CRITICAL ROLE OF CLINICAL LABORATORIES IN THE COVID-19 PANDEMIC

IFCC GLOBAL CONFERENCE ON COVID-19
(PRELIMINARY PROGRAMME)

FEBRUARY 15–17, 2021

IFCC Scientific Symposia will be presented in the morning. Afternoon will be mostly dedicated to industry Educational Workshops.

TIME SCHEDULE: PROGRAMME WILL START AT 08.00 AM, US EASTERN TIME (CORRESPONDING TO: 14.00 ROME; 21.00 BEIJING)
All sessions will be recorded and fully available for registered people.
It is my great pleasure to present this welcoming message to all attendees, speakers, and industry sponsors of the IFCC Global Conference on COVID-19. This virtual conference will bring leading experts around the world together to present the latest advances in COVID-19 diagnostics and therapeutics. The theme of this conference will be the Critical Role of Clinical Laboratories in the COVID-19 Pandemic. It will be a truly international event with presentations from all regions across the globe.

At the beginning of the pandemic, the IFCC established a Taskforce on COVID-19 to provide updates on epidemiology, pathogenesis, and diagnostics of COVID-19, as well as to develop practical recommendations for diagnostic testing and patient monitoring. Since establishment, the Taskforce has maintained an online Information Guide on COVID-19, which can be found on the IFCC website. This guide is updated biweekly, presenting the latest evidence on COVID-19. The Taskforce has now also published interim guidelines in the November 2020 issue of Clin Chem Lab Med to provide practical recommendations on the intended use, selection, evaluation, and implementation of laboratory tests used in the diagnosis of SARS-CoV-2 infection and monitoring of COVID-19 patients.

There is no doubt that the current pandemic has highlighted the critical role of clinical laboratory medicine, which until now has not been widely recognized within healthcare organizations or by the public. Clinical laboratory professionals continue to play a vital role in the diagnosis of SARS-CoV-2 infection, serological monitoring of individuals with past SARS-CoV-2 infection, and biochemical monitoring of hospitalized patients with COVID-19. Scientists, other medical professionals, industry leaders, and public health authorities have also been working diligently to understand, diagnose, treat, and prevent COVID-19, providing invaluable information and service.

Now, the IFCC feels it is more crucial than ever to virtually bring us all together on a global platform to present the most up to date evidence in the field of COVID-19, with a specific focus on innovations in diagnostics and laboratory management of hospitalized patients. This conference also provides the opportunity for us all to work towards a more collaborative clinical care model in diagnosing and treating COVID-19. Specifically, you will have access to:

• Plenary sessions delivered by leading scientists, physicians, and public health authorities.
• Ten scientific symposia, covering physiology, diagnostics, therapeutics, and technology
• Special presentations on the global response to COVID-19 in Africa, Asia-Pacific, Europe, Latin America, Arab Federation, and North America
• An industry panel with presentations from industry leaders on the latest IVD innovations
• Twelve educational industry workshops
• A young investigator forum with presentations from young scientists worldwide
• Scientific e-posters and virtual industry exhibits

I look forward to seeing many of you (virtually!) at this important and timely scientific event in February.

Professor Khosrow Adeli
IFCC President
CONFERENCE ORGANIZING COMMITTEE

Khosrow Adeli, Canada (Chair)
Sergio Bernardini, Italy
Andrea Horvath, Australia
David Koch, USA
Giuseppe Lippi, Italy
Tomris Ozben, Turkey
Cheng-Bin Wang, China

Regional Federation Representatives:
- Rosa Sierra-Amor (Latin America)
- Ana-Maria Simundic (Europe)
- Ann Gronowski (North America)
- Rajiv Erasmus (Africa)
- Sunil Kumar Sethi (Asia-Pacific)
- Osama Najjar (Arab Federation)

Corporate Representatives:
- Rolf Hinzmann, Roche Diagnostics
- Patricia Ravalico, Abbott Diagnostics

