University of Rome, Italy - <sup>2</sup> Department of Public Health and Infectious Diseases, Sapienza, University of Rome, Italy - <sup>3</sup> Department of Radiological, Oncological and Pathological Sciences, Sapienza University of Rome, Italy
- P12** **SARS-CoV-2 B.1.1.7 reinfection after previous COVID-19**  
F. Novazzi<sup>1</sup>, A. Baj<sup>1,2</sup>, A. Genoni<sup>2</sup>, PG. Spezia<sup>3</sup>, A. Colombo<sup>1</sup>, G. Cassani<sup>1</sup>, C. Zago<sup>1</sup>, R. Pasciuta<sup>1</sup>, R. Capuano<sup>2</sup>, M. Prestia<sup>2</sup>, D. Dalla Gasperina<sup>4,2</sup>, W. Ageno<sup>5,2</sup>, P. Severgnini<sup>6</sup>, F. Dentali<sup>4,2</sup>, D. Focosi<sup>7</sup>, F. Maggi<sup>1,2</sup>  
<sup>1</sup> Laboratory of Microbiology, ASST Sette Laghi, Varese, Italy - <sup>2</sup> Department of Medicine and Surgery, University of Insubria, Varese, Italy - <sup>3</sup> Department of Translational Research, University of Pisa, Pisa, Italy - <sup>4</sup> Unit of Internal Medicine, ASST dei Sette Laghi, Varese, Italy - <sup>5</sup> Department of Emergency, ASST dei Sette Laghi, Varese, Italy - <sup>6</sup> Anesthesia and Intensive Care, ASST Sette Laghi, and Biotechnology and Life Sciences Department, Varese, Italy - <sup>7</sup> North-Western Tuscany Blood Bank, Pisa University Hospital, Pisa, Italy
- P13  
OC 4** **Usefulness of RT-PCR in SARS-CoV-2 variant surveillance**  
A. Rizzo, F. Bracchitta, G. Gagliardi, L. Rizzuto, A. Mancon, C. Pagani, S.G. Rimoldi, A. Gigantiello, D. Mileto, D. Curreli A. Lombardi, M.R. Gismondo, V. Micheli  
Laboratory of Clinical Microbiology, Virology and Bioemergencies, ASST Fatebenefratelli Sacco, L. Sacco University Hospital, Milan
- P14  
OC 5** **Genomic characterization of the emergent SARS-CoV-2 lineage in two provinces of Campania (Italy): whole-genome sequencing study**  
M. Scrima<sup>1,3</sup>, A.M. Cossu<sup>1,3</sup>, E.L. D'Andrea<sup>1,2</sup>, Y. Abruzzese<sup>1</sup>, C. Iannarone<sup>1</sup>, C. Miarelli<sup>1</sup>, T.M.R. Noviello<sup>4</sup>, M. Ceccarelli<sup>4</sup>, A. Fucci<sup>1,2</sup> and M. Caraglia<sup>1,3,10</sup>  
<sup>1</sup> COVID Lab; Biogem scarl Ariano Irpino, Italy - <sup>2</sup> Protein Factory, Biogem Scarl, Ariano Irpino, Italy - <sup>3</sup> Molecular Oncology and Precision Medicine Laboratory, Ariano Irpino, Italy - <sup>4</sup> Bioinformatics Core, BIOGEM s.c.a.r.l, Italy - <sup>5</sup> Department of Precision Medicine, University of Campania Luigi Vanvitelli, Naples, Italy
- P15** **Genomic monitoring of SARS-CoV-2 variants in Campania**  
Y. D'Agostino<sup>1</sup>, V. Mirici Cappa<sup>1</sup>, E. Alexandrova<sup>1</sup>, O. Strianese<sup>2</sup>, T. Rocco<sup>3</sup>, D. Memoli<sup>3</sup>, J. Lamberti<sup>1</sup>, G. Pecoraro<sup>1,2</sup>, V. Melone<sup>1</sup>, V. D'Amore<sup>1</sup>, I. Terenzi<sup>1</sup>, G. Nassa<sup>1,2</sup>, R. Tarallo<sup>1,2</sup>, P. Pagliano<sup>1,4</sup>, G. Franci<sup>1,5</sup>, E. Vaccaro<sup>6</sup>, M. Cennamo<sup>7</sup>, G. Portella<sup>7</sup>, G. Fenza<sup>8</sup>, A. Saccomanno<sup>9</sup>, M. Galdiero<sup>10,11</sup>, G. Giurato<sup>1,2</sup>, A. Weisz<sup>1,2,3</sup>, F. Rizzo<sup>1,2</sup>  
<sup>1</sup> Department of Medicine, Surgery and Dentistry "Scuola Medica Salernitana" and Laboratory of Molecular Medicine and Genomics, University of Salerno, Baronissi (SA), Italy - <sup>2</sup> Genome Research Center for Health, Campus of Medicine, Baronissi (SA), Italy - <sup>3</sup> Program of Medical Genomics, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>4</sup> Unit of Infectious Diseases, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>5</sup> Program of Clinical Microbiology, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>6</sup> Unit of Transfusion Medicine, Molecular Biology Section, AOU 'SS Giovanni di Dio e Ruggi d'Aragona' University of Salerno, Italy - <sup>7</sup> Department of Medical Translational Sciences, University of Napoli 'Federico II', Napoli (Italy) - <sup>8</sup> Department of Management & Innovation Systems, University of Salerno, Fisciano (SA), Italy - <sup>9</sup> Centre for Research in Pure and Applied Mathematics, University of Salerno, Fisciano (SA), Italy - <sup>10</sup> Department of Experimental Medicine, University of Campania "Luigi Vanvitelli", Napoli, Italy - <sup>11</sup> Unit of Virology and Microbiology, AOU University of Campania "L. Vanvitelli", Napoli, Italy

