

INTEGRATED PULMONARY, CARDIOLOGICAL AND IMMUNOLOGICAL MEDICINE 2026

20th International Conference — "Inflammation, Multisystem Dynamics and Multidisciplinary Treatment"

San George Campus — Lovere (BG), Italy — 18–19 September 2026

Organised by: Advances in Pneumology (AIP)

Provider and Organising Secretariat: Scuola di Alta Formazione e Studi specializzati per Professionisti — Italian CME Provider no. 6956

Scientific Directors: Prof. Kurt Rasche · Prof. Mieczysław Pokorski · Dr Giovanni Barassi

An application has been made to the UEMS EACCME® for CME accreditation of this event.

Congress language: English. Format: on-site (max 100 participants) and synchronous live-streaming for remote participants.

ABOUT THE CONFERENCE

The 20th AIP International Congress brings together clinicians, researchers and healthcare professionals to explore respiratory medicine within a broader, integrated vision of human health.

Under the theme "Inflammation, Multisystem Dynamics and Multidisciplinary Treatment," the 2026 scientific programme moves beyond the traditional boundaries of pneumology to examine the complex interactions between the respiratory, cardiovascular, immune, autonomic and musculoskeletal systems. Inflammation, respiratory mechanics, environmental exposure, pharmacology, rehabilitation, postural–respiratory interactions and emerging functional technologies are addressed as interconnected components of contemporary patient care. This multidisciplinary approach is reflected throughout the scientific sessions and practical activities of the Congress.

The choice of Lovere, on the shores of Lake Iseo and surrounded by the Alpine landscape of Northern Italy, provides a particularly meaningful setting for a congress dedicated to breathing and respiratory health. Here, the relationship between the individual, the environment and the act of breathing becomes not only a scientific subject, but also part of the experience of the meeting itself.

Across two days, magistral lectures, scientific communications, multidisciplinary discussions and practical sessions will bring together different perspectives—from basic and translational research to clinical medicine, rehabilitation and technological innovation—with the common objective of encouraging dialogue between disciplines that too often develop separately.

The Congress therefore aims to create a meeting point between research and clinical practice, established knowledge and emerging approaches, biological mechanisms and functional rehabilitation, promoting a more integrated understanding of respiratory health and of the patient as a whole.

OVERALL EXPECTED LEARNING OUTCOMES

At the end of the congress participants will be able to:

1. Describe the shared inflammatory mechanisms linking pulmonary, cardiovascular and immune dysfunction, and their clinical expression in chronic respiratory disease.
2. Apply current criteria for the functional assessment of respiratory mechanics and postural–respiratory coupling in daily practice.
3. Interpret the pharmacological and immunological rationale of treatment choices in COPD, asthma and chronic airway inflammation.
4. Evaluate the impact of environmental and occupational exposure on the airway epithelium and on patient risk stratification.
5. Integrate pharmacological treatment and multidisciplinary pulmonary rehabilitation into a single patient-centred care pathway.
6. Critically discuss the evidence supporting emerging functional and rehabilitation technologies, distinguishing established evidence from preliminary data.

PRINCIPAL INTENDED RECIPIENTS

Specialists in Respiratory Medicine, Internal Medicine, Cardiology, Allergology, Clinical Immunology, Occupational Medicine, Sports Medicine, Physical and Rehabilitation Medicine, Otorhinolaryngology, Neurology and Thoracic Surgery.

SCIENTIFIC PROGRAMME — DAY 1 — FRIDAY 18 SEPTEMBER 2026

08:30–09:00 *Registration of participants*

09:00–09:30 *Opening ceremony and greetings from the local authorities*

09:30–10:00 OPENING HONORARY PRESENTATION — **Respiration and Carotid Body Glomopathy in Diabetes**

M. Pokorski — Institute of Health Sciences, Opole University, Opole, Poland

Co-authors: Y. Okada & I. Fukushi

10:00–10:30 MAGISTRAL LECTURE — **Inflammation as a Multisystem Network: New Insights in Pulmonary and Cardiorespiratory Pathophysiology**