Conference Organizing Secretariat (MZ Congressi):
- Stefano Montalbetti

SPEAKERS & CHAIRS

Abderrazek Hedhili
Aleksei Tikhonov
Allan Njau
Ana-Maria Simundic
Andrea Horvath
Ann Gronowski
Annalise Zemlin
Antonio Buño Soto
Ashish Agravatt
Benjamin Pinsky
Bernard Goet
Brandon M. Henry
Camilla Mattiuzzi
Cao Bin
Carl J. Lavie
Chris Farnsworth
Clara Benavent
Corrado Di Natale
Damien Gruson
Daniel Satchkov
Emmanuel J. Favaloro
Fabian Sanchis-Gomar
Federico Remes-Lenicov
Fernando Goldbaum
Giuseppe Lippi
Graciela Russomando
Jac Dinnes
James Nichols
Jenny Doust
Job Harenberg
Jon Deeks
Joseph Passarelli
Marco Perrone
María Belén García Fabiani
Martina Montagnana
Mary Kathryn Bohn
Massimo Ciccozi
Meheri Emna
Mette Christophersen Tollånes
Michael Neumaier
Miswar Fattah
Mohamed Ben Moussa
Muhittin Serdar
Myrna Germanos
Nevan Krogan
Nicolene Steyn
Nqobile Ndlovu
Osama Najar
Patricia Ravalico
Patrick Bossuyt
Prasenjit Mitra
Rajiv Erasmus
Ronda Greaves
Rosa Sierra Amor
Sam Schulman
Santiago Fares Taie
Sergio Bernardini
Sibtain Ahmed
Situmbeko Mwangala
Sunil Kumar Sethi
Susan Matthews
Sverre Sandberg
Tahir Pillay
Tan Wenjie
Tom Hope
William Blake
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### TUESDAY 16 FEBRUARY

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<td>09.30 - 12.00</td>
<td><strong>Industry Panel</strong>&lt;br&gt;Technological Innovations for Today and Tomorrow</td>
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<td><strong>SYM5</strong>&lt;br&gt;Global Response to COVID-19 Pandemic (Latin America)</td>
<td><strong>SYM6</strong>&lt;br&gt;Global Response to COVID-19 Pandemic (North America)</td>
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### WEDNESDAY 17 FEBRUARY

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<td>08.00 - 09.30</td>
<td><strong>PLENARY SESSION</strong>&lt;br&gt;Clinical Evaluation of Tests for SARS-CoV-2 Infection</td>
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<td>09.45 - 11.45</td>
<td><strong>SYM7</strong>&lt;br&gt;Global Response to COVID-19 Pandemic (Asia-Pacific)</td>
<td><strong>SYM8</strong>&lt;br&gt;Global Response to COVID-19 Pandemic (Middle East/Arab Federation)</td>
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<td>12.00 - 14.00</td>
<td><strong>SYM9</strong>&lt;br&gt;Hemostasis and COVID-19</td>
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8:00-9:30 AM
OPENING & PLENARY SESSION
Critical Role of Laboratory Medicine in Public Health
Scientific presentations from Infectious Disease Experts at WHO, NIH, CDC, CAP
IFCC Executive Board
IFCC Taskforce on COVID-19

Break (15 min)

9:45-11:45 ROOM 1
Symposium 1: Pathophysiology of COVID-19
Chair: Khosrow Adeli

- Giuseppe Lippi, Verona, Italy
  Pathophysiology of COVID-19 (30 min)
- Camilla Mattiuzzi, Trento, Italy
  Demographical, environmental and social predictors (30 min)
- Martina Montagnana, Verona, Italy
  Clinical risk factors for severe COVID-19 illness (30 min)
- Q&A (30 min)

Break (15 min)

12:00-13:00
Industry Workshops

Break (15 min)

9:45-11:45 ROOM 2
Symposium 2: Emerging Tools in Fighting COVID-19
Chair: Bernard Gouget

- William Blake, Boston, USA
  CRISPR and synthetic biology-based solutions applied to COVID-19 diagnosis (20 min)
- Corrado Di Natale, Rome, Italy
  Volatile compounds array for COVID-19 (20 min)
- Daniel Satchkov, Sheridan, USA
  Comprehending hundreds of thousands of COVID-19: Studies using mathematical models of language and AI (20 min)
- Tom Hope, USA
  Accelerating scientific search and exploration by mining and visualizing COVID-19 literature (20 min)
- Damien Gruson, Brussels, Belgium
  Telemedicine and Health at the Time of COVID-19 (20 min)
- Q&A (20 min)
13:15–15:15 ROOM 1
Symposium 3: Global Response to COVID-19 Pandemic (Europe)
Chair: Ana-Maria Simundic