- P16** **Spike is the most recognized antigen in the whole-blood platform in both acute and convalescent COVID-19 patients**  
A. Aiello<sup>a</sup>, S. Najafi Fard<sup>a</sup>, E. Petruccioli<sup>a</sup>, L. Petrone<sup>a</sup>, V. Vanini<sup>a,b</sup>, C. Farroni<sup>a</sup>, G. Cuzzi<sup>a</sup>, A. Navarra<sup>c</sup>, G. Gualano<sup>d</sup>, S. Mosti<sup>d</sup>, L. Pierelli<sup>e</sup>, E. Nicastrì<sup>f</sup> and D. Goletti<sup>a</sup>  
<sup>a</sup> Translational Research Unit, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy - <sup>b</sup> UOS Professioni Sanitarie Tecniche, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy - <sup>c</sup> Clinical Epidemiology Unit, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy - <sup>d</sup> Clinical Division of Respiratory Infectious Diseases, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy - <sup>e</sup> UOC Transfusion Medicine and Stem Cell Unit, San Camillo Forlanini Hospital, Rome, Italy - <sup>f</sup> Clinical Division of Infectious Diseases, National Institute for Infectious Diseases Lazzaro Spallanzani-IRCCS, Rome, Italy
- P17** **Hematological parameters as indicators of disease severity in COVID-19 patients; Pakistan's experience**  
M. Ali<sup>1,2\*</sup>, A. Waris<sup>1</sup>  
<sup>1</sup> Department of Biotechnology, Quaid-i-Azam University Islamabad, Pakistan-45320 - <sup>2</sup> Pakistan Academy of Sciences, Islamabad, Pakistan
- P18** **Symptomatic SARS-CoV-2 infections after full schedule BNT162b2 vaccination in seropositive healthcare workers**  
A. Baj<sup>1</sup>, F. Novazzi<sup>2</sup>, A. Genoni<sup>3</sup>, F. Drago Ferrante<sup>2</sup>, S. Taborrelli<sup>4</sup>, B. Pini<sup>5</sup>, M. Partenope<sup>5</sup>, M. Valli<sup>5</sup>, R. Pasciuta<sup>2</sup>, A. Colombo<sup>2</sup>, C. Zago<sup>2</sup>, G. Cassani<sup>2</sup>, D. Dalla Gasperina<sup>1</sup>, R. Capuano<sup>2</sup>, M. Prestia<sup>2</sup>, P. G. Spezia<sup>6</sup>, L. Azzi<sup>7</sup>, D. Focosi<sup>8</sup>, F. Maggi<sup>1,2</sup>  
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- P19** **SARS-CoV-2 wastewater surveillance in Sicily**  
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- P20** **Bowel ischemia in otherwise asymptomatic patients: a possible COVID-19 onset**  
D. Bortolotti<sup>1</sup>, P. Zamboni<sup>2,3</sup>, S. Occhionorelli<sup>2,3</sup>, L. Traina<sup>3</sup>, L. M. Neri<sup>2</sup>, R. Gafà<sup>2,4</sup>, A. Passaro<sup>2</sup>, R. Rizzo<sup>1</sup>  
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- P21** **Antibody response to SARS-CoV-2 vaccination is extremely vivacious in subjects with previous SARS-CoV-2 infection**  
A. Callegaro<sup>1,2</sup>, D. Borleri<sup>3</sup>, M. Arosio, C. Farina<sup>2</sup>, G. Napolitano<sup>1,2</sup>, D. Valenti<sup>4,5</sup>, M. Rizzi<sup>5</sup>, F. Maggiolo<sup>5</sup>  
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- P22** **Neutrophil to lymphocyte ratio and clinical severity in COVID-19 patients of 1st and 2nd waves**  
M. Gelzo<sup>1,2</sup>, S. Cacciapuotì<sup>3</sup>, B. Pinchera<sup>3</sup>, A. De Rosa<sup>4</sup>, G. Cernerà<sup>1,2</sup>, F. Scialò<sup>1,5</sup>, M. Mormile<sup>3</sup>, G. Fabbrocini<sup>3</sup>, R. Parrella<sup>4</sup>, I. Gentile<sup>3</sup>, G. Castaldo<sup>1,2</sup>  
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- P23  
OC 53** **A real-life use of remdesivir in patients with coronavirus disease 2019: a retrospective case-control study**  
F. Cogliati Dezza, A. Oliva, V. Mauro, F.E. Romani, R. Aronica, F. Cancelli, C.M. Mastroianni  
Department of Public Health and Infectious Diseases, Sapienza University of Rome
- P24** **Is SARS-CoV-2 spreading among undocumented migrants? A real life experience**  
A. Colpani<sup>1</sup>, B. Zauli<sup>1</sup>, A. De Vito<sup>1</sup>, C. Fanelli<sup>1</sup>, V. Fiore<sup>1</sup>, G. Madeddu<sup>1</sup>, A. Donisi<sup>2</sup>  
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- P25  
OC 50** **Oral microbiome and local immune/inflammatory response in COVID-19 patients: a cross-sectional study**  
M. D'Accolti<sup>1</sup>, I. Soffritti<sup>1</sup>, C. Fabbri<sup>2</sup>, A. Passaro<sup>3</sup>, R. Manfredini<sup>4</sup>, G. Zuliani<sup>3</sup>, M. Franchi<sup>2</sup>, C. Contini<sup>5</sup>, E. Caselli<sup>1</sup>  
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- P26** **Demographic and clinical characteristics of COVID-19 patients: AORN Sant'Anna e San Sebastiano of Caserta experience**  
M.T. Della Rocca<sup>1,2</sup>, P. Iuliano<sup>3,4</sup>, V. Panetta<sup>1</sup>, A. Durante<sup>1</sup>, F. Simeone<sup>3</sup>, G. Di Caprio<sup>3</sup>, R. Greco<sup>1</sup> and P. Maggi<sup>3</sup>  
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- P27** **Preliminary evidence of blunted humoral response to SARS-CoV-2 mRNA vaccine in Multiple Sclerosis patients treated with Ocrelizumab**  
G. Donnarumma<sup>1</sup>, A. Gallo<sup>2</sup>, R. Capuano<sup>2</sup>, A. Bisecco<sup>2</sup>, E. Grimaldi<sup>1</sup>, M. Conte<sup>2</sup>, A. d'Ambrosio<sup>2</sup>, G. Tedeschi<sup>2</sup>, M. Galdiero<sup>1</sup>  
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- P28  
OC 7** **Analysis of anti-spike neutralizing antibodies titers and levels of circulating biomarkers in COVID-19 patients**  
F. Frasca<sup>1</sup>, M. Scordio<sup>1</sup>, G. Oliveto<sup>1</sup>, A. Viscido<sup>1</sup>, L. Sorrentino<sup>1</sup>, L. Santinelli<sup>2</sup>, C. Pinacchio<sup>2</sup>, G. Ceccarelli<sup>2</sup>, E. Gentilini<sup>2</sup>, E. Nelson Cavallari<sup>2</sup>, A. Gaeta<sup>2</sup>, G. d'Ettore<sup>2</sup>, A. Pierangeli<sup>1</sup>, G. Antonelli<sup>1,3</sup>, C. Scagnolari<sup>1</sup>  
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- P29** **Absolute quantitation of IgG response to COVID-19 mRNA vaccine, a longitudinal study**  
A. Fucci<sup>1</sup>, S. Giacobbe<sup>1</sup>, E.L. D'Andrea<sup>1</sup>, G. Vitale<sup>2</sup>, G. Icardi<sup>3</sup>, M. Scrima<sup>4</sup>, M. Caraglia<sup>4,5</sup> & M.L. Nolfi<sup>1</sup>  
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- P30** **Seroprevalence of SARS-CoV-2 assessed by four chemiluminescence immunoassays and one immunocromatography test for SARS-CoV-2**  
A. Furno<sup>1</sup>, M. Cennamo<sup>1</sup>, E. La Civita<sup>1</sup>, A. Liotti<sup>1</sup>, F. Russo<sup>1</sup>, G. Carbone<sup>1</sup>, S. Di Somma<sup>1</sup>, F. Napolitano<sup>1</sup>, F. Aloe<sup>1</sup>, T. M. Sorbo<sup>2</sup>, P. Romano<sup>3</sup>, D. Iorio<sup>4</sup>, V. Bruno<sup>4</sup>, P. Filauri<sup>4</sup>, F. Alfarano<sup>4</sup>, E. Coluccia<sup>4</sup>, P. Cerino, D. Terracciano, G. Portella  
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- P31 SARS-CoV-2 mRNA detection in the cerebrospinal fluid of a COVID-19-related acute encephalitis**  
V. Gentili<sup>1</sup>, F. Sganga<sup>2</sup>, R. Rizzo<sup>1</sup>, D. De Plano<sup>3</sup>, M. Polastri<sup>3</sup>, E. Fallica<sup>4</sup>, G.P.I. Caio<sup>5</sup>, R. De Giorgio<sup>5</sup>, R. Cultrera<sup>6</sup>  
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- P32 OC 51 The pathogenic HERV-W envelope protein is associated to the hyper-inflammation and lymphocytes exhaustion in COVID-19**  
 C. Matteucci<sup>1</sup>, A. Minutolo<sup>1</sup>, V. Petrone<sup>1</sup>, M. Fanelli<sup>1</sup>, M. Iannetta<sup>2,3</sup>, V. Malagnino<sup>2,3</sup>, M. Zordan<sup>2,3</sup>, P. Vitale<sup>2,3</sup>, S. Bernardini<sup>1</sup>, E. Garaci<sup>4</sup>, P. Di Francesco<sup>1</sup>, P. Sinibaldi Vallebona<sup>1,5</sup>, H. Perron<sup>6,7</sup>, L. Sarmati<sup>2,3</sup>, M. Andreoni<sup>2,3</sup>, E. Balestrieri<sup>1</sup>, S. Grelli<sup>1,8</sup>  
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- P33 Profiling of oral microbiota and cytelines in COVID-19 patients**  
V. Iebba<sup>1</sup>, N. Zanutta<sup>2</sup>, G. Campisciano<sup>2</sup>, V. Zerbato<sup>3</sup>, S. Di Bella<sup>1</sup>, C. Cason<sup>2</sup>, R. Luzzati<sup>1</sup>, M. Confalonieri<sup>1,4</sup>, A.T. Palamara<sup>5</sup>, M. Comar<sup>1,2</sup>  
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- P34 Anti-SARS-CoV-2 vaccination strategy and immunoreponse in healthcare workers of the INT - IRCCS "Fondazione Pascale" Cancer Center (Naples, Italy)**  
M.A. Isgrò<sup>1</sup>, D. Rea<sup>1</sup>, L. Di Capua<sup>1</sup>, G. Trillò<sup>2</sup>, L. Russo<sup>1</sup>, G. Botti<sup>3</sup>, L. Miscio<sup>3</sup>, A.A.M. Bianchi<sup>3</sup>, F.M. Buonaguro<sup>3</sup>, E. Cavalcanti<sup>1</sup>  
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- P35 COVID-19 vaccine MRNABNT162B2 elicits human antibody response in milk of breastfeeding**  
E. La Civita<sup>1</sup>, M. Cennamo<sup>1</sup>, A. Liotti<sup>1</sup>, A. Furno<sup>1</sup>, L. Conte<sup>1</sup>, C. Grillo<sup>1</sup>, C. Gnasso<sup>1</sup>, C. Cozzolino<sup>1</sup>, S. Di Somma<sup>1</sup>, F. Napolitano<sup>1</sup>, L. Sarno<sup>2</sup>, M. Guida<sup>2</sup>, D. Terracciano<sup>1</sup>, G. Portella<sup>1</sup>  
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- P36 Screening workers to prevent SARS-CoV-2 infection in the workplace: results of a year of investigation in the Marche Nord Companies**  
C. Orlandi<sup>1</sup>, D. Betti<sup>1</sup>, B. Borghi<sup>2</sup>, A. Baroni<sup>2</sup>, M. Papalini<sup>2</sup>, M. Magnani<sup>1</sup>, A. Casabianca<sup>1</sup>  
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- P37 Coinfection of tuberculosis and COVID-19 limits the ability to in vitro respond to SARS-CoV-2**  
L. Petrone<sup>1</sup>, E. Petruccioli<sup>1</sup>, V. Vanini<sup>1</sup>, G. Cuzzi<sup>1</sup>, G. Gualano<sup>2</sup>, P. Vittozzi<sup>2</sup>, E. Nicastri<sup>3</sup>, G. Maffongelli<sup>3</sup>, A. Grifoni<sup>4</sup>, A. Sette<sup>4</sup>, G. Ippolito<sup>5</sup>, G.B. Migliori<sup>6</sup>, F. Palmieri<sup>2</sup>, D. Goletti<sup>1</sup>  
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- P38 OC 52** **Study of entry checkpoints and kinetics of SARS-CoV-2 variants in veroe6 cells**  
P. Quaranta<sup>1,3</sup>, B. Storti<sup>2</sup>, C. Di Primio<sup>3</sup>, N. Clementi<sup>4,5</sup>, P.G. Spezia<sup>1</sup>, V. Carnicelli<sup>6</sup>, G. Lottini<sup>1</sup>, E. Paolini<sup>7</sup>, G. Freer<sup>1</sup>, M. Lai<sup>1</sup>, M. Costa<sup>3</sup>, F. Beltram<sup>2,8</sup>, A. Diaspro<sup>9,10</sup>, M. Pistello<sup>1,9</sup>, R. Zucchi<sup>6</sup>, P. Bianchini<sup>9</sup>, G. Signore<sup>8</sup>, R. Bizzarri<sup>2,6</sup>  
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- P39 OC 47** **SARS-CoV-2 sensing by TLR3 enhances immune response and hACE2 expression**  
S. Rizzo<sup>1</sup>, D. Bortolotti<sup>1</sup>, V. Gentili<sup>1</sup>, G. Schiuma, F. Caccuri<sup>2</sup>, A. Caruso<sup>2</sup>, R. Rizzo<sup>1</sup>  
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- P40** **Cytokine signature and prediction models in the waves of COVID-19 pandemics**  
S. Romano<sup>1,2</sup>, S. Cabaro<sup>1,2</sup>, V. D'Esposito<sup>1,2</sup>, M. F. Di Tolla<sup>1,2</sup>, T. Migliaccio<sup>1,2</sup>, A. Riva<sup>1,2</sup>, L. Atripaldi<sup>3</sup>, U. Atripaldi<sup>3</sup>, T. Di Matola<sup>3</sup>, D. Terracciano<sup>1</sup>, M. Cennamo<sup>1</sup>, M. Sansone<sup>4</sup>, F. Beguinot<sup>1,2</sup>, G. Portella<sup>1</sup>, P. Formisano<sup>1,2</sup>  
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- P41** **Higher plasma IFN- $\alpha$  in children with acute COVID-19 infection as compared to multisystem inflammatory syndrome (MIS-C) patients**  
S. Roversi<sup>1</sup>, C. Sabelli<sup>2</sup>, S. Messali<sup>1</sup>, A. Caruso<sup>1</sup>, S. Fiorentini<sup>1</sup>  
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- P42** **High IFN- $\alpha$  Levels in ruxolitinib-treated Aicardi-Goutieres patient during SARS-CoV-2 infection: a case report**  
R. Scaduto<sup>1,2</sup>, S. Roversi<sup>1,2</sup>, J. Galli<sup>3</sup>, M. Cattalini<sup>1</sup>, R.M. Ferraro<sup>4</sup>, M. Cortesi<sup>1</sup>, S. Giliani<sup>4</sup>, E. Fazzi<sup>3</sup>, A. Caruso<sup>2</sup>, R. Badolato<sup>1</sup>  
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- P43** **Effects of remdesivir on negativation time in SARS-CoV-2 disease: an open label cohort clinical trial - preliminary data**  
E.S. Serino<sup>1</sup>, M. Manara<sup>1</sup>, L. Di Donato<sup>1</sup>, C. Guarente<sup>1</sup>, L. Brollo<sup>2</sup>  
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- P44** **Evaluation of a fully closed real time PCR platform for the detection of SARS-CoV-2 in nasopharyngeal swabs: a pilot study**  
L. Stanzio<sup>1</sup>, M. Cennamo<sup>1</sup>, E.A. Molinari<sup>1</sup>, A. Liotti<sup>1</sup>, La Civita<sup>1</sup>, M. Fiorenza<sup>1</sup>, C. De Luca<sup>2</sup>, L. Vallefucio<sup>1</sup>, R. Sorrentino<sup>1</sup>, T.M. Sorbo<sup>3</sup>, P. Romano<sup>4</sup>, E. Montella<sup>2</sup>, G. Troncone<sup>2</sup>, D. Terracciano<sup>1</sup>, G. Portella<sup>1</sup>  
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- P45  
OC 54** **Single-dose BNT 162B2 mRNA COVID-19 vaccine significantly boosts neutralizing antibody response in health care workers recovering from asymptomatic or mild natural SARS-CoV-2 infection**  
I. Vicenti<sup>1</sup>, F. Gatti<sup>2</sup>, R. Scaggiante<sup>3</sup>, A. Boccuto<sup>1</sup>, D. Zago<sup>2</sup>, M. Basso<sup>2</sup>, F. Dragoni<sup>1</sup>, M. Zazzi<sup>1</sup>, S.G. Parisi<sup>2</sup>  
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- P46** **Monitoring anti SARS-CoV-2 antibody response after BNT162b2 vaccine**  
G. Anichini, C. Gandolfo, C. Terrosi, G. Gori Savellini, M. G. Cusi  
 Virology Unit, Department of Medical Biotechnologies, Siena University Hospital, Siena, Italy
- P47** **Time course of neutralizing antibody in healthcare workers with mild or asymptomatic COVID-19 infection**  