P. Conti — Tufts University, Boston, Massachusetts, USA

SESSION 1 — Structural–Visceral Dynamics and Early Respiratory–Circulatory Dysfunction

Session Chairmen: M. Pokorski (University of Opole, PL); R. Di Pietro (University of Chieti–Pescara, IT)

10:30–10:45 **Effects of Portable Biofield Stimulation on Respiratory Function in Healthy Subjects: A One-Week Prospective Pilot Study**

P. Galasso — UniCamillus — Saint Camillus International University of Health and Medical Sciences, Rome, Italy

Co-authors: C. Marinucci, V. Guglielmi, A. De Pascalis, M. Noce, V. De Carolis, G. De Luca, F. Papa, V. Cipolloni

10:45–11:00 **Optimising Bronchoalveolar Lavage Fluid Microbiome Profiling in Guinea Pigs: Development of a Robust Sequencing Workflow**

T. Buday — Comenius University, Martin, Slovakia

Co-authors: T. Burjanivova, J. Jakusova, D. Mokra, M. Brožmanová, J. Plevkova

11:00–11:30 *Coffee Break and Exhibition Area Tour*

SESSION 2 — Integrated Pulmonary Care: Pharmacological, Autonomic and Functional Perspectives

Session Chairmen: R. Di Pietro (University of Chieti–Pescara, IT); P. Conti (Tufts University School of Medicine, USA)

11:30–11:45 **Flavour-Specific Pro-Oxidative and Pro-Inflammatory Activation of Monocyte/Macrophage THP-1 Cells Induced by E-Cigarette Aerosols**

K. Milewska — Medical University of Białystok, Białystok, Poland

Co-authors: J. Rosław, P. Szoka, A. Hołownia

11:45–12:00 **Flavour-Dependent Oxidative Stress and Inflammatory Responses Induced by Electronic Cigarette Aerosols in A549 Lung Epithelial Cells**

M. Rosław — Medical University of Białystok, Białystok, Poland

Co-authors: K. Milewska, P. Szoka, A. Niechoda, A. Hołownia

12:00–12:15 **Systemic Corticosteroid Use and 30-Day Mortality in Critically Ill Adults with Influenza Pneumonia: A Retrospective Cohort Study**

J. Yayan — Witten/Herdecke University, Witten, Germany

12:15–13:15 — Practical Session

ROOM 1: Bioresonance and Functional Regulatory Medicine

ROOM 2: Adaptive Electrotherapy and Neurovegetative Rebalancing

ROOM 3: Cranial Motion Assessment and Neuro-Respiratory Functional Monitoring

ROOM 4: Microcurrent Therapy and Biocellular Regulation

13:15–14:45 *Lunch and Exhibition Area Tour*

14:45–15:45 — Practical Session

ROOM 1: Advanced Integrated Rehabilitation Technologies for Respiratory and Functional Recovery

ROOM 2: Focused Vibro-Acoustic Stimulation: Autonomic Regulation, Respiratory Function and Fascial Rebalancing

ROOM 3: Advanced Physical Therapies for Tissue Recovery and Regeneration

ROOM 4: Digital Postural Assessment and Functional Monitoring

15:45–16:15 MAGISTRAL LECTURE — **Posture and Breathing: Beyond Biomechanics**

G. Anastasi — University of Messina, Messina, Italy

Co-author: I. Barbera

SESSION 3 — Immuno-Inflammatory Pathways, Precision Pharmacology and Integrated Care

Session Chairmen: K. Rasche (HELIOS University Hospital Wuppertal, DE); M. Pokorski (University of Opole, PL)

16:15–16:30 SIRTUIN 3 Is Involved in Cytoprotective Ways Under Hypoxia

A. Portnychenko — National Academy of Sciences of Ukraine, Kyiv, Ukraine
Co-authors: V. Babicheva, O. Harmatina, M. Kozlovska, M. Vasylenko, K. Rozova

16:30–16:45 Insulin Resistance Increases Respiratory Tolerance to Hypoxia and Changes Sensitivity to Calcium Channel Blockers