• Antonio Buño Soto, Madrid, Spain
  Experience of the organization of laboratory medicine in Madrid’s IFEMA field hospital during the first wave of the pandemic (30 min)
• Sverre Sandberg, Bergen, Norway
  How the government and the national quality improvement organisation of laboratory examinations (Noklus) cooperate in the pandemic (30 min)
• Muhittin Serdar, Istanbul, Turkey
  COVID-19 challenges and laboratory perspective from Turkey: Limitations and competences (30 min)
• Q&A (30 min)

Break (15 min)

15:30–16:30
Industry Workshops

Break (15 min)

16:45–17:45
Industry Workshops

Break (15 min)

18:00–19:00
Industry Workshops

13:15–15:15 ROOM 2
Symposium 4: Global Response to COVID-19 Pandemic (Africa)
Chair: Rajiv Erasmus

• Annalise Zemlin, Cape Town, South Africa
  Biochemical changes in COVID-19: Experience from Africa (20 min)
• Tahir Pillay, Durban, South Africa
  The promise of single domain antibodies (nanobodies) in COVID-19: Applications in diagnosis and therapy (20 min)
• Rajiv Erasmus, Cape Town, South Africa
  Unfolding the reasons and the theories for COVID-19 being less deadly in Africa (20 min)
• Ngobile Ndlovu, Zimbabwe
  COVID-19 diagnostic response: The Africa experience (15 min)
• Situmbeko Mwangala, Zambia
  Investigation of SARS-CoV-2 infections among health care workers in Lusaka District, Zambia (15 min)
• Allan Njau, Kenya
  Quality management for SARS-CoV-2 testing: Key indicators for starting small and medium size molecular laboratories in Kenya (15 min)
• Q&A (15 min)
TUESDAY 16 FEBRUARY (EASTERN STANDARD TIME/NEW YORK)

8:00–9:15
PLENARY SESSION
Cardio-renal Involvement in COVID-19
Chair: Carl J. Lavie

• Carl J. Lavie, New Orleans, USA
  Pathophysiology of cardio-renal involvement in COVID-19 (25 min)
• Brandon M. Henry, Cincinnati, USA
  The renin-angiotensin system in COVID-19 (25 min)
• Fabian Sanchis-Gomar, Valencia, Spain
  Cardiac biomarkers in COVID-19 (25 min)

9:30–12:00 ROOM 1
COVID-19 Industry Panel:
Technological Innovations for Today and Tomorrow
Co-Chairs:
  Patricia Ravalico, Abbott (Chair, IFCC Taskforce on Corporate Members)
  Joseph Passarelli, Roche (Corporate Representative to the IFCC Executive Board)

  • Scientific presentations by industry scientists representing IFCC corporate members
  • Panel discussion (30 min)

9:30–12:00 ROOM 2
Young Scientist Forum
Chair: Santigao Fares Taie

  • Ashish Agravatt, India
    Rapid tests: Antibody & antigen tests (15 min)
  • María Belén García Fabian, Argentina
    CRISPR: Disrupting technology (15 min)
  • Sibtain Ahmed, Pakistan
    Utility of prognostic biomarkers in COVID-19 (15 min)
  • Marco Perrone, Italy
    Clinical management & drugs (15 min)
  • Nicolene Steyn, South Africa
    COVID in children (15 min)
  • Ashlin Rampul, South Africa
    Nanobodies for COVID (15 min)
  • Clara Benavent, Spain
    PCR targets and sensitivity (15 min)
  • Aleksei Tikhonov, Russia
    Antibody test development (15 min)
  • Mary Kathryn Bohn, Canada
    Pediatric evaluation of COVID-19 serology assays (15 min)

Break (15 min)

12:15–14:15 ROOM 1
Symposium 5: Global Response to COVID-19 Pandemic (Latin America)
Chair: Rosa Sierra Amor

  • Graciela Russomando, Asuncion, Paraguay
    COVID-19 infection and community transmission: Lessons learned from a public molecular Dx laboratory (20 min)

12:15–14:15 ROOM 2
Symposium 6: Global Response to COVID-19 Pandemic (North America)
Chair: Ann Gronowski