A. Boccuto<sup>1</sup>, F. Gatti<sup>2</sup>, R. Scaggiante<sup>3</sup>, E. Moldolo<sup>3</sup>, D. Zago<sup>2</sup>, M. Basso<sup>2</sup>, F. Dragoni<sup>1</sup>, N. Bartolini<sup>1</sup>, I. Vicenti<sup>1</sup>, M. Zazzi<sup>1</sup>, S. G. Parisi<sup>2</sup>  
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- P48  
OC 20** **Analysis of adaptive immune response to SARS-CoV-2 infection and the acquired immune response after COVID-19 vaccination with different assays**  
F. Bossi<sup>1</sup>, A. Vendramin<sup>1</sup>, S. Molon<sup>1</sup>, E. Ricci<sup>2</sup>, V. Lucente<sup>2</sup>, E. De Marchi, G. Spirito<sup>2</sup>, M. Marino<sup>3</sup>, L. Grumiro<sup>3</sup>, M. Gasparin<sup>1</sup>, K. Bortolozzo<sup>1</sup>, L. Pasini<sup>2</sup>, V. Sambri<sup>3</sup>  
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- P49** **Antibody response to COVID-19 vaccination in healthcare workers of Microbiology Unit of "S. Maria della Misericordia" Hospital**  
S. Bozza<sup>1,2</sup>, A. Graziani<sup>2</sup>, A. Mencacci<sup>1,2</sup>, B. Camilloni<sup>1,2</sup>  
<sup>1</sup> Microbiology Unit of S. Maria della Misericordia Hospital, Perugia - <sup>2</sup> Department of Medicine and Surgery, University of Perugia
- P50** **Neutralization of SARS-CoV-2 variants by convalescent and post-vaccine serum**  
A. Cara<sup>1</sup>, A. Rosellini<sup>1</sup>, P. Villa<sup>1</sup>, C. Dolfa<sup>1</sup>, R. Fonnesu<sup>1</sup>, F. Maggi<sup>2</sup>, M.L. Vatteroni<sup>1</sup>, P. Mazzetti<sup>1</sup>, M. Pistello<sup>1</sup>  
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- P51** **Dynamics of SARS-CoV-2 neutralizing antibody response among infected healthcare workers**  
S. Chandel<sup>1</sup>, G. Griffante<sup>1</sup>, V. Caneparo<sup>2</sup>, D. Ferrante<sup>1</sup>, S. Bortoluzzi, D. Cappello<sup>1</sup>, V. Bettio, C. Aleni, L. Scotti<sup>1</sup>, C. Airoidi<sup>1</sup>, S. Esposito, D. Cappello<sup>1</sup>, G. Gazzola, M. De Andrea<sup>2</sup>, C. Borgogna<sup>1</sup>, F. Faggiano<sup>1</sup>, M. Gariglio<sup>1</sup>  
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- P52** **The IgA immune response in COVID-19 patients and vaccines: a neglected but critical aspect of SARS-CoV-2 infection**  
F. De Marco<sup>1</sup>, L. de Latouliere<sup>1</sup>, L. Sorrentino<sup>1,5</sup>, C. Mandoj<sup>2</sup>, L. Conti<sup>2</sup>, M. De Rienzo<sup>3</sup>, M.L. Foddai<sup>3</sup>, C. Castilletti<sup>6</sup>, M.R. Capobianchi<sup>6</sup>, G. Ciliberto<sup>4</sup>  
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- P53** **Mucosal humoral response in BNT162B2 COVID-19 vaccinated subjects**  
L. Azzi<sup>1</sup>, M. Shallak<sup>2</sup>, D. Dalla Gasperina<sup>3</sup>, F. Maggi<sup>4</sup>, R.S. Accolla<sup>2</sup>, G. Forlani<sup>2</sup>  
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- P54** **BNT162b2 efficacy: results from healthcare workers vaccination. The renaissance study**  
O.M. Gagliardi<sup>1</sup>, A. Pani<sup>2</sup>, V. Cento<sup>2</sup>, F. Di Ruscio<sup>3</sup>, R. Gibilisco<sup>3</sup>, A. Zampiero<sup>4</sup>, D. Campisi<sup>4</sup>, A. Rimondini<sup>1</sup>, M. Senatore<sup>1</sup>, P.A. Schenardi<sup>1</sup>, S. Agliardi<sup>1</sup>, T. Conti<sup>1</sup>, G. Gazzaniga<sup>1</sup>, A. Schianchi<sup>1</sup>, F. Scaglione<sup>2-4</sup>  
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- P55** **SARS-CoV-2 N protein target TRIM-25-mediated RIG-I activation to suppress innate immunity**  
**OC 38** G. Gori Savellini, G. Anichini, C. Gandolfo, M.G. Cusi  
 Department of Medical Biotechnologies, University of Siena, Siena, Italy
- P56** **Humoral response assessment in BNT162b2 vaccinated healthcare workers: an assay comparison**  
D. Mileto<sup>1</sup>, M. Cutrera<sup>1</sup>, G. Gagliardi<sup>1</sup>, A. Rizzo<sup>1</sup>, A. Gigantiello<sup>1</sup>, A. Mancon<sup>1</sup>, M. Bianchi<sup>1</sup>, F. De Poli<sup>1</sup>, G. Giacomel<sup>1</sup>, I. Burgo<sup>2</sup>, M. Longo<sup>1</sup>, S. Grosso<sup>1</sup>, V. Micheli<sup>1</sup>, G. Rizzardini<sup>3</sup>, M.R. Gismondo<sup>1</sup>, and A. Lombardi<sup>1</sup>  
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- P57** **Vaccination against COVID 19 prevents disease severity and infection in a hospital in Northern Italy**  
 C. Belgiovine<sup>1</sup>, I. Dambrosio<sup>2</sup>, F. Frattolillo<sup>2</sup>, S. Sancini<sup>2</sup>, A. Porcella<sup>2</sup>, N. Nicodemo<sup>2</sup>, A. Garegnani<sup>2</sup>, R. Lacavalla<sup>2</sup>, C. Vidello<sup>2</sup>, M. Monari<sup>1</sup>  
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- P58** **Impaired priming of SARS-CoV-2 specific naive CD8+ T cells in older subjects**  
 E. Gallerani<sup>1</sup>, D. Proietto<sup>1</sup>, B. Dallan<sup>1</sup>, M. Campagnaro<sup>1</sup>, S. Pacifico<sup>2</sup>, V. Albanese<sup>2</sup>, E. Marzola<sup>2</sup>, P. Marconi<sup>1</sup>, A. Caputo<sup>1</sup>, V. Appay<sup>3</sup>, R. Gavioli<sup>1</sup> and F. Nicoli<sup>1</sup>  
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- P59** **Neutralizing antibodies responses against SARS-CoV-2 in sardinian cohort group**  
G. Sanna<sup>1</sup>, A. Marongiu<sup>1,2</sup>, G. Franci<sup>3</sup>, M. Galdiero<sup>4</sup>, C. Piras<sup>1</sup>, G. Pala<sup>1</sup>, V. Palmas<sup>1</sup>, R. Littera<sup>5</sup>, M. Vacca<sup>5</sup>, R. Jammoul<sup>5</sup>, A. Perra<sup>6</sup>, F. Sedda<sup>6</sup>, M. Campagna<sup>7</sup>, F. Pes<sup>7</sup>, D. Firinu<sup>7</sup>, M. Erbi<sup>7</sup>, M. Secci<sup>7</sup>, F. Meloni<sup>7</sup>, L. Chessa<sup>7</sup>, A. Manzin<sup>1</sup>  
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- P60** **Serosurvey in BNT162B2 vaccine-elicited neutralizing antibodies against authentic SARS-CoV-2 variants**  
**OC 10** A. Zani, F. Caccuri, S. Messali, C. Bonfanti, A. Caruso  
 Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, 25123 Brescia, Italy
- P61** **Robust and persistente B and T-cell responses after COVID-19 in immunocompetent and transplanted patients**  
**OC 37** F. Zavaglio<sup>1</sup>, V. Frangipane<sup>2</sup>, M. Morosini<sup>2</sup>, E. Gabanti<sup>1</sup>, P. Zelini<sup>3</sup>, M. Gregorini<sup>4</sup>, T. Rampino<sup>4</sup>, A. Asti<sup>4</sup>, E. Seminari<sup>5</sup>, A. Di Matteo<sup>5</sup>, C. Pellegrini<sup>6</sup>, F. Meloni<sup>2</sup>, D. Lilleri<sup>1</sup>, F. Baldanti<sup>1,7</sup>  
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- P62 SARS-CoV-2 diagnosis: implementation of a qPCR kit on the automated platform Panther Fusion system**  
P. Bottino, E. Zanotto, C. Balloco, S. Varetto S. Alizzi, F. Sidoti, C. Costa, R. Cavallo  
 Microbiology and Virology U., A.O.U. "Città della Salute e della Scienza di Torino"
- P63 OC 6 Colorimetric test for fast detection of SARS-CoV-2 in nasal and throat swabs**  
M. Cennamo<sup>1</sup>, B. Della Ventura<sup>2</sup>, A. Minopoli<sup>2</sup>, R. Campanile<sup>2</sup>, E. La Civita<sup>1</sup>, A. Liotti<sup>1</sup>, A. Furno<sup>1</sup>, L. Stanziola<sup>1</sup>, M. Fiorenza<sup>1</sup>, S. Di Somma<sup>1</sup>, F. Napolitano<sup>1</sup>, A. Russo<sup>1</sup>, M. Pagano<sup>1</sup>, R. Velotta<sup>2</sup>, D. Terracciano<sup>1</sup>, G. Portella<sup>1</sup>  
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- P64 Detection of SARS-CoV-2 RNA on plastic glasses and bottles. A possible approach for non-invasive surveillance of communities?**  
F. Di Maria<sup>1</sup>, T. Bonato<sup>2</sup>, A. Pivato<sup>3</sup>, R. Piazza<sup>2</sup>, P. Mancini<sup>4</sup>, G. Bonanno Ferraro<sup>4</sup>, C. Veneri<sup>4</sup>, M. Iaconelli<sup>4</sup>, E. Beccaloni<sup>4</sup>, F. Scaini<sup>4</sup>, L. Bonadonna<sup>4</sup>, T. Vicenza<sup>5</sup>, G. La Rosa<sup>4</sup>, E. Suffredini<sup>5</sup>  
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- P65 Post vaccinale evaluation of the increase in IgG anti SARS-CoV-2 in a sample of health care workers of the ASL Napoli 3 Sud**  
M. Ferrigno, C. Maiello, A. Rainone, M. A. Sorrentino, L. Riccardi, N. Occhiati, L. Di Maio, L. Lovriso, E. Policano, L. Folliero, V. Rodriguez, G. Pagliara, A. Cimino, M. Aloisio, P. Petrosino, F. Maiello, M. D'Orazio, C. Furfaro  
 Azienda Sanitaria Locale Napoli 3 Sud Presidio Ospedaliero "Cav. R. Apicella" Pollena Trocchia (Na) - Laboratorio Di Patologia Clinica
- P66 SARS-CoV-2 serological diagnosis: comparison of Liaison® vs Abbott® chemiluminescent assay and Roche® electrochemiluminescent assay**  
R. Gibilisco<sup>1</sup>, F. Di Ruscio<sup>1</sup>, A. Zampiero<sup>2</sup>, A. Nava<sup>2</sup>, D. Fanti<sup>2</sup>, C. Vismara<sup>2</sup>, A. Pani<sup>3</sup>, V. Cento<sup>3</sup>, F. Scaglione<sup>2,3</sup>, D. Campisi<sup>2</sup>  
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- P67 Parvovirus B19: role in the differential diagnosis of measles and rubella**  
S. Gioacchini, M. Baggieri, A. Marchi, P. Bucci, M. Kojouri, E. D'Ugo, F. Magurano  
 Dipartimento di Malattie Infettive, Istituto Superiore di Sanità, Rome, Italy
- P68 Detection of uncommon G3P[4] group a rotavirus strains in symptomatic children in Italy, during 2019**  
G. Janiro<sup>1</sup>, A. Chiereghin<sup>2</sup>, L. Gabrielli<sup>3</sup>, T. Lazzarotto<sup>3</sup>, M. Monini<sup>1</sup>  
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- P69 Enhanced liver fibrosis (ELF) score and fibroscan: a comparison between two noninvasive methods in patient with chronic liver disease HCV-related**  
E.A. Molinari<sup>1</sup>, L. Stanziola<sup>1</sup>, L. Vallefucio<sup>1</sup>, R. Sorrentino<sup>1</sup>, S. Di Somma<sup>1</sup>, F. Napolitano<sup>1</sup>, A. Furno<sup>1</sup>, A. Russo, M. Pagano, V. Cossiga<sup>2</sup>, G. Pontillo<sup>2</sup>, M. Guarino<sup>2</sup>, A. Fiorentino<sup>2</sup>, D. Terracciano<sup>1</sup>, F. Morisco<sup>2</sup>, G. Portella<sup>1</sup>  
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- P70** **Two years surveillance of Norovirus and Rotavirus acute gastroenteritis in healthcare associated infections in Italy**  
M. Monini<sup>1</sup>, I. Di Bartolo<sup>1</sup>, G. Ianaro<sup>1</sup>, A. Di Pierro<sup>2</sup>, G. Giammanco<sup>3</sup>, S. De Grazia<sup>3</sup>, F. Bonura<sup>3</sup>, G.M. Rossolini<sup>4,5</sup>, S. Pollini<sup>4,5</sup>, V. Rabensteiner<sup>6</sup>, E. Pagani<sup>2</sup> and the NosoVirNet group  
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- P71** **A case of CMV pancreatitis in an immunocompetent host**  
A. Morea<sup>1</sup>, A. Forniti<sup>2</sup>, C. Caroselli<sup>2</sup>, S. Verdenelli<sup>2</sup>, F. Amadori<sup>3</sup>, L.R. Suardi<sup>2</sup>  
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- P72** **Assessment the feasibility of pool testing for SARS-CoV-2 infection screening**  
I. Paganini<sup>1</sup>, C. Sani<sup>1</sup>, E. Burrioni<sup>1</sup>, S. Bisanzi<sup>1</sup>, G. Pompeo<sup>1</sup>, F. Cellai<sup>1</sup>, J. Viti<sup>1</sup>, A. Antonelli<sup>2,3</sup>, C. Chilleri<sup>2,3</sup>, M. Coppi<sup>2,3</sup>, M. Baccini<sup>4</sup>, F. Mealli<sup>4</sup>, G. M. Rossolini<sup>2,3</sup>, F. Carozzi<sup>5</sup>  
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- P73** **Exploratory analysis to identify the best antigen and the best immune biomarkers to study SARS-CoV-2 infection**  
E. Petruccioli<sup>1</sup>, S. Najafi Fard<sup>1</sup>, A. Navarra<sup>2</sup>, L. Petrone<sup>1</sup>, V. Vanini<sup>1,3</sup>, G. Cuzzi<sup>1</sup>, G. Gualano<sup>4</sup>, L. Pierelli<sup>5</sup>, A. Bertoletti<sup>6</sup>, E. Nicastrì<sup>4</sup>, F. Palmieri<sup>4</sup>, G. Ippolito<sup>7</sup>, D. Goletti<sup>1</sup>  
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- P74** **Development and evaluation of two serological ELISA assays based on SARS-CoV-2 N protein**  
G. Pezzoni<sup>1</sup>, S. Grazioli<sup>1</sup>, R. Savoldi<sup>3</sup>, A. Bregoli<sup>1</sup>, L. Capucci<sup>1</sup>, D. Lelli<sup>1</sup>, E. Foglia Alessandro<sup>1</sup>, M.B. Boniotti<sup>1</sup>, B. Colitti<sup>2</sup>, S. Rosati<sup>2</sup>, E. Brocchi<sup>1</sup>  
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- P75** **Respiratory infections pre and post SARS-CORONAVIRUS 2 era**  
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Microbiology and Diagnostic Immunology Unit, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy
- P76** **KI and WU polyomavirus in respiratory samples of SARS-CoV-2 infected patients**  
C. Prezioso<sup>1,2</sup>, U. Moens<sup>3</sup>, G. Oliveto<sup>4,5,6</sup>, F. Frasca<sup>4,6</sup>, A. Viscido<sup>4,5</sup>, G. Brazzini<sup>1</sup>, F. Piacentini<sup>1</sup>, M. Scordio<sup>4,6</sup>, G. Guerrizio<sup>4,5</sup>, D.M. Rodio<sup>4,5</sup>, A. Pierangeli<sup>4,6</sup>, O. Turriziani<sup>4,5</sup>, G. d'Ettore<sup>1</sup>, G. Antonelli<sup>4,5,6</sup>, C. Scagnolari<sup>4,6</sup>, V. Pietropaolo<sup>1,5</sup>  
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- P77** **Detection of cytomegalovirus with molecular biology technique in transplanted and/or immunodepressed subjects in a representative sample of the Campania region**  
A. Rainone<sup>\*</sup>, C. Maiello<sup>\*\*</sup>, M. Ferrigno<sup>\*</sup>, M.A. Sorrentino<sup>\*</sup>, R. Angrisani<sup>\*\*</sup>, L. Di Maio<sup>\*</sup>, N. Occhiati<sup>\*</sup>, L. Lovriso<sup>\*</sup>, E. Policano<sup>\*</sup>, F. Maiello<sup>\*\*</sup>, L. Folliero<sup>\*</sup>, M. Aloisio<sup>\*</sup>, P. Petrosino<sup>\*</sup>, M. Ametrano<sup>\*\*</sup>, M. D'Orazio<sup>\*</sup>, C. Furfaro<sup>\*</sup>  
Azienda Sanitaria Locale Napoli 3 Sud, Presidio Ospedaliero "Cav. R. Apicella", Pollena Trocchia (NA) - <sup>\*</sup> Laboratorio di Patologia Clinica, Direttore: Dott. M. D'Orazio, Azienda Sanitaria Locale Salerno - Presidio Ospedaliero di Agropoli (SA) - <sup>\*\*</sup> Laboratorio di Patologia Clinica, Direttore Dott. M. Ametrano