V. Portnichenko — National Academy of Sciences of Ukraine, Kyiv, Ukraine
Co-authors: M. Zavhorodni, P. Tsapenko, M. Kozlovska, K. Rozova, A. Portnychenko

16:45–17:00 Antitussive Effects of a New Butamirate Analogue – Electrophysiological Study

M. Šimera — Comenius University, Martin, Slovakia
Co-authors: D. Beríková, A. Lukáčová, M. Veterník, J. Míšek, S. Fraňová, E. Gondáš, M. Brožmanová, J. Csöllei, I. Poliaček

17:00–17:30 *Coffee Break and Exhibition Area Tour*

SESSION 4 — Advanced Functional Assessment and Integrated Therapeutic Strategies in Respiratory Medicine

Session Chairmen: P. Galasso (UniCamillus, IT); A. Hołownia (Medical University of Białystok, PL)

17:30–17:45 Integrated Thermal Therapies and Respiratory Function: Real-World Evidence from Multidisciplinary Rehabilitation Programs

G. Barassi — Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), Chieti, Italy
Co-authors: A. Moccia, F. Biccari, F. Cristinziano, R. De Luca, D.P. Fratta, F. Lariccia, D. Brunetti, U. Vincenzi

17:45–18:00 From Ground-Glass Opacity to Invasive Adenocarcinoma: Radiological Predictors and Surgical Decision-Making in a Real-World Cohort

V. Di Resta — Casa di Cura Pierangeli, Pescara, Italy

18:00–18:15 Selective NaV1.8 Inhibition Attenuates Cough Hypersensitivity in a Guinea Pig Model of Chronic Allergic Rhinitis

M. Brožmanová — Comenius University, Martin, Slovakia
Co-authors: J. Jakusova, T. Buday, J. Plevkova

SESSION 5 — Neurophysiology, ENT–Pulmonary Interfaces and Integrated Imaging

Session Chairmen: R. Di Pietro (University of Chieti–Pescara, IT); V. Portnichenko (National Academy of Sciences of Ukraine, UA)

18:15–18:30 Role of artificial intelligence in pneumology

R. Siekmeier — Federal Institute for Drugs and Medical Devices, Bonn, Germany
Co-authors: A. Moissl-Blanke, K. Rasche, M. Pokorski, W. März

18:30–18:45 Combined Airway Stimuli Enhance Airway Defense. Expiration Reflex Potential in Cat's Experiment

I. Poliaček — Comenius University, Martin, Slovakia
Co-authors: M. Veterník, L. Martvoň, J. Míšek, Z. Kotmanova, D. Beríková, A. Lukacova, J. Plevkova, M. Šimera

18:45–19:00 A Novel Approach to Brainstem Neuromodulation of Swallowing and Coughing via TMS

I. Kuchta — Comenius University, Martin, Slovakia
Co-authors: I. Poliaček, M. Veterník, L. Martvoň, D. Beríková, A. Lukáčová, M. Šimera, L. Janoušek, J. Míšek

SCIENTIFIC PROGRAMME — DAY 2 — SATURDAY 19 SEPTEMBER 2026

08:30–09:30 — Practical Session

ROOM 1: Advanced Integrated Rehabilitation Technologies for Respiratory and Functional Recovery

ROOM 2: Focused Vibro-Acoustic Stimulation: Autonomic Regulation, Respiratory Function and Fascial Rebalancing

ROOM 3: Advanced Physical Therapies for Tissue Recovery and Regeneration

ROOM 4: Digital Postural Assessment and Functional Monitoring

09:30–10:00 MAGISTRAL LECTURE — The Neuro-Visceral-Inflammatory Axis in Cardiorespiratory and Sleep Disorders

N. Netzer — University of Innsbruck, Innsbruck, Austria

SESSION 1 — Systemic Inflammation, Immune Reactivity and Therapeutic Targets

Session Chairmen: M. Pokorski (University of Opole, PL); A. Badyda (Warsaw University of Technology, PL)