  • Benjamin Pinsky, Stanford, USA
    Method validation for COVID-19 testing (20 min)
• Fernando Goldbaum, Buenos Aires, Argentina
  Equine polyclonal neutralizing antibodies (Epabs) for the treatment of severe COVID-19 patients (20 min)
• Cecilia Tapia
  Diagnostic approach in networked laboratories, Chilean experience (20 min)
• Federico Remes-Lenicov, Buenos Aires, Argentina
  Emergency establishment of a SARS-CoV-2 test center at an academic lab in the University of Buenos Aires, Argentina (20 min)
• Maria-Elizabeth Menezes, Rio de Janeiro, Brazil
  The coronavirus storm: The pandemic situation at the bench (20 min)
• Q&A (20 min)

Break (15 min)

14:30-15:30
Industry Workshops

• Victoria Zhang, Rochester, USA
  AACC Taskforce COVID-19 Serology Guidelines (20 min)
• Chris Farnsworth, St. Louis, USA
  SARS-CoV-2 serology: Utilization and outstanding questions (20 min)
• Nevan Krogan, San Francisco, USA
  Multi-omics/systems approach to COVID investigation (20 min)
• Q&A (20 min)

Break (15 min)

15:45-16:45
Industry Workshops
8:00–9:30
PLENARY SESSION
Clinical Evaluation of Tests for SARS-CoV-2 Infection
Chair: Andrea Horvath

• Patrick Bossuyt, Amsterdam, Netherlands
When disaster strikes: How to balance unmet needs with imperfect tests in an emergency situation of a pandemic? (20 min)
• Jac Dinnes and Jon Deeks, Birmingham, UK
State-of-the-art of diagnostic tests: What did we learn from the Cochrane systematic reviews of existing test evaluations? (20 min)
• Jenny Doust, Brisbane, Australia
Can we do better? Framework for the evaluation of SARS-CoV-2 tests (20 min)
• Q&A (30 min)
Break (15 min)

9:45–11:45 ROOM 1
Symposium 7: Global Response to COVID-19 Pandemic (Asia-Pacific)
Chair: Sunil Kumar Sethi

• Tan Wenjie, China
Discovery of COVID-19 (20 min)
• Miswar Fattah, Indonesia
Variability of molecular testing for SARS CoV-2 (20 min)
• Prasenjit Mitra, India
COVID-19 pandemic: Perspectives from India (20 min)
• Susan Matthews, Australia
SARS-CoV-2 molecular-based testing – experience from the Aboriginal and Torres Strait Islander COVID-19 point-of-care testing program in rural and remote Australia (20 min)
• Cao Bin, China
Atypical pneumonia to COVID-19 (20 min)
• Q&A (20 min)
Break (15 min)

9:45–11:45 ROOM 2
Symposium 8: Global Response to COVID-19 Pandemic (Middle East/Arab Federation)
Co-Chairs: Osama Najjar Abderrazek Hedhili

• Mehiri Emna, Tunisia
Impact of COVID-19 in the Middle East (25 min)
• Myrna Germanos, Lebanon
Impact of COVID-19 (25 min)
• Osman Najjar, Palestine
AFCB Response to COVID-19 crisis (25 min)
• Mohamed Ben Moussa, Tunisia
Tunisian Mobile Military Laboratory and COVID-19 management (25 min)
• Q&A (20 min)

12:00–14:00 ROOM 1
Symposium 9: Hemostasis and COVID-19
Chair: Giuseppe Lippi

• Emmanuel J. Favaloro, Sydney, Australia
ADAMTS13 and Von Willebrand Factor testing in COVID-19 and beyond (30 min)

12:00–14:00 ROOM 2
Symposium 10: Emerging Technologies in Fighting COVID-19
Chair: Sergio Bernardini

• Mette Christophersen Tollånes, Bergen, Norway
Quality and clinical use of rapid tests for COVID-19 (20 min)
• Job Harenberg, Heidelberg, Germany
  Laboratory diagnostics of COVID-19 related thromboembolism (30 min)
• Sam Schulman, Hamilton, Canada
  Anticoagulation and laboratory monitoring in COVID-19 (30 min)
• Q&A (30 min)