- P78** **Comparison of three commercial diagnostic tests for antibody anti SARS-CoV-2 spike protein detection**  
S. Ranno<sup>1</sup>, G. Linardos<sup>1</sup>, L. Piccioni<sup>1</sup>, L. Coltella<sup>1</sup>, M. Agosta<sup>1</sup>, E. Galeno<sup>1</sup>, S. Gobbi<sup>1</sup>, M. D'Agostini<sup>2</sup>, F. Antonelli<sup>4</sup>, R. Veralli<sup>4</sup>, S. Angeletti<sup>3</sup>, O. Porzio<sup>2</sup>, C.F. Perno<sup>1</sup>, E. Riva<sup>3</sup>  
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- P79** **Evaluation of analytical results obtained with different elution procedures from simulated nasal matrix collected with Copan Nasopharyngeal Floqswabs**  
S. Roversi<sup>1</sup>, C. Sabelli<sup>2</sup>, S. Messali<sup>1</sup>, A. Caruso<sup>1</sup>, S. Fiorentini<sup>1</sup>  
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- P80** **Analysis and validation of a rapid one-step RT-PCR assay for specific detection of SARS-CoV-2 on nasopharyngeal swabs**  
S. Fontana<sup>1</sup>, S. Roversi<sup>2</sup>, S. Messali<sup>2</sup>, R. Negrini<sup>3</sup>, G. Flamminio<sup>1</sup>, A. Caruso<sup>2</sup>, S. Fiorentini<sup>2,3</sup>  
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- P81** **Vaginal self-collected vs cervical clinicians collected samples for cervical cancer screening**  
**OC 8** C. Sani<sup>1</sup>, G. Fantacci<sup>1</sup>, E. Burroni<sup>1</sup>, S. Bisanzi<sup>1</sup>, G. Pompeo<sup>1</sup>, F. Cellai<sup>1</sup>, I. Paganini<sup>1</sup>, A. Iossa<sup>2</sup>, C. Di Pierro<sup>2</sup>, C.B. Visioli<sup>3</sup>, C. Nicolai<sup>4</sup>, A. Lombardi<sup>4</sup>, F. Carozzi<sup>5</sup>  
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- P82** **In-house validation of a real-time RT-qPCR and a droplet digital RT-PCR assay for SARS-CoV-2 detection in nasopharyngeal swabs**  
B. Pierri<sup>1,2</sup>, Y.T.R. Proroga<sup>3</sup>, F. Capuano<sup>3</sup>, P. Cerino<sup>1</sup>, A. Mancusi<sup>3</sup>, S. Girardi<sup>3</sup>, L. Vassallo<sup>1</sup>, M. Tafuro<sup>1</sup>, G. La Rosa<sup>4</sup>, F. Beikpour<sup>5,6</sup>, S. Di Pasquale<sup>6</sup>, T. Vicenza<sup>6</sup>, L. Cozzi<sup>6</sup>, E. Suffredini<sup>6</sup>  
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- P83** **Prevalence analysis of respiratory viruses during SARS-CoV-2 pandemic in a hospital in north-east Italy**  
D. Treggiari, C. Piubelli, E. Pomari, F. Formenti, R. Silva, and F. Perandin  
 Department of Infectious, Tropical Disease and Microbiology, IRCCS Sacro Cuore Don Calabria Hospital, Negrar di Valpolicella, Verona, Italy
- P84** **Assessment of HIV-1 DNA quantification methods in the Italian HIV DNA network**  
I. Vicenti<sup>1</sup>, F. Dragoni<sup>1</sup>, A. Giannini<sup>1</sup>, F. Saladini<sup>1</sup>, O. Turriziani<sup>2</sup>, D. Di Carlo<sup>2</sup>, S. Belmonti<sup>3</sup>, S. Di Giambenedetto<sup>3,13</sup>, F. Lombardi<sup>3</sup>, F. Ceccherini-Silberstein<sup>4</sup>, R. Scutari<sup>4</sup>, C. Alteri<sup>5</sup>, M. Antonello<sup>5</sup>, A. Lai<sup>6</sup>, A. Bergna<sup>6</sup>, S. Racca<sup>7</sup>, A. Ardemagni<sup>7</sup>, A. Casabianca<sup>8</sup>, C. Orlandi<sup>8</sup>, I. Bon<sup>9</sup>, A. Bertoldi<sup>9</sup>, P. Bagnarelli<sup>10</sup>, L. Di Sante<sup>10</sup>, I. Abbate<sup>11</sup>, G. Rozera<sup>11</sup>, M.R. Capobianchi<sup>11</sup>, S. Paolucci<sup>12</sup>, F. Giardina<sup>12</sup>, M. Zazzi<sup>1</sup>  
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- P85 Association between HSV-1 and Parkinson's disease**  
S. Agostini<sup>1</sup>, R. Mancuso<sup>1</sup>, L.A. Citterio<sup>1</sup>, A.S. Costa<sup>1</sup>, M. Meloni<sup>2</sup>, M. Clerici<sup>1</sup>  
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- P86 Overexpression of endogenous retroviruses in children with celiac disease**  
P.A. Tovo<sup>1</sup>, A. Opramolla<sup>2</sup>, A. Pizzol<sup>2</sup>, G. Calosso<sup>2</sup>, V. Daprà<sup>3</sup>, I. Galliano<sup>3</sup>, C. Calvi<sup>3</sup>, M. Pinon<sup>2</sup>, F. Cisarò<sup>2</sup>, C. Rigazio<sup>2</sup>, P.L. Calvo<sup>2</sup>, M. Bergallo<sup>1,3\*</sup>  
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- P87 Molecular features of the measles fusion complex: infection and spread in the central nervous system**  
F.T. Bovier<sup>1,2,3</sup>, B. Corneo<sup>4</sup>, G. Franci<sup>5</sup>, M. Galdiero<sup>6</sup>, N.A.P. Lieberman<sup>7</sup>, A.L. Greninger<sup>7</sup>, M. Porotto<sup>1,2,3</sup>  
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- P88 Binding to PI(4,5)P2 is indispensable for secretion of B cell clonogenic HIV-1 matrix protein P17 variants**  
A. Bugatti<sup>a</sup>, F. Caccuri<sup>a</sup>, F. Filippini<sup>a</sup>, C. Ravelli<sup>b</sup>, A. Caruso<sup>a</sup>  
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- P89 Role of Immediate Early Proteins ICP0 and ICP27 in Apoptotic pathway**  
M. Buratto<sup>1</sup>, M. Sicurella<sup>1</sup>, A. Stanchina<sup>1</sup>, A. Caproni<sup>1</sup>, F. Salvatori<sup>1</sup>, M. Pappadà<sup>1</sup>, R. Fontana<sup>1,2</sup>, R. Manservigi<sup>2</sup>, P. Marconi<sup>1</sup>  
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- P90 Dissecting lyssavirus-host interaction in the Syrian Hamster model**  
M. Castellan<sup>\*</sup>, M. Zorzan<sup>\*</sup>, R. Mura<sup>#</sup>, L. Brandao<sup>#</sup>, A. Pastori<sup>\*</sup>, S. Leopardi<sup>\*</sup>, S. Crovella<sup>§</sup>, P. De Benedictis<sup>\*</sup>  
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- P91 A novel nanobret protease sensor to sense HIV-1 PR activity in living cells**  
M. Centazzo, H. Ghassabian, G. Alvisi  
Department of Molecular Medicine, University of Padova, Padova Italy
- P92 Chronic HCV infection is associated with overexpression of human endogenous retroviruses that persists after drug-induced viral clearance**  
V. Daprà<sup>3</sup>, P.A. Tovo<sup>1\*</sup>, S. Garazzino<sup>2</sup>, C. Alliaudi<sup>1,3</sup>, C. Calvi<sup>1,3</sup>, P. Montanari<sup>1,3</sup>, I. Galliano<sup>1,3</sup>, M. Bergallo<sup>1,3\*</sup>  
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- P93 Nrf2 and G6PD as key players in modulating cell antioxidant response and influenza virus replication**  
M. De Angelis<sup>a</sup>, D. Amatore<sup>b</sup>, P. Checconi<sup>c</sup>, G. De Chiara<sup>d</sup>, A.T. Palamara<sup>a</sup>, L. Nencioni<sup>a</sup>  
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- P94**  
**OC 22** **The first high detailed Human nuclear proteome and the HPV16 genome interaction**  
G. Franci<sup>1</sup>, A. Chianese<sup>2</sup>, F. Dal Piaz<sup>1</sup>, A. Nebbioso<sup>3</sup>, G. Donadio<sup>1</sup>, G. Greco<sup>2</sup>, M.V. Morone<sup>2</sup>, G. Sanna<sup>4</sup>, S. Amitrano<sup>5</sup>, L. Altucci<sup>3</sup>, M. Galdiero<sup>2</sup>  
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- P95**  
**OC 23** **Parallel G-quadruplexes recruit the HSV-1 transcription factor ICP4 to promote viral transcription in infected human cells**  
I. Frasson, M. Nadai, S.N. Richter  
Department of Molecular Medicine, University of Padova, Padova Italy
- P96**  
**OC 16** **Identification of the nuclear proteome from all human viruses by a comprehensive analysis of classical nuclear localizations**  
H. Ghassabian, G. Cassioli, M. Allegro, M. Centazzo, N. Ambkari, G. Palù, E. Lavezzo, G. Alvisi  
Department of Molecular Medicine, University of Padova, Padova Italy
- P97** **HIV-1 NefSF2 protein increases vesicles production in THP-1 human monocytic cells differentiated with PMA**  
F. Giannessi<sup>1</sup>, A. Aiello<sup>1</sup>, Z.A Percario<sup>1</sup>, K. Fecchi<sup>2</sup>, M. Carollo<sup>3</sup>, M. Sargiacomo<sup>2</sup> and E. Affabris<sup>1</sup>  
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- P98** **Human cytomegalovirus-induced host protein citrullination is crucial for viral replication**  
G. Griffante<sup>1</sup>, F. Gugliesi<sup>1</sup>, S. Pasquero<sup>1</sup>, V. Dell'Oste<sup>1</sup>, M. Biolatti<sup>1</sup>, A. J. Salinger<sup>2,3</sup>, S. Mondal<sup>2</sup>, P.R. Thompson<sup>2</sup>, E. Weerapana<sup>3</sup>, R. J. Lebbink<sup>4</sup>, J. A. Soppe<sup>4</sup>, T. Stamminger<sup>5</sup>, V. Girault<sup>6</sup>, A. Pichlmair<sup>6</sup>, G. Oroszlán<sup>7</sup>, D. M. Coen<sup>7</sup>, M. De Andrea<sup>1,8</sup> and S. Landolfo<sup>1\*</sup>  
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- P99** **The envelope protein of Usutu virus attenuates West Nile virus virulence in immunocompetent mice**  
L. Jurisic<sup>1</sup>, G. Zaccaria<sup>2</sup>, D. Malatesta<sup>3</sup>, G. Di Teodoro<sup>4</sup>, A. Conte<sup>5</sup>, A. Lorusso<sup>6</sup>  
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- P100**  
**OC 25** **The US21 viroporin of human cytomegalovirus regulates cell adhesion and migration**  
A. Luganini<sup>1</sup>, V. Serra<sup>1</sup>, S. M. Bhat<sup>1</sup>, G. Scarpellino<sup>2</sup>, L. Munaron<sup>2</sup>, A. Fiorio Pla<sup>2</sup>, G. Gribaudo<sup>1</sup>  
<sup>1</sup> Laboratory of Microbiology and Virology - <sup>2</sup> Laboratory of Molecular Angiogenesis, Department of Life Sciences and Systems Biology, University of Turin, Turin, Italy
- P101** **Nicotine upregulates ACE2 expression and increases competence for SARS-CoV-2 in human pneumocytes**  
L. Macera<sup>1,2</sup>, A. Rosellini<sup>2</sup>, P. Russo<sup>3</sup>, C. Tomino<sup>4</sup>, P.G. Spezia<sup>1</sup>, M. Pistello<sup>1,2</sup>, F. Maggi<sup>5</sup>  
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- P102** **Role of the HSV-1 US11 protein in the pathway of apoptotic response in monocytic cells**  
M. Musarra-Pizzo<sup>1</sup>, R. Pennisi<sup>1,2</sup>, M.T. Sciortino<sup>1</sup>  
<sup>1</sup> Department of Chemical Biological Pharmaceutical and Environmental Sciences, University of Messina, Messina, 98166, Italy - <sup>2</sup> Shenzhen International Institute for Biomedical Research, 1301 Guanguang Rd. 3F Building 1-B, Silver Star Hi-tech Park Longhua District, Shenzhen, Guangdong, 518116, China