10:00–10:15 Mutagenic and Inflammatory Synergy of Carbon Black Nanoparticles and Benzo[a]pyrene in A549 Alveolar Epithelial Cells

J. Roslan — Medical University of Białystok, Białystok, Poland

Co-authors: K. Milewska, P. Szoka, A. Hołownia

10:15–10:30 Cellular Model for Monitoring Inflammation and DNA Damage by Nanoparticle Air Pollutants

A. Hołownia — Medical University of Białystok, Białystok, Poland

Co-authors: A. Niechoda, K. Milewska, K. Maciorowska

10:30–10:45 Targeted Treatment of Key Myofascial Trigger Points Using Focused Mechano-Sonore Vibrations Improves Respiratory Function and Postural Alignment: A Prospective Pilot Study

C. Marinucci — Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), Chieti, Italy

Co-authors: C. Di Matteo, C. Mariani, F. Colleluori, G. Ianieri, A. Meo

10:45–11:15 Coffee break and Exhibition Area Tour

SESSION 2 — Autonomic Plasticity, Pharmacological Management and Circulatory–Pulmonary Integration

Session Chairmen: T. Paolucci (University of Chieti–Pescara, IT); G. Anastasi (University of Messina, IT)

11:15–11:30 Effects of an Integrated Rehabilitation Program Supported by Advanced Physical Technologies on Respiratory Function, Pain, Postural Perception and Functional Recovery in Patients Admitted to an Intensive Rehabilitation Facility: A Retrospective Observational Study

L. Proserpi — Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), Chieti, Italy; M. Panunzio — University of Molise, Campobasso, Italy (co-presented)

Co-authors: M. Panico, A. Carideo, R. Bourelly, S. Trapanese, M. Gabriele, P. Valleriani

11:30–11:45 Reaction to Sleeping at High Altitude Is Very Individual: Could the Brainstem Play a Role?

P. Waldner — Sleep Medicine Center, Melittaklinik, Bozen/Bolzano, Italy; N. Netzer — University of Innsbruck, Innsbruck, Austria (co-presented)

11:45–12:00 Laser-Based Cranial Surface Motion Analysis and Its Association with Respiratory, Cardiovascular and Immune Dysfunctions: A Preliminary Observational Study

G. Putignano — bioERGOTech Foundation, Taranto, Italy

Co-authors: M. Genga, V. Nobile, M. Gadaleta, S. Bennani

SESSION 3 — Predictive Science and Multisystem Modelling in Respiratory Medicine

Session Chairmen: K. Rasche (HELIOS University Hospital Wuppertal, DE); V. Guglielmi (University of Chieti–Pescara, IT)

12:00–12:15 Motor and Respiratory Recovery After Cardiac Surgery: Clinical Efficacy of a Short-Term Rehabilitation Program

A. Di Stefano — Azienda Sanitaria Locale (ASL) Teramo, Teramo, Italy; G. Franzone — Azienda Sanitaria Locale (ASL) Teramo, Teramo, Italy (co-presented)

Co-authors: M. D'Amico, G. Paoletti, M. Benvenuto, F. D'Antonio, G. Di Giamberardino

12:15–12:30 Ocular System and Respiratory System: A Systematic Review of Anatomical, Immunological and Functional Interactions

P.E. Gallenga — "G. d'Annunzio" University of Chieti–Pescara, Chieti, Italy

12:30–14:00 Lunch and Exhibition Area Tour

14:00–15:00 — Practical Session

ROOM 1: Bioresonance and Functional Regulatory Medicine

ROOM 2: Adaptive Electrotherapy and Neurovegetative Rebalancing

ROOM 3: Cranial Motion Assessment and Neuro-Respiratory Functional Monitoring

ROOM 4: Microcurrent Therapy and Biocellular Regulation

SESSION 4 — Environmental Determinants, Respiratory Physiology and Exercise Tolerance

Session Chairmen: T. Paolucci (University of Chieti–Pescara, IT); G. Barassi (CeFiRR, IT)