• James Nichols, Nashville, USA
  CLSI COVID testing resources to assist labs with their validations and implementation of new COVID tests as well as quality management of the testing after implementation (20 min)
• Ronda Greaves, Sydney, Australia
  Managing rapid changes in LC/MS during the COVID pandemic: State-of-art (20 min)
• Michael Neumaier, Heidelberg, Germany
  Innate and adaptive immunological response to SARS-CoV-2: Implications for vaccine (20 min)
• Massimo Ciccozzi, Rome, Italy
  COVID-19 phylogenesis and mutations: Implications for vaccine (20 min)
• Q&A (20 min)
DEADLINE TO SUBMIT YOUR PAPERS: 5 JANUARY 2021  
(Abstracts are limited to 3250 characters, spaces included)

YOUNG INVESTIGATOR ORAL PRESENTATIONS
Call for submissions for COVID-19 related oral presentations. Diverse and high ranking proposals will be selected (can be data-driven or content-based)

VIRTUAL E-POSTER SESSION: for presentation by IFCC members and young scientists

Congress delegates are cordially invited to submit abstracts of their scientific work for presentation as a free communication at the IFCC Global Conference on COVID-19 in February 2021. An unlimited number of abstracts may be submitted provided the presenting author applies for "full registration". Abstracts are welcome in all fields of clinical chemistry, hematology, clinical molecular biology and laboratory medicine, in the broader sense. Free communications are primarily presented via poster. A limited number of abstracts will be selected for oral presentation during symposia. Authors wishing to compete for these oral communication slots should mark the appropriate field on the on-line abstract-submission form. Abstracts are limited to 3250 characters, spaces included.

ABSTRACT TOPICS

- COVID-19: innovations in in vitro diagnostics
- Molecular diagnosis of SARS-CoV-2 infection
- Advances & challenges in viral antigen testing
- Advances in serological assays to monitor viral exposure
- Rapid testing and POCT diagnostics
- Antigen testing: Point of care and lab-based assays
- Analytical and clinical assay validation
- Serology testing and immunity
- Molecular testing and infectivity
- External quality assessment and assay standardization
- Orthogonal testing strategies
- Biochemical/hematological markers in patient monitoring
- Clinical risk scores and their global application
- Pediatric management of SARS-CoV-2 viral infection or exposure
- Multisystem inflammatory syndrome in children (MIS-C)
- Laboratory biosafety management
- COVID-19: Clinical/Public Health
- Preventive Medicine, Public Health and COVID-19

- COVID-19 treatment & future perspectives:
- Emerging treatments and clinical practice paradigms
- Clinical value of Remdesivir
- Pharmacology and TDM
- Prognosis, pre/post exposure prophylaxis and antiviral treatment
- Convalescent plasma, selection of recipient and donor
- COVID-19 and multisystem organ involvement
- Progression from respiratory infection to systemic disease
- Hematology and thrombotic complications
- Cardiovascular implications
- Gastrointestinal complications
- Dermatological manifestations
- Rheumatic diseases and COVID-19 susceptibility
- Pulmonary fibrosis and lung function
- Neurological associations
- Nephrology & the vasculature
- Pathological anatomy and cytology
- Key risk factors and role in pathophysiology
- Mental health in the face of the COVID-19 pandemic
REGISTRATIONS

Online registrations available with the following fees:

**EARLY REGISTRATION FEE** – valid within 20 January 2021:
- IFCC NATIONAL SOCIETY MEMBERS AND NON-MEMBERS: €100
- CORPORATE/INDUSTRY REPRESENTATIVES: €100
- YOUNG SCIENTISTS/TRAINEES (=< 40 YEARS): FREE OF CHARGE

**AFTER 20 JANUARY 2021:**
- IFCC NATIONAL SOCIETY MEMBERS AND NON-MEMBERS: €150
- CORPORATE/INDUSTRY REPRESENTATIVES: €150
- YOUNG SCIENTISTS/TRAINEES (=< 40 YEARS): €50

Registration will allow you to:
- enter all sessions of the programme (both plenary and parallel)
- ask “live” questions and interact with the speakers
- visit industry virtual booths and attend educational workshops
- get a Certificate of Attendance
- enter the recorded sessions for 12 months after the conference date

VIRTUAL INDUSTRY EXHIBITS AND WORKSHOPS

Opportunities for both live and recorded exhibits and workshops by corporate members, IVD manufacturers as well as other member and non-member industry partners.

More information will be sent soon directly to companies’ representatives.

VIRTUAL NETWORKING ONLINE CHAT ROOM