- P103 OC 26** **The innate immunological response mediated by PKR is counteracted by herpes virus tegument proteins**  
R. Pennisi<sup>1,2</sup>, M. Musarra-Pizzo<sup>2</sup>, G. Zhou<sup>1</sup>, M. T. Sciortino<sup>2</sup>  
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- P104 OC 21** **The expression of the truncated ACE2 isoforms only is related to the interferon response in airway epithelial cells from young adults**  
G. Oliveto<sup>1</sup>, A. Viscido<sup>1</sup>, F. Frasca<sup>1</sup>, M. Scordio<sup>1</sup>, L. Sorrentino<sup>1</sup>, A.M. Zicari<sup>2</sup>, A. Salvatori<sup>2</sup>, F. Salvatori<sup>2</sup>, L. Matera<sup>2</sup>, A. Febbo<sup>2</sup>, R. Nenna<sup>2</sup>, F. Midulla<sup>2</sup>, C. Scagnolari<sup>1</sup>, G. Antonelli<sup>1</sup>, A. Pierangeli<sup>1</sup>  
<sup>1</sup> Virology Laboratory, Department of Molecular Medicine, and <sup>2</sup> Department of Pediatrics and Infantile Neuropsychiatry "Sapienza" University
- P105** **Nrf2 expression differs in bronchiolitis caused by RSV-A, RSV-B or HRV**  
A. Viscido<sup>1\*</sup>, W. Toscanelli<sup>2\*</sup>, G. Oliveto<sup>1</sup>, R. Nenna<sup>3</sup>, M. De Angelis<sup>2</sup>, F. Midulla<sup>3</sup>, G. Antonelli<sup>1</sup>, A.T. Palamara<sup>2</sup>, A. Pierangeli<sup>1</sup>, C. Scagnolari<sup>1\*</sup> and L. Nencioni<sup>2\*</sup>  
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- P106** **Human Endogenous Retroviruses (HERVs) and Mammalian Apparent LTRs Retrotransposons (MaLRs) are dynamically modulated in different stages of immunity**  
M.P. Pisano, N. Grandi and E. Tramontano  
 Laboratory of Molecular Virology, Department of Life and Environmental Sciences, University of Cagliari, Cagliari, Italy
- P107 OC 46** **Role of extracellular vesicles in propagating HSV-1 induced brain neurodegenerative damage**  
V. Proto<sup>1</sup>, M. Miteva<sup>1</sup>, V. Ardovali<sup>1</sup>, M.E. Marocci<sup>1</sup>, A.T. Palamara<sup>1,2</sup>, G. De Chiara<sup>3</sup>  
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- P108** **HPV infection: the role of vaginal microbiota**  
B. Santella<sup>1</sup>, E. Serretiello<sup>1</sup>, V. Folliero<sup>1</sup>, M.T. Schettino<sup>2</sup>, P. De Franciscis<sup>2</sup>, N. Colacurci<sup>2</sup>, A. Schiattarella<sup>2</sup>, M. Galdiero<sup>1</sup>, G. Franci<sup>3</sup>  
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- P109** **Kinetic of IL-35 and IgA antibodies in COVID-19 patients**  
A. Quirino<sup>1</sup>, N. Marascio<sup>1</sup>, C. Peronace<sup>1</sup>, G.S. Barreca<sup>1</sup>, L. Gallo<sup>1</sup>, A. Giancotti<sup>1</sup>, A.G. Lamberti<sup>1</sup>, M. Mazzitelli<sup>2</sup>, E.M. Trecarichi<sup>2</sup>, C. Torti<sup>2</sup>, E. Garofalo<sup>3</sup>, A. Bruni<sup>3</sup>, F. Longhini<sup>3</sup>, F. Divenuto<sup>1</sup>, G. Pavia<sup>1</sup>, G.G.M. Scarlata<sup>1</sup>, G. Matera<sup>1</sup>, M.C. Liberto<sup>1</sup> and Microbiology COVID-19 Group\*  
 \* E. Colosimo, L. Martino, C. Zangari, E. La Ratta, C. Di Cello, N. Raso, R. Sinopoli, V. Tancre, E. Gambardella, V. Esposito, C. Maida, F. Mongiardo  
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- P110** **Late onset intra-uterine growth restriction: role of HHV-6 infection**  
G. Schiuma<sup>1</sup>, D. Bortolotti<sup>1</sup>, V. Gentili<sup>1</sup>, S. Rizzo<sup>1</sup>, E. Santi<sup>2</sup>, C. Taliento<sup>2</sup>, A. Vitagliano<sup>2</sup>, S. Beltrami<sup>1</sup>, G. Lanza<sup>3</sup>, R. Gafà<sup>3</sup>, P. Greco<sup>2</sup>, R. Rizzo<sup>1</sup>  
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- P111** **HSV-1 as a risk factor in the pathogenesis of Alzheimer's disease: expression of nuclear tau in different cell lines and in mouse model neurons**  
M. Sicurella<sup>1</sup>, D. Cecchi<sup>1</sup>, M. Buratto<sup>1</sup>, A. Caproni<sup>1</sup>, F. Salvatori<sup>1</sup>, M. Pappadà<sup>1</sup>, R. Fontana<sup>1,2</sup>, M.C. Tomasini<sup>3</sup>, R. Manservigi<sup>2</sup>, P. Marconi<sup>1</sup>  
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- P112** **Modulation of mirnome by HCMV and HHV-6 infection in human dermal fibroblasts: possible significance in systemic sclerosis**  
I. Soffritti<sup>1</sup>, M. D'Accolti<sup>1</sup>, G. Ravegnini<sup>2</sup>, C. Arcangeletti<sup>3</sup> and E. Caselli<sup>1</sup>  
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- P113** **Potential of latency reversing agents in NK cell-mediated eradication of the HIV reservoir**  
**OC 40** D.A. Covino, M.G. Desimio, M. Doria  
 Primary Immunodeficiency Unit, Bambino Gesù Children's Hospital, IRCCS, Rome, Italy
- P114** **Rhein and oncolytic herpes simplex virus in HCC treatment**  
A. Ambrosino<sup>1</sup>, D. Stelitano<sup>1</sup>, F. Dell'Annunziata<sup>1</sup>, F. Caruso<sup>1</sup>, BM Nastro<sup>1</sup>, A. Chianese<sup>1</sup>, B. Santella<sup>1</sup>, G. Franci<sup>2</sup>, M. Galdiero<sup>1</sup>, M. Galdiero<sup>1</sup>  
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- P115** **Increased susceptibility to skin carcinogenesis and UVB-induced damage in immunodeficient human papillomavirus (HPV)-8 transgenic mice**  
C. Borgogna<sup>1</sup>, L. Martuscelli<sup>1</sup>, C. Olivero<sup>2</sup>, G. Patel<sup>2</sup>, B. Akguel<sup>3</sup>, R. Boldorini<sup>4</sup>, M. De Andrea<sup>5,6</sup>, and M. Gariglio<sup>1</sup>  
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- P116** **Involvement of microRNAs and extracellular vesicles in human papillomavirus-induced carcinogenesis**  
M.V. Chiantore<sup>1</sup>, R.M. Mongiovi<sup>1</sup>, M. Iuliano<sup>2</sup>, G. Mangino<sup>2</sup>, L. Capriotti<sup>2</sup>, M. Tommasino<sup>3</sup>, P. Di Bonito<sup>1</sup>, G. Romeo<sup>1,2</sup>  
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- P117** **Virotherapy as a novel tool for reshaping tumor microenvironment in aggressive breast cancer**  
S. Di Somma, F. Napolitano, G. Castellano, I. Cimmino, M. Cennamo, M. Fiorenza, A.M. Malfitano, P. Formisano, G. Portella  
 Dipartimento di Scienze Mediche Traslazionali, Università degli Studi di Napoli Federico II
- P118** **Dual Cytoplasmic and nuclear localization of HTLV-1-encoded HBZ protein is a unique feature of adult cell leukemia**  
G. Forlani<sup>1</sup>, M. Shallak<sup>1</sup>, A. Tedeschi<sup>1</sup>, I. Cavallari<sup>2</sup>, A. Marais<sup>3</sup>, O. Hermine<sup>3</sup>, R.S. Accolla<sup>1</sup>  
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- P119** **Immunotherapeutic effectiveness of retargeted HSV oncolytic virus against the prostate membrane antigen**  
**OC 27** T. Gianni<sup>1</sup>, A. Vannini<sup>1</sup>, D. Bressanin<sup>1</sup>, F. Parenti<sup>2</sup>, A. Zaghini<sup>2</sup> and G. Campadelli-Fiume<sup>1</sup>  
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- P120** **Human papillomavirus (HPV) testing of vaginal self-collected samples: evaluation of different resuspension media**  
C. Giubbi<sup>1</sup>, M. Martinelli<sup>1</sup>, I. Triva<sup>1</sup>, R. Musumeci<sup>1</sup>, F. Perdoni<sup>1</sup>, G.E. Calcagno<sup>1</sup>, S. Canali<sup>1</sup>, R. Fruscio<sup>1,2</sup>, F. Landoni<sup>1,2</sup>, S. Castriciano<sup>3</sup>, C. Cocuzza<sup>1</sup>  
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- P121** **The cellular deacetylase SIRT1 contributes to P53 curbing by HPV16 and 18 and its targeting inhibits cancer cell proliferation**  
**OC 29** I. Lo Cigno<sup>1</sup>, F. Calati<sup>1</sup>, C. Girone<sup>1</sup>, G. Loi<sup>2</sup>, M. Krengli<sup>3</sup>, M. Niebler<sup>4</sup>, F. Rösl<sup>4</sup>, A. Venuti<sup>5</sup>, M. Gariglio<sup>1</sup>  
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- P122** **dl922-947 adenovirus and G-quadruplex binder combination against breast cancer**  
**OC 28** A.M. Malfitano<sup>1</sup>, F. Napolitano<sup>1</sup>, S. Di Somma<sup>1</sup>, J. Amato<sup>2</sup>, B. Pagano<sup>2</sup>, A. Randazzo<sup>2</sup>, G. Portella<sup>1</sup>  
<sup>1</sup> Department of Translational Medical Sciences, University of Naples Federico II, 80131 Naples, Italy - <sup>2</sup> Department of Pharmacy, University of Naples Federico II, 80131, Naples, Italy
- P123** **U94 inhibits tumorigenesis of prostate cancer cells lines**  
F. Giordano<sup>1</sup>, F. Caccuri<sup>2</sup>, M.L. Panno<sup>3</sup>, S. Marsico<sup>4</sup>  
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- P124** **Intra-tumor delivery of HPV therapeutic vaccines in an oral orthotopic preclinical model**  
F. Paolini<sup>1,2</sup>, S. Falcucci<sup>1,2</sup>, R. Covello<sup>3</sup>, S. Massa<sup>4</sup>, G. Coppola<sup>5</sup>, C. Bonomo<sup>3</sup>, V. Balzano<sup>2</sup>, R. Franconi<sup>6</sup>, A. Venuti<sup>1,2</sup>  
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- P125** **Association between polymorphism in the enhancer gene and hepatitis C virus-induced hepatocellular cancer risk**  
E. Serretelli<sup>1</sup>, G. Greco<sup>1</sup>, L. Rinaldi<sup>2</sup>, F. Pinto<sup>1</sup>, M. Manfredini<sup>1</sup>, F. Caruso<sup>1</sup>, G. Franci<sup>3</sup>, M. Galdiero<sup>1</sup>  
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- P126** **The unprecedented wide interaction of HTLV-1-encoded HBZ protein with the RNA splicing and stability machineries in leukemic cells**  
**OC 30** M. Shallak<sup>1</sup>, I. Iacobucci<sup>2</sup>, M. Monti<sup>2</sup>, T. Alberio<sup>3</sup>, M. Fasano<sup>3</sup>, F. Mortreux<sup>4</sup>, R.S. Accolla<sup>1</sup>, G. Forlani<sup>1</sup>  
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- P127** **Role of HPV infection and tert promoter mutation in vulvar squamous cell carcinoma**  
N. Starita<sup>1</sup>, A. Cerasuolo<sup>1</sup>, V. Gigantino<sup>2</sup>, G. Aquino<sup>2</sup>, L. Dassi<sup>1</sup>, S. Greggi<sup>3</sup>, C. Scaffa<sup>3</sup>, N.S. Losito<sup>2</sup>, F.M. Buonaguro<sup>1</sup>, M.L. Tornesello<sup>1</sup>  
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- P128** **Antibody response to peptide microarray of HCV proteome identifies specific epitopes with diagnostic potential for disease progression in HCV infected subjects**  
A.L. Tornesello<sup>1</sup>, U. Reimer<sup>2</sup>, P. Holenya<sup>2</sup>, T. Knaute<sup>2</sup>, F. Izzo<sup>3</sup>, L. Buonaguro<sup>1</sup>, M.L. Tornesello<sup>1</sup> and F.M. Buonaguro<sup>1</sup>  
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- P129** **Oncolytic adenovirus in combination therapeutic approaches with epigenetic modulators**  
C. Zannella<sup>1</sup>, A.M. Malfitano<sup>2</sup>, A. Ambrosino<sup>1</sup>, B. Santella<sup>1</sup>, S. Di Somma<sup>2</sup>, F. Napolitano<sup>2</sup>, A. Chianese<sup>1</sup>, G. Franci<sup>3</sup>, M. Galdiero<sup>1</sup>, G. Portella<sup>2</sup>  
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- P130** **Deep next-generation sequencing (NGS) data analysis of SARS-CoV-2: detection of defective viral genomes**  
G. Campisi, S. Messali, C. Arnaldo  
 Department of Molecular and Translational Medicine, Section of Microbiology, University of Brescia, Brescia, Italy
- P131** **Genomic characterization of SARS-CoV-2 variants in Campania, Italy**  
**OC 14** A. Grimaldi<sup>1</sup>, P. Annunziata<sup>1</sup>, F. Panariello<sup>1</sup>, T. Giuliano<sup>1</sup>, B. Pierri<sup>2</sup>, P. Cerino<sup>2</sup>, A. Ballabio<sup>1</sup> and D. Cacchiarelli<sup>2</sup>  
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- P132** **Isolation and characterization of monoclonal antibodies specific for SARS-CoV-2 and its major variants useful for developing innovative diagnostic assays and immunotherapy**  
**OC 49** S. Mariotti, A. Capocefalo, M.V. Chiantore, A. Iacobino, R. Teloni, A. Marchi, M. Baggieri, P. Bucci, M.F. Pirillo, A. Gallinaro, A. Di Virgilio, M. Sgarbanti, S. Sandini, C. Acchioni, F. Grasso, F. Tosini, M. Borghi, M.L. De Angelis, D. Negri, F. Magurano, A. Cara, P. Di Bonito and R. Nisini  
 Istituto Superiore di Sanità, Roma
- P133** **Plant-produced VP2-based particles provide protection against very virulent Infectious Bursal Disease Virus**  
**OC 15** C. Marusic<sup>1</sup>, A. Bortolami<sup>2</sup>, M. Donini<sup>1</sup>, C. Lico<sup>1</sup>, C. Terregino<sup>2</sup>, S. Baschieri<sup>1</sup>  
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- P134** **SARS-CoV-2 genome reconstruction: a method for obtaining accurate data from low viral load clinical samples and a simple targeted method for variants identification**  
C. Piubelli<sup>1</sup>, L. Marcolungo<sup>2</sup>, C. Beltrami<sup>2</sup>, C. Degli Esposti<sup>2</sup>, G. Lopatriello<sup>2</sup>, A. Mori<sup>1</sup>, E. Pomari<sup>1</sup>, M. Deiana<sup>1</sup>, S. Scarso<sup>1</sup>, Z. Bisoffi<sup>1,3</sup>, V. Grosso<sup>2</sup>, E. Cosentino<sup>2</sup>, S. Maestri<sup>2</sup>, D. Lavezzari<sup>2</sup>, B. Iadarola<sup>2</sup>, M. Paterno<sup>2</sup>, E. Segala<sup>2</sup>, B. Giovannone<sup>2</sup>, M. Gallinaro<sup>2</sup>, M. Rossato<sup>2,4</sup> and M. Delledonne<sup>2,4</sup>  
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- P135** **Validation of monocytes as carrier cells for intravascular delivery of oncolytic HSV-1**  
A. Reale<sup>1</sup>, A. Vitiello<sup>1</sup>, M. Cadamuro<sup>1</sup>, L. Krutzke<sup>2</sup>, S. Kochanek<sup>2</sup>, G. Palù<sup>1</sup>, A. Calistri<sup>1</sup>  
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- P136 OC 17** **High-throughput platforms to assess neutralizing antibodies and antiviral molecules against SARS-CoV-2**  
D. Stelitano<sup>1,2,3</sup>, C. Mathieu<sup>4</sup>, F.T. Bovier<sup>1,2,3</sup>, G. Franci<sup>5</sup>, G. Portella<sup>6</sup>, M. Cennamo<sup>6</sup>, B. Horvat<sup>4</sup>, M. Galdiero<sup>1</sup>, M. Porotto<sup>1,2,3</sup>  
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- P137** **Optimization of a protocol for the production of pseudotyped vectors with SARS-CoV-2 spike glycoprotein**  
G. Lottini<sup>a,b</sup>, M. Sidoti<sup>a</sup>, E. Plicanti<sup>a</sup>, M. Lai<sup>a</sup>, P. Quaranta<sup>a</sup>, M. Pistello<sup>a</sup>, G. Freer<sup>a</sup>  
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- P138** **Quinolinonyl Non-Diketo Acid Derivatives as Inhibitors of the HIV-1 Ribonuclease H Function of Reverse Transcriptase**  
A. Messorè<sup>1</sup>, A. Corona<sup>2</sup>, V.N. Madia<sup>1</sup>, F. Saccoliti<sup>3</sup>, V. Tudino<sup>1</sup>, A. De Leo<sup>1</sup>, D. Ialongo<sup>1</sup>, L. Scipione<sup>1</sup>, D. De Vita<sup>1</sup>, G. Amendola<sup>4</sup>, E. Novellino<sup>5</sup>, S. Cosconati<sup>4</sup>, M. Metifiot<sup>6</sup>, M.L. Andreola<sup>6</sup>, F. Esposito<sup>2</sup>, N. Grandi<sup>2</sup>, E. Tramontano<sup>2</sup>, R. Costi<sup>1</sup>, R. Di Santo<sup>1</sup>  
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- P139** **Cysteamine and its oxidised form cystamine reduces SARS-CoV-2 production in culture and cytokines release from immune cells**  
T. Alonzi<sup>\*</sup>, A. Aiello<sup>\*</sup>, S. Najafi Fard<sup>\*</sup>, L. Petrone<sup>\*</sup>, M.R. Capobianchi<sup>§</sup>, M. Piacentini<sup>\*\*</sup>, D. Goletti<sup>\*</sup>  
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- P140 OC 13** **In silico and in vitro combined approaches identified promising candidates as SARS-CoV-2 and HCoV-OC43 inhibitors**  
I. Arduino<sup>1</sup>, M. Donalisio<sup>1</sup>, M. Milani<sup>2</sup>, E. Mastrangelo<sup>2</sup>, F. Boni<sup>2</sup>, A. Marcello<sup>3</sup>, R. M. Bonotto<sup>3</sup>, E. Schneider<sup>4</sup>, D. Lembo<sup>1</sup>  
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- P141 OC 44** **Antiviral and antioxidant activities of *Artemisia annua* against SARS-CoV-2**  
M. Baggieri<sup>1</sup>, A. Marchi<sup>1</sup>, P. Bucci<sup>1</sup>, M. Kojouri<sup>1</sup>, S. Gioacchini<sup>1</sup>, D. Nuzzo<sup>2</sup>, P. Picone<sup>2</sup>, A. Pinto<sup>3</sup>, S. Dallavalle<sup>3</sup>, F. Ubaldi, F. Magurano<sup>1</sup>  
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- P142** **Inhibitory effect of ophthalmic solutions against SARS-CoV-2**  
A. Chianese<sup>1</sup>, F. Petrillo<sup>1</sup>, M. De Bernardo<sup>2</sup>, C. Zannella<sup>1</sup>, M.V. Morone<sup>1</sup>, M. Galdiero<sup>1</sup>, G. Boccia<sup>2</sup>, M. Galdiero<sup>1</sup>, N. Rosa<sup>2</sup>, G. Franci<sup>2</sup>  
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- P143** **The cholesterol metabolite 27-hydroxycholesterol inhibits SARS-CoV-2 and is markedly decreased in COVID-19 patients**  
A. Civra<sup>1</sup>, A. Marcello<sup>2</sup>, R. Milan Bonotto<sup>2</sup>, M. Costantino<sup>1</sup>, L. Nascimento Alves<sup>2</sup>, S. Rajasekharan<sup>2</sup>, C. Giacobbone<sup>3</sup>, C. Caccia<sup>4</sup>, R. Cavalli<sup>5</sup>, M. Adami<sup>6</sup>, P. Brambilla<sup>3</sup>, V. Leoni<sup>3</sup>, G. Poli<sup>7</sup>, D. Lembo<sup>1</sup>  
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- P144** **Lactoferrin as potential supplementary nutraceutical agent in COVID-19 patients: in vitro and in vivo preliminary evidences**  
M.P. Conte<sup>1</sup>, E. Campione<sup>2</sup>, L. Rosa<sup>1</sup>, C. Lanna<sup>2</sup>, C. Del Vecchio<sup>3</sup>, F. Iacovelli<sup>4</sup>, M. Falconi<sup>4</sup>, L. Bianchi<sup>2</sup>, P. Valenti<sup>1</sup>  
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- P145** **Antiviral effect of a cationic antimicrobial peptide against murine norovirus and hepatitis A virus**  
 G. Palmieri<sup>1</sup>, Y.T.R. Proroga<sup>2</sup>, T. Vicenza<sup>3</sup>, M. Balestrieri<sup>1</sup>, M. Gogliettino<sup>1</sup>, B. Agrillo<sup>1,4</sup>, A. Mancusi<sup>2</sup>, S. Di Pasquale<sup>3</sup>, E. Suffredini<sup>3</sup>, L. Cozzi<sup>3</sup>  
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- P146** **Antiviral activity of hydrolates from *Citrus limon*, *Thymus vulgaris* and *Thymus serpyllum* against norovirus surrogates**  
L. Cozzi<sup>1</sup>, T. Vicenza<sup>1</sup>, R. Battistini<sup>2</sup>, C. Masotti<sup>2</sup>, E. Suffredini<sup>1</sup>, S. Di Pasquale<sup>1</sup>, C. Ercolini<sup>2</sup>, L. Serracca<sup>2</sup>  
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- P147** **Peptidodendrimer designed on the viral spike protein inhibits SARS-CoV-2 infectivity**  
A. De Filippis<sup>1</sup>, C. Zannella<sup>1</sup>, V. Folliero<sup>1</sup>, D. Stelitano<sup>1</sup>, V. Fiore<sup>1</sup>, G. Franci<sup>2</sup>, M. Galdiero<sup>1</sup>  
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- P148** **Antiviral activity against HSV-1 and SARS-CoV-2 of leaf extract derived from *Vitis vinifera***  
**OC 45** F. Dell'Annunziata<sup>1</sup>, F. Sarno<sup>2</sup>, A. Nebbioso<sup>2</sup>, L. Altucci<sup>2</sup>, C. Buonocore<sup>3</sup>, D. de Pascale<sup>4</sup>, G. Vitale<sup>4</sup>, R. Giugliano<sup>1</sup>, A. Chianese<sup>1</sup>, G. Franci<sup>1</sup>, M. Galdiero<sup>1</sup>  
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- P149** **Identification of inhibitors of SARS-CoV-2 3CLpro enzymatic activity using a small molecule in vitro repurposing screen**  
**OC 42** F. Esposito<sup>1</sup>, M. Kuzikov<sup>2</sup>, E. Costanzi<sup>3</sup>, J. Reinshagen<sup>2</sup>, L. Vangeel<sup>4</sup>, M. Wolf<sup>2</sup>, B. Ellinger<sup>2</sup>, C. Claussen<sup>2</sup>, G. Geisslinger<sup>2,11</sup>, A. Corona<sup>1</sup>, D. Iaconis<sup>5</sup>, C. Talarico<sup>5</sup>, C. Manelfi<sup>5</sup>, R. Cannalire<sup>6</sup>, G. Rossetti<sup>7</sup>, J. Gossen<sup>7</sup>, S. Albani<sup>7</sup>, F. Musiani<sup>8</sup>, K. Herzog<sup>9</sup>, Y. Ye<sup>10</sup>, B. Giabbai<sup>3</sup>, N. Demitri<sup>3</sup>, D. Jochmans<sup>4</sup>, S. D. Jonghe<sup>4</sup>, J. Rymenants<sup>4</sup>, V. Summa<sup>6</sup>, A. R. Beccari<sup>5</sup>, P. Leysen<sup>4</sup>, P. Storici<sup>3</sup>, J. Neyts<sup>4</sup>, P. Gribbon<sup>2</sup>, A. Zaliani<sup>2</sup> and E. Tramontano<sup>1</sup>  
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- P150** **Evaluation of phenolic profile and antimicrobial activity of grapevine waste from typical cultivars of Campania**  
V. Folliero<sup>1</sup>, A. Morana<sup>2</sup>, G. Squillaci<sup>2</sup>, F. La Cara<sup>2</sup>, F. De Caro<sup>3</sup>, V. Carbone<sup>4</sup>, P. Minasi<sup>4</sup>, F. Dell'Annunziata<sup>1</sup>, G. Franci<sup>3</sup>, M. Galdiero<sup>1</sup>  
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- P151 Drug repurposing: palmitoylethanolamide in the treatment of SARS-CoV-2**  
R. Fannesu, V. La Rocca, E. Iacono, G. Freer, M. Pistello, M. Lai  
 Centro Retrovirus. Dipartimento di Ricerca Trasazionale e delle Nuove Tecnologie in Medicina e Chirurgia, Università di Pisa, Pisa
- P152 Antiviral activity of human milk and derived extracellular vesicles against known and emerging viruses**  
R. Francese<sup>1</sup>, M. Donalisio<sup>1</sup>, A. Civra<sup>1</sup>, P. Tonetto<sup>2</sup>, S. Sottemano<sup>2</sup>, A. Coscia<sup>2</sup>, S. Cirrincione<sup>3</sup>, C. Lamberti<sup>3</sup>, L. Cavallarin<sup>3</sup>, G.E. Moro<sup>4</sup>, E. Bertino<sup>2</sup>, D. Lembo<sup>1</sup>  
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- P153 Therapeutic efficacy of hyperimmune immunoglobulins isolated from the plasma of convalescent COVID-19 subjects**  
C. Fusco<sup>1</sup>, C. Zannella<sup>2</sup>, G. Franci<sup>3</sup>, M. Galdiero<sup>3</sup>, A. Leonardi<sup>1</sup>, I. Gargiulo<sup>4</sup>, R. Parrella<sup>4</sup>, G. Matarese<sup>1,5</sup>  
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- P154 Comparison of immunocytometric pattern in COVID-19 patients of 1st and 2nd waves**  
 G. Scalia<sup>1</sup>, M. Raia<sup>1</sup>, M. Gelzo<sup>1,2</sup>, S. Cacciapuotì<sup>3</sup>, A. De Rosa<sup>4</sup>, B. Pinchera<sup>3</sup>, R. Scotto<sup>3</sup>, G. Fabbrocini<sup>3</sup>, I. Gentile<sup>3</sup>, R. Parrella<sup>4</sup>, G. Castaldo<sup>1,2</sup>  
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- P155 New antiviral glycolipids from a marine Rhodococcus sp.**  
R. Giugliano<sup>1</sup>, F. Palma Esposito<sup>2</sup>, C. Buonocore<sup>3</sup>, D. de Pascale<sup>2</sup>, BM. Nastro<sup>1</sup>, V. Folliero<sup>1</sup>, G. Franci<sup>4</sup>, M. Galdiero<sup>1</sup>  
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- P156 Combating actions of green 2D-materials against herpes simplex virus type 1**  
A. Mali<sup>1</sup>, P. More<sup>1</sup>, F. Foglia<sup>1</sup>, C.A. Lanza<sup>1</sup>, R. Giugliano<sup>1</sup>, A. Ambrosino<sup>1</sup>, M. Singh<sup>2</sup>, C. Altucci<sup>2</sup>, B. Santella<sup>1</sup>, A. De Filippis<sup>1</sup>, M. Galdiero<sup>1</sup>, M. Galdiero<sup>1</sup>  
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- P157 The cranberry extract oximacro prevents Hazara virus infection by inhibiting the attachment to target cells**  
M. Mirandola<sup>1</sup>, M.V. Salvati<sup>1</sup>, C. Rodigari<sup>1</sup>, A. Mirazimi<sup>2,3</sup>, M.E. Maffei<sup>4</sup>, G. Gribaudo<sup>4</sup> and C. Salata<sup>1</sup>  
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- P158 Evaluation of antiviral effect of silver nanoparticles from sour cherry leave extract**  
P. More<sup>1</sup>, S. Shinde<sup>1</sup>, A. Mali<sup>1</sup>, A. Ambrosino<sup>1</sup>, A. Santangelo<sup>1</sup>, A. Zaino<sup>1</sup>, CA. Lanza<sup>1</sup>, F. Foglia<sup>1</sup>, S.A. Maiella<sup>1</sup>, G. Franci<sup>2</sup>, M. Galdiero<sup>1</sup>  
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- P159** **SmCo nanoparticles produced for microbiological applications**  
M.V. Morone<sup>1</sup>, G. Corvino<sup>1</sup>, E. Serretiello<sup>1</sup>, S. Shinde<sup>1</sup>, R. Giugliano<sup>1</sup>, F. Foglia<sup>1</sup>, G. Greco<sup>1</sup>, M. Galdiero<sup>1</sup>, A. Morone<sup>2</sup>  
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- P160** **A new therapeutic approach in HSV-1 infection: synergic effect of YY1 and HDACs**  
B.M. Nastri, C. Zannella, M.V. Morone, G. Greco, C. Del Vecchio, C. Russo, C. De Biasio, M. Galdiero  
 Department of Experimental Medicine, section Virology and Microbiology, University of Campania "Luigi Vanvitelli", Naples, Italy
- P161** **Molecular dynamics simulations to investigate the antiviral effect of heparin in SARS-CoV-2 spike infection**  
G. Paiardi<sup>1,3</sup>, S. Richter<sup>1</sup>, M. Rusnati<sup>3</sup>, R.C. Wade<sup>1,2</sup>  
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- P162** **In-vitro evaluation of the immunomodulatory effects of baricitinib: implication for COVID-19 therapy**  
L. Petrone<sup>a</sup>, E. Petruccioli<sup>a</sup>, T. Alonzi<sup>a</sup>, V. Vanini<sup>a</sup>, G. Cuzzi<sup>a</sup>, S. Najafi Fard<sup>a</sup>, C. Castilletti<sup>b</sup>, F. Palmieri<sup>c</sup>, G. Gualano<sup>c</sup>, P. Vitozzi<sup>c</sup>, E. Nicastrì<sup>d</sup>, L. Lepore<sup>d</sup>, A. Grifoni<sup>e</sup>, A. Antinori<sup>f</sup>, A. Vergori<sup>f</sup>, G. Ippolito<sup>g</sup>, F. Cantini<sup>h</sup>, and D. Goletti<sup>a</sup>  
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- P163** **Antiviral activity of silver nanoparticles from Campania Region red grape cultivars (aglianico, fiano and greco)**  
S. Shinde<sup>1</sup>, A. De Filippis<sup>1</sup>, P. More<sup>1</sup>, A. Schettino<sup>1</sup>, R. Manente<sup>1</sup>, G. Giordano<sup>1</sup>, M. Galdiero<sup>1</sup>, G. Franci<sup>2</sup>, M. Galdiero<sup>1</sup>  
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- P164** **Effectiveness of polyphenols in improving virucidal properties of surgical masks**  
M. Verani<sup>1</sup>, I. Federigi<sup>1</sup>, E. Bramanti<sup>2</sup>, B. Campanella<sup>2</sup>, F. Cicogna<sup>2</sup>, S. Coiai<sup>2</sup>, E. Passaglia<sup>2</sup>, B. Casini<sup>3</sup>, B. Tuvo<sup>3</sup>, A. Carducci<sup>1</sup>  
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- P165** **Antiviral therapeutics from amphibian skin peptides**  
C. Zannella<sup>1</sup>, G. Franci<sup>2</sup>, P. Grieco<sup>3</sup>, A. Mali<sup>1</sup>, MT. Della Rocca<sup>1</sup>, M. Galdiero<sup>1</sup>, M. Galdiero<sup>1</sup>  
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- P166** **In vitro investigation of the mechanism of action of two broadly neutralizing human monoclonal antibodies against rabies virus**  
M. Zorzan<sup>\*</sup>, M. Castellan<sup>\*</sup>, B. Zecchin<sup>\*</sup>, A. Minola<sup>#</sup>, F. Benigni<sup>#</sup>, D. Corti<sup>#§</sup>, P. De Benedictis<sup>\*</sup>  
<sup>\*</sup> Istituto Zooprofilattico Sperimentale delle Venezie, Padua, Italy - <sup>#</sup> Humabs BioMed SA, a subsidiary of Vir Biotechnology, Bellinzona, Switzerland - <sup>§</sup> Vir Biotechnology, San Francisco, CA, USA