15:00–15:15 Short-Term Changes in FeNO in Children from Two Environments with Different Levels of Air Pollution

K. Gojny — Wrocław Medical University, Wrocław, Poland

Co-authors: K. Gomułka, M. Drozd, M. Sobieszkańska

15:15–15:30 Influence of Polycyclic Aromatic Hydrocarbons on Health Risks of Children in Indoor and Outdoor Environments

A. Badyda — Warsaw University of Technology (Politechnika Warszawska), Warsaw, Poland

Co-authors: P. Kępa, M. Rogulski, D. Mucha, A. Kristian, B. Kozińska

15:30–15:45 Exposure to Air Pollutants when Using Tobacco Heating Products and Conventional Cigarettes Inside a Vehicle

A. Badyda — Warsaw University of Technology (Politechnika Warszawska), Warsaw, Poland

Co-authors: K. Koziak, M. Rogulski, P. Kępa, M. Dutkiewicz, O. Zegrocka-Stendel

15:45–16:15 *Coffee break + Open poster display*

16:15–16:45 CLOSING HONORARY PRESENTATION — COPD: Which Patients Are Readmitted Within One Year After Severe Exacerbation?

K. Rasche — Witten/Herdecke University, Witten, Germany

Co-authors: S. Kwast, S. Hohenstein, A. Bollmann, C. Peukert, T. Armbrust, T. Bauer, S. Krüger, R. Kuhlen, N. Büchner

16:45–17:00 *Closing ceremony — Best Abstract Award, closing remarks, invitation to AIP 2027*

INTERACTIVE DISCUSSION

25% of the total time allotted for each presentation and keynote lecture will be dedicated to an immediate Q&A session.

VERIFICATION OF PARTICIPATION

Attendance is monitored session by session by badge scanning at the entrance of the hall for on-site participants and by connection tracking for remote participants. Participants might additionally be required to complete a short evaluation questionnaire at the end of each half-day and the participant feedback form, which includes a question on the perceived bias of the faculty, at the end of the congress. Eventual credits will be issued on the basis of the sessions actually attended.

SCIENTIFIC AND ORGANISING COMMITTEE

Scientific Directors:

- Prof. **Kurt Rasche** (Witten/Herdecke University, Witten, Germany)
- Prof. **Mieczysław Pokorski** (Institute of Health Sciences, Opole University, Opole, Poland) — medical officer
- Dr **Giovanni Barassi** (Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), Chieti, Italy) — Conference Host

Scientific Committee:

- Prof. **Pio Conti** (Tufts University, Boston, Massachusetts, USA)
- Dr **Piero Galasso** (UniCamillus – Saint Camillus International University of Health and Medical Sciences, Rome, Italy)
- Prof. **Pier Enrico Gallenga** ("G. d'Annunzio" University of Chieti–Pescara, Chieti, Italy)
- Prof. **Volodymyr Portnichenko** (National Academy of Sciences of Ukraine, Kyiv, Ukraine)
- Dr **Loris Prosperi** (Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR))

Organising Entities:

- **Advances in Pneumology (AIP)**
- **Scuola di Alta Formazione e Studi specializzati per Professionisti (SAFESPRO)**