- P167 OC 35 Identification of different cress DNA viruses in lizards and geckos**  
**P. Capozza**<sup>1</sup>, G. Lanave<sup>1</sup>, G. Diakoudi<sup>1</sup>, F. Pellegrini<sup>1</sup>, R. Cardone<sup>1</sup>, V. I. Vasinioti<sup>1</sup>, N. Decaro<sup>1</sup>, A. Alberti<sup>2</sup>, J. A. Mendoza-Roldan<sup>1</sup>, K. Bányai<sup>3</sup>, D. Otranto<sup>1</sup>, C. Buonavoglia<sup>1</sup>, V. Martella<sup>1</sup>  
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- P168 OC 34 Unrevealed genetic diversity of GII norovirus in the swine population of North East Italy**  
**L. Cavicchio**<sup>1</sup>, L. Tassoni<sup>1</sup>, A. Laconi<sup>2,3</sup>, G. Cunial<sup>4</sup>, L. Gagliazzo<sup>4</sup>, A. Milani<sup>2</sup>, M. Campalto<sup>1</sup>, G. Di Martino<sup>4</sup>, M. Forzan<sup>5</sup>, I. Monne<sup>2</sup>, M. S. Beato<sup>6</sup>  
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- P169 Unexpected genetic diversity of two novel swine MRVS in Italy**  
**L. Cavicchio**<sup>1</sup>, L. Tassoni<sup>1</sup>, G. Zamperin<sup>2</sup>, **M. Campalto**<sup>1</sup>, M. Carrino<sup>1</sup>, F. Tonon<sup>3</sup>, S. Leopardi<sup>2</sup>, P. De Benedictis<sup>2</sup>, M. S. Beato<sup>1</sup>  
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- P170 Tick-borne-encephalitis virus: seroprevalence in blood donors and in sentinel animals in the autonomous province of Bolzano**  
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- P171 Evaluation of infectivity of hepatitis E virus in fermented dried salami**  
**D. De Medici**<sup>1</sup>, M.N. Losio<sup>2</sup>, **S. Di Pasquale**<sup>1</sup>, E. Cosciani Cunico<sup>2</sup>, L. Cozzi<sup>1</sup>, P. Monastero<sup>2</sup>, T. Vicenza<sup>1</sup>, A. Di Sandro<sup>3</sup>, R. Lena<sup>3</sup>, E. Dalzini<sup>2</sup>, E. Suffredini<sup>1</sup>, E. Pavoni<sup>4</sup>  
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- P172 Identification of a canine homolog of human hepatitis B virus**  
**G. Diakoudi**<sup>1</sup>, P. Capozza<sup>1</sup>, G. Lanave<sup>1</sup>, F. Pellegrini<sup>1</sup>, B. Di Martino<sup>2</sup>, G. Elia<sup>1</sup>, M. Camero<sup>1</sup>, M. Tempesta, V.R. Barrs<sup>3</sup>, K. Banyai<sup>4</sup>, C. Catella<sup>1</sup>, S. Lucente<sup>1</sup>, C. Buonavoglia<sup>1</sup>, V. Martella<sup>1</sup>  
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- P173 Pilot investigation of astroviruses in squamates**  
**G. Diakoudi**<sup>1</sup>, P. Capozza<sup>1</sup>, F. Pellegrini<sup>1</sup>, V. I. Vasinioti<sup>1</sup>, G. Lanave<sup>1</sup>, C. Catella<sup>1</sup>, M. Camero<sup>1</sup>, A. Parisi<sup>2</sup>, L. Capozzi<sup>2</sup>, J. A. Mendoza-Roldan<sup>1</sup>, D. Otranto<sup>1</sup>, C. Buonavoglia<sup>1</sup>, V. Martella<sup>1</sup>  
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- P174 Dioxin modifies the expression of nucleocapsid protein during canine coronavirus infection**  
**C. Cerracchio**<sup>1</sup>, F.P. Nocera<sup>1</sup>, M. Ambrosio<sup>1</sup>, S. Lambiase<sup>2</sup>, L. De Martino<sup>1</sup> and F. Fiorito<sup>1</sup>  
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- P175** **Isolation of HEV-3 strains from swine fecal samples on human A549 cell line**  
**OC 36** G. Ianiro<sup>1</sup>, M. Monini<sup>1</sup>, L. De Sabato<sup>1</sup>, M.G. Ammendolia<sup>1</sup>, F. Ostanello<sup>2</sup>, I. Di Bartolo<sup>1</sup>  
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- P176** **Avian reovirus P17 suppresses angiogenesis by promoting DPP4 secretion**  
**OC 32** E. Manocha<sup>1</sup>, A. Bugatti<sup>1</sup>, M. Belleri<sup>2</sup>, A. Zani<sup>1</sup>, F. Caccuri<sup>1</sup>, M. Presta<sup>2</sup>, A. Caruso<sup>1\*</sup>  
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- P177** **SARS-CoV-2 virus dynamic in a mink farm in Italy: lessons learned**  
**OC 33** A. Moreno<sup>1</sup>, D. Lelli<sup>1</sup>, T. Trogu<sup>1</sup>, A. Lavazza<sup>1</sup>, I. Barbieri<sup>1</sup>, M.B. Boniotti<sup>1</sup>, C. Salogni<sup>1</sup>, S. Giovannini<sup>1</sup>, G. Alborali<sup>1</sup>, S. Bellini<sup>1</sup>, M. Boldini<sup>1</sup>, M. Farioli<sup>2</sup>, L. Ruocco<sup>3</sup>, O. Bessi<sup>3</sup>, A. Maroni Ponti<sup>3</sup>, G. Belli<sup>4</sup>, A. Margutti<sup>4</sup>, M. Giorgi<sup>4</sup>  
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- P178** **Dynamic evolution of H1 swine viruses: what can we expect in the near future?**  
A. Moreno<sup>1</sup>, G. Alborali<sup>1</sup>, L. Baioni<sup>2</sup>, S. Faccini<sup>1</sup>, A. Luppi<sup>2</sup>, A. Prosperi<sup>2</sup>, C. Rosignoli<sup>1</sup>, C. Salogni<sup>1</sup>, S. Canziani<sup>1</sup>, S. Salvato<sup>1</sup>, T. Trogu<sup>1</sup>, C. Chiapponi<sup>2</sup>  
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- P179** **Bovine Delta papillomavirus E5 oncoprotein interacts with TRIM25 and hampers antiviral innate immune response**  
**OC 31** F. De Falco<sup>1</sup>, A. Cutarelli<sup>2</sup>, P. Cerino<sup>2</sup>, V. Uleri<sup>1</sup>, S. Roperto<sup>1\*</sup>  
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- P180** **Preliminary results from an environmental investigation for orthohepevirus C (HEV-C) in Italy**  
V. Sarchese<sup>1</sup>, P. Fruci<sup>1</sup>, F. Di Profio<sup>1</sup>, A. Palombieri<sup>1</sup>, G. Lanave<sup>2</sup>, G. La Rosa<sup>3</sup>, E. Suffredini<sup>4</sup>, F. Marsilio<sup>1</sup>, V. Martella<sup>2</sup>, B. Di Martino<sup>1</sup>  
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- P181** **Occurrence and trend of human viruses in wild bivalves growing in Venice channels during the COVID-19 pandemic**  
M. Sigovini<sup>1</sup>, D. Tagliapietra<sup>1</sup>, I. Guarneri<sup>1</sup>, G. La Rosa<sup>2</sup>, F. Beikpour<sup>3,4</sup>, T. Vicenza<sup>3</sup>, S. Di Pasquale<sup>3</sup>, M. Losardo<sup>5</sup>, L. Cozzi<sup>3</sup>, E. Suffredini<sup>3</sup>  
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- P182** **Chronic wasting disease: present situation and surveillance of the Italian National Reference Center for Animal Encephalopathies**  
L. Tripodi<sup>\*</sup>, G. Ru<sup>\*</sup>, F. Lazzara<sup>\*\*\*</sup>, L. Florio<sup>\*</sup>, D. Meloni<sup>\*</sup>, M. Mazza<sup>\*</sup>, E. Bozzetta<sup>\*</sup>, M.G. Perrotta<sup>\*\*</sup>, M. Caramelli<sup>\*</sup>, C. Casalone<sup>\*</sup>, B. Iulini<sup>\*</sup>  
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- P183** **Comparison of the egeneup and the minimag nuclisens semi-automatic systems for viral nucleic acids extraction from food matrices**  
T. Vicenza, L. Cozzi, E. Suffredini, S. Di Pasquale  
Department of Food Safety, Nutrition and Veterinary Public Health, Istituto Superiore di Sanità, National Reference Laboratory for Foodborne Viruses, Rome, Italy

- P184** **Hepatitis E virus: retention of infectivity in presence of additives used for the production of cured meats**  
D. De Medici<sup>1</sup>, T. Vicenza<sup>1</sup>, A. Di Sandro<sup>2</sup>, R. Lena<sup>2</sup>, L. Cozzi<sup>1</sup>, S. Di Pasquale<sup>1</sup>, E. Suffredini<sup>1</sup>  
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- P185** **Identification of a bacteriophage in the phytoplasma insect vector *Euscelidius variegatus***  
S. Abbà<sup>1</sup>, M. Rossi<sup>1</sup>, S. Ottati<sup>1,2</sup>, G. Martino<sup>1</sup>, M. Turina<sup>1</sup>, L. Galetto<sup>1</sup>, C. Marzachi<sup>1</sup>, M. Vallino<sup>1</sup>  
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- P186** **Identification of possible new viruses in bumble bees by next-generation sequencing**  
R. Abou Kuba<sup>1</sup>, A.K. Alabdullah<sup>2</sup>, A. Giampetruzzi<sup>1</sup>, R. Addante<sup>3</sup>, M. Saponari<sup>1</sup>  
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- P187** **Plant viruses go global: the european virus archive**  
G.P. Accotto<sup>1</sup>, M. Ciuffo<sup>1</sup>, R. Pierro<sup>1</sup>, L. Rubino<sup>2</sup>, A.M. Vaira<sup>1</sup>, C. Prat<sup>3</sup>, J.L. Romette<sup>3</sup>  
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- P188** **Transcriptomics to reveal the genetic basis of CMD2 resistance in cassava**  
**OC 12** A.V. Carluccio<sup>1,2\*</sup>, R.O. Adeoti<sup>1</sup>, I. Rabbi<sup>1</sup>, M. Gedil<sup>1</sup>, A. Gisel<sup>1,3</sup> and L. Stabolone<sup>1,2\*</sup>  
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- P189** **A complex virome associated to tospovirus-transmitting thrips species offers new approaches to contain the damage they cause**  
M. Chiapello<sup>1</sup>, L. Bosco<sup>2</sup>, M. Ciuffo<sup>1</sup>, S. Ottati<sup>1,2</sup>, L. Tavella<sup>2</sup> and M. Turina<sup>1\*</sup>  
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- P190** **Looking for novel species demarcation criteria for viroid classification**  
M. Chiumenti<sup>1</sup>, B. Navarro<sup>1</sup>, T. Candresse<sup>2</sup>, R. Flores<sup>3</sup>, and F. Di Serio<sup>1</sup>  
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- P191** **TSWV-targeted VIGS in plants and thrips as possible virus control strategy: preliminary results**  
S. Daghighi<sup>1</sup>, S. Ottati<sup>1,2</sup>, G. Forestello<sup>1,2</sup>, M. Ciuffo<sup>1</sup>, L. Tavella<sup>2</sup>, M. Turina<sup>1</sup>  
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- P192** **A tripartite narnavirus-like mycovirus reveals the existence of a split RNA-dependent RNA**  
**OC 11** **polymerase palm domain hosted by two distinct proteins**  
M. Forgia<sup>1</sup>, M. Daghighi<sup>1</sup>, S. Perotto<sup>2</sup>, S. Turina<sup>1</sup>  
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- P193** **Genetic diversity of norovirus genogroups I and II in urban sewage through a next generation sequencing-based approach: four years monitoring**  
G. Bonanno Ferraro<sup>1</sup>, P. Mancini<sup>1</sup>, C. Veneri<sup>1</sup>, M. Iaconelli<sup>1</sup>, E. Suffredini<sup>2</sup>, D. Brandtner<sup>3</sup>, G. La Rosa<sup>1</sup>  
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- P194 SARS-CoV-2 variants of concern (UK and Brazilian variant) detected in urban wastewaters in central Italy**  
 G. La Rosa<sup>1</sup>, P. Mancini<sup>1</sup>, G. Bonanno Ferraro<sup>1</sup>, C. Veneri<sup>1</sup>, M. Iaconelli<sup>1</sup>, L. Lucentini<sup>1</sup>, L. Bonadonna<sup>1</sup>, S. Brusaferro<sup>2</sup>, D. Brandtner<sup>3</sup>, A. Fasanella<sup>4</sup>, L. Pace<sup>4</sup>, A. Parisi<sup>4</sup>, D. Galante<sup>4</sup>, E. Suffredini<sup>5</sup>  
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- P195 Emerging viruses in raw and treated wastewaters, surface waters, and drinking waters**  
P. Mancini<sup>1</sup>, M. Iaconelli<sup>1</sup>, C. Veneri<sup>1</sup>, G. Bonanno Ferraro<sup>1</sup>, L. Meucci<sup>2</sup>, F. Bersani<sup>2</sup>, G. La Rosa<sup>1</sup>  
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- P196 One-year monitoring of SARS-CoV-2 in urban sewage in Rome, Italy**  
 G. La Rosa<sup>2</sup>, G. Bonanno Ferraro<sup>1</sup>, P. Mancini<sup>1</sup>, C. Veneri<sup>1</sup>, M. Iaconelli<sup>1</sup>, L. Lucentini<sup>1</sup>, L. Bonadonna<sup>1</sup>, E. Suffredini<sup>2</sup>  
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- P197 Fast, simple and cost-effective concentration method for SARS-CoV-2 detection in wastewaters**  
G. La Rosa<sup>1</sup>, G. Bonanno Ferraro<sup>1</sup>, P. Mancini<sup>1</sup>, C. Veneri<sup>1</sup>, M. Iaconelli<sup>1</sup>, E. Nicosia<sup>2</sup>, S. Rosatto<sup>3</sup>, G. Allaria<sup>3</sup>, E. Iervasi<sup>4</sup>, I. Tomesani<sup>3</sup>, L. Dondero<sup>3</sup>, E. Grasselli<sup>3</sup>, E. Poznanski<sup>6</sup>, A. Stenico<sup>6</sup>, A.M. Prast<sup>6</sup>, M. Rossi<sup>6</sup>, E. Suffredini<sup>7</sup>  
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- P198 Monitoring enteric viruses, somatic coliphages, protozoa and campylobacter, in surface waters (Tiber river) for drinking water production in Rome**  
C. Veneri<sup>1</sup>, P. Mancini<sup>1</sup>, G. Bonanno Ferraro<sup>1</sup>, M. Iaconelli<sup>1</sup>, R. Brianescio<sup>1</sup>, S. Della Libera<sup>1</sup>, R. Paradiso<sup>1</sup>, A.M. Coccia<sup>1</sup>, L. Bonadonna<sup>1</sup>, C. Ottaviano<sup>2</sup>, M. Arizzi<sup>2</sup>, M. Segatori<sup>2</sup>, C. Ceci<sup>3</sup>, A. Zitelli<sup>3</sup>, G. La Rosa<sup>1</sup>  
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- P199 Minimal mutations of citrus tristeza virus P23 cause substantial changes in the phenotypic expression in specific citrus hosts**  
G. Licciardello<sup>1</sup>, R. Ferraro<sup>2</sup>, A.F. Catara<sup>3</sup>  
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- P200 Isolation of new phages and biocontrol of plant bacterial diseases**  
G. Martino, M. Vallino, M.T. Urina, M. Ciuffo  
 Istituto per la Protezione Sostenibile delle Piante - Consiglio Nazionale delle Ricerche, Strada delle Cacce 73 10135, Torino, TO
- P201 Viroid-like RNAs containing hammerhead ribozymes associated with fig trees**  
B. Navarro<sup>1</sup>, A. Olmedo-Velarde<sup>2</sup>, J.S. Hu<sup>2</sup>, M.J. Melzer<sup>2</sup> and F. Di Serio<sup>1</sup>  
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- P202 SARS-CoV-2 and Coronavirus 229E detection in atmospheric particulate matter**  
A. Pivato<sup>1</sup>, G. Formenton<sup>2</sup>, F. Di Maria<sup>3</sup>, T. Baldovin<sup>4</sup>, I. Amoroso<sup>4</sup>, T. Bonato<sup>5</sup>, P. Mancini<sup>6</sup>, G. Bonanno Ferraro<sup>6</sup>, C. Veneri<sup>6</sup>, M. Iaconelli<sup>6</sup>, L. Bonadonna<sup>6</sup>, T. Vicenza<sup>7</sup>, E. Suffredini<sup>7</sup>, G. La Rosa<sup>6</sup>  
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**P203 The International Committee on Taxonomy of viruses (ICTV) adopts a binomial nomenclature for virus species**