FACULTY

Faculty member	Role	Affiliation	Country
Anastasi Giuseppe	Emeritus Professor	Department of Human Anatomy, University of Messina, Messina	Italy
Badyda Artur	Professor	Faculty of Environmental Engineering, Warsaw University of Technology (Politechnika Warszawska), Warsaw	Poland
Barassi Giovanni	Director	Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), "G. d'Annunzio" University, Chieti–Pescara, Chieti	Italy
Brožmanová Mariana	Professor	Jessenius Faculty of Medicine in Martin, Comenius University, Bratislava	Slovakia
Buday Tomáš	Researcher	Department of Pathophysiology, Jessenius Faculty of Medicine in Martin, Comenius University, Bratislava	Slovakia
Conti Pio	Professor	Tufts University, Boston, Massachusetts	USA
Di Pietro Roberta	Professor	Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti–Pescara, Chieti	Italy
Di Resta Velia	Thoracic Surgeon	Responsible of the Area of General Surgery with Thoracic Focus, Casa di Cura Pierangeli, Pescara	Italy
Di Stefano Alexandra	Medical Doctor	Physical Medicine and Rehabilitation Unit, Azienda Sanitaria Locale (ASL) Teramo, Teramo	Italy
Franzone Giuseppina	Head of Department	Physical Medicine and Rehabilitation Unit, Azienda Sanitaria Locale (ASL) Teramo, Teramo	Italy
Galasso Piero	Lecturer	UniCamillus – Saint Camillus International University of Health and Medical Sciences, Rome	Italy
Gallenga Pier Enrico	Former Professor	Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti–Pescara, Chieti	Italy
Gojny Karina	Researcher	Department and Clinic of Internal Medicine, Pneumology and Allergology, Wrocław Medical University, Wrocław	Poland
Guglielmi Vito	Lecturer	Department of Medicine and Aging Sciences, "G. d'Annunzio" University of Chieti–Pescara, Chieti	Italy
Hołownia Adam	Professor	Department of Pharmacology, Faculty of Medicine, Medical University of Białystok, Białystok	Poland
Kuchta Ivan	Researcher	Jessenius Faculty of Medicine in Martin, Comenius University, Bratislava	Slovakia
Marinucci Celeste	Chief Officer	Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), "G. d'Annunzio" University, Chieti–Pescara, Chieti	Italy
Milewska Katarzyna	Researcher	Department of Pharmacology, Faculty of Medicine, Medical University of Białystok, Białystok	Poland
Netzer Nikolaus	Professor	Department of Sport Science, University of Innsbruck, Innsbruck	Austria
Panunzio Maurizio	Researcher	Department of Medical Sciences, University of Molise, Campobasso	Italy
Paolucci Teresa	Professor	Department of Medical, Oral and Biotechnological Sciences, "G. d'Annunzio" University of Chieti–Pescara, Chieti	Italy
Pokorski Mieczysław	Professor	Institute of Health Sciences, Faculty of Health Sciences, Opole University, Opole	Poland
Poliaček Ivan	Researcher	Jessenius Faculty of Medicine in Martin, Comenius University, Bratislava	Slovakia
Portnichenko Volodymyr	Head of Department	Department of Clinical Physiology of Connective Tissue, Bogomoletz Institute of Physiology, National Academy of Sciences of Ukraine, Kyiv	Ukraine
Portnychenko Alla	Head of Department	Department of Hypoxia, Bogomoletz Institute of Physiology, National Academy of Sciences of Ukraine, Kyiv	Ukraine
Prosperi Loris	Head of Research	Center for Physiotherapy, Rehabilitation and Re-Education (CeFiRR), "G. d'Annunzio" University, Chieti–Pescara, Chieti	Italy
Putignano Guido	Researcher	bioERGotech Foundation, Taranto	Italy
Rasche Kurt	Professor	Division of Pneumology, Allergology and Sleep Medicine, Department of Internal Medicine, HELIOS Clinic Wuppertal, Witten/Herdecke University, Witten	Germany
Roslan Joanna	Researcher	Department of Gynecological Endocrinology and Adolescent Gynecology, Medical University of Białystok, Białystok	Poland
Roslan Maciej	Researcher	Department of Pharmacology, Faculty of Medicine, Medical University of Białystok, Białystok	Poland
Siekmeier Rüdiger	Head of Section	In Vitro Diagnostics Section, Department of Medical Devices, Federal Institute for Drugs and Medical Devices (BfArM), Bonn	Germany
Šimera Michal	Researcher	Jessenius Faculty of Medicine in Martin, Comenius University, Bratislava	Slovakia
Waldner Petra	Head Nurse	Sleep Medicine Center, Melittaklinik, Bozen/Bolzano	Italy
Yayan Josef	Researcher	Division of Pneumology, Allergology and Sleep Medicine, Department of Internal Medicine, HELIOS Clinic Wuppertal, Witten/Herdecke University, Witten	Germany