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**P204 The interplay between carnation italian ringspot virus p36 replicase protein and mitochondria alters the mitochondrial function in yeast cells**

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**P205 Survey for citrus tristeza virus in the region of Apulia, Southern Italy**

L. Manco<sup>1</sup>, P. Pollastro<sup>1</sup>, M.R. Silletti<sup>1</sup>, D. Angione<sup>1</sup>, D. Valenzano<sup>1</sup>, A. Percoco<sup>2</sup>, V.N. Fornarelli<sup>2</sup>, V. Cavalieri<sup>1</sup>, F. Palmisano<sup>1</sup>, M. Saponari<sup>3</sup>, G. Loconsole<sup>3</sup>

<sup>1</sup> Centro di Ricerca, Sperimentazione e Formazione in Agricoltura "Basile Caramia" - <sup>2</sup> Regione Puglia, Area Politiche per lo Sviluppo Rurale, Osservatorio Fitosanitario Regionale - <sup>3</sup> Institute for Sustainable Plant Protection, National Research Council, Italy

**P206 Effect of onion yellow dwarf virus infection on the composition of volatile organic fraction in "Rossa di Tropea" onion**

A. Taglienti<sup>1</sup>, F. Araniti<sup>2</sup>, A. Piscopo<sup>3</sup>, A. Tiberini<sup>1</sup>

<sup>1</sup> Research Centre for Plant Protection and Certification, Council for Agricultural Research and Economics, Via C.G. Bertero 22, 00156 Rome, Italy - <sup>2</sup> Department of Agricultural and Environmental Sciences (DISAA), University of Milan, Via Celoria, 2, 20133 Milan, Italy - <sup>3</sup> Department of Agricultural Science, University 'Mediterranea' of Reggio Calabria, loc. Feo di Vito, 89122 Reggio Calabria, Italy

**P207 Biological and molecular characterization of cryphonectria ambivirus 1, type member of a recently characterized orfan RNA virus clade with unprecedented genome organization**

M. Funmilayo Akinyuwa<sup>1</sup>, M. Forgia<sup>3</sup>, D. Bulgari<sup>2</sup>, E. Gobbi<sup>2</sup>, M. Turina<sup>3</sup>

<sup>1</sup> University of Padua, Via 8 Febbraio, 2 - 35122 Padova (PD) - <sup>2</sup> Agri-food and Environmental Microbiology Platform (PiMiAA), Department of Molecular and Translational Medicine, University of Brescia, Brescia 25123, Italy - <sup>3</sup> IPSP-CNR, Strada delle Cacce 73 10135, Torino, TO

# **GENERAL INFORMATION**

## **DATE OF CONGRESS**

Monday 5th July 2021 from 8.30 to 20.00

Tuesday 6th July 2021 from 9.00 to 19.15

## **ONLINE REGISTRATION:**

**[www.congressosivisv.com](http://www.congressosivisv.com)**

The registration is free but mandatory and includes:

- Participation at the webinar congress works
- Attendance certificate
- CME certificate
- Post-event educational material (slides of the presentations)
- Assistance of a technician before and during the webinar Congress
- **Accessing the Webinar** - You have to register in order to access the webinar. After you fill out the form, you will receive a mail with a link to confirm the activation of your account. After you activate your account, you will receive a message confirming registration, with instructions to access the live streaming on 5-6 July 2021. The webinar has a limited number of participants and is reserved to ECM-accredited professions and fields of study.
- **E-learning typology:**
  - Live course on dedicated multimedia platform (virtual classroom, webinar) - synchronous e-learning

## **CERTIFICATE OF ATTENDANCE**

You can download it by the end of the Congress at <https://nadirex.dnaconnect.sm> (with the same ID and PASSWORD of registration)

## **ABSTRACT BOOK**

It will be available in digital format at [www.congressosivisv.com](http://www.congressosivisv.com)

The Organizing Secretariat will send to all participants ID and PASSWORD for the download.

## **ORGANIZING SECRETARIAT AND PROVIDER NR. 265**



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[www.congressosivisv.com](http://www.congressosivisv.com)

# **GENERAL INFORMATION**

The Congress will be held in virtual format.

To attend the Congress users will need a PC (Desktop or Laptop). Users using a desktop PC will have to connect a webcam and a microphone; laptops are equipped with webcam and microphone. Finally, the user must have access to an internet connection.

The scientific programme presents:

- live sessions, on Zoom platform (synchronous distance learning virtual classroom - webinar).

The Congress is divided into 3 AREAS:

## **DIGITAL CONFERENCE AREA**

It is divided into two days (July 5 and 6), in three rooms (Plenary, Parallel A, Parallel B) and in scientific sessions (plenary sessions, parallel sessions, sponsor symposia in parallel, oral contributions in parallel). Each session will provide details on the papers being presented.

## **E-POSTER AREA**

It presents the list of the posters that can be viewed with the possibility of conducting search, viewing of files, release of comments and voting.

## **VIRTUAL EXHIBITION AREA**

This area is reserved for the Sponsors' Virtual Booths.

It is possible to include information and content usable by visitors (i.e.: technical sheets, sails, videos, and links to other sites of interest).

The possibility to create a web-room where to virtually meet the sponsor is also available: inclusion of contents that enable interaction between sponsor and visitor (i.e.: videoconferencing, chats, surveys).

In order to access the company content all you need to do is click on the company logo.

## **GUIDELINES FOR SPEAKERS AND CHAIRMEN**

The Zoom room will be opened only for speakers and chairmen at:

**Monday 5th July: 07.30 p.m.**

**Tuesday 6th July: 08.00 p.m.**

(For participants room opens at the beginning time of the Congress)

# **POSTER GUIDELINES**

The contributions selected as poster presentation will be divided by thematic topics and made available on-line on the “ *virtual poster area* “ of the congress platform <https://posters.congressosivisv.com> from the 5th of July 2021.

Congress participants will be able to make their comments for each published poster.

## **BEST POSTER AWARD:**

A Springer voucher will be awarded to the authors of the five most popular posters.

## **GUIDELINES TOWARDS POSTER PRESENTATION:**

Please upload your poster on [www.congressosivisv.com](http://www.congressosivisv.com)  
by **June 20th 2021 at the latest**

**Software:** Accepted files: .ppt, .pptx, .doc, .docx, .pdf

**The Text** must contain (in the following order):

- **Title:** title of abstract (short, written in UPPERCASE letters)
- **Author(s):** name initial(s) in uppercase followed by surname  
Please do not mention any academic title.  
In case of multiple authors please underline the name of the Author who will present the work.
- **Affiliation:** name and address of the Institution
- **Background and Aims** of the study
- **Methodology** used
- **Results**
- **Conclusions**

**Title:** Times New Roman, font size 24pt, single-spaced

**Text:** Times New Roman, font size 12pt, single-spaced

Vertical orientation

Maximum length: two A4 pages

All bibliographic citations must be inserted in the text page (maximum font size: 8pt).

Summary tables/graphs may be included provided they fit in the page

**5th National Congress of the Italian Society for Virology**

**One Virology One Health 5-6 July 2021**

# CME INFORMATIONS

## ID EVENTO FAD

| Data       | Titolo Sessione                            | ID ECM     | Nr. Crediti |
|------------|--------------------------------------------|------------|-------------|
| 5-6 luglio | PLENARY SESSION                            | 265-322025 | 12          |
| 5 luglio   | VIRAL DIAGNOSIS                            | 265-323373 | 3           |
| 5 luglio   | ENVIRONMENTAL AND PLANT VIROLOGY           | 265-323375 | 1,5         |
| 5 luglio   | GENETICS, BIOTECHNOLOGY AND BIOINFORMATICS | 265-323378 | 3           |
| 5 luglio   | FRONTIERS IN GENERAL VIROLOGY 1            | 265-323380 | 1,5         |
| 6 luglio   | VETERINARY VIROLOGY                        | 265-323382 | 3           |
| 6 luglio   | IMMUNITY AND VACCINES AND UPDATES ON HIV   | 265-323388 | 3           |
| 6 luglio   | ANTIVIRAL THERAPY                          | 265-323390 | 3           |
| 6 luglio   | FRONTIERS IN GENERAL VIROLOGY 2            | 265-323392 | 1,5         |

- **Destinatari dell'iniziativa:**

Il Congresso è rivolto alle seguenti figure professionali:

- **Medico Chirurgo** (Discipline: Tutte le discipline)
- **Infermiere**
- **Biologo**
- **Farmacista** (Discipline: Farmacia Ospedaliera; Farmacia Territoriale)
- **Psicologo** (Discipline: Psicologia; Psicoterapia)
- **Chimico** (Discipline: Chimica Analitica)
- **Veterinario** (Discipline: Igiene degli Allevamenti e delle Produzioni Zootecniche; Igiene Prod., Trasf., Commercial., Conserv. e Tras. Alimenti di Origine Animale e Derivati; Sanità Animale)
- **Tecnico Sanitario Laboratorio Biomedico**

- **Obiettivi Formativi:** 3 – Documentazione clinica. Percorsi clinico assistenziali diagnostici e riabilitativi, profili di assistenza – profili di cura

- **Numero partecipanti:** 800

- **Lingue ufficiali:** Italiano/Inglese

### Metodo di verifica dell'apprendimento

Per conseguire i crediti ECM relativi all'evento FAD è obbligatorio:

- Partecipare al 90% delle attività formative
- Rispondere correttamente ad almeno il 75% dei quesiti del questionario di apprendimento on-line a risposta multipla con doppia randomizzazione
  - sono consentiti al massimo cinque tentativi di superamento della prova
  - il questionario sarà on-line per 3 (tre) giorni dalla data di conclusione dell'evento
- Compilare la scheda di qualità percepita evento FAD
- Compilare la scheda indagine bisogni formativi

Nadirex International si assume ogni responsabilità per i contenuti, la qualità e la correttezza etica di questa attività ECM.



Room 2

Room 1

## PLATINUM SPONSOR



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