

International meeting PISA per la SLA

*Artificial Intelligence
driving research and cure in ALS
and other Motor Neuron Diseases*

Host and local organizer
Gabriele Siciliano

Scientific Committee

Sharon Abrahams (UK)
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Jessica Mandrioli (IT)
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Faculty

Atalaia Antonio M. - Paris, France
Bandini Andrea - Pisa, Italy
Barbat du Closel Luce - Marseille, France
Bochicchio Mario - Bari, Italy
Botta Monica - Novara, Italy
Catanese Alberto - Ulm, Germany
Chiò Adriano - Turin, Italy
Conte Raffaele - Pisa, Italy
Coratti Giorgia - Rome, Italy
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Dal Canto Mariabeatrice - Monza, Italy
Di Marco Roberto - Verona, Italy
Fanucci Luca - Pisa, Italy
Fornai Francesco - Pisa, Italy
Giannoni Stefano - Bari-Tricase, Italy
Girardi Laura - Marostica, Italy
Giugno Alessia - Bari-Tricase, Italy
Iacoangeli Alfredo - London, UK
Lopriore Piervito - Pisa, Italy

Local organizing Committee

Gabriele Siciliano
Andrea Bandini
Francesca Bianchi
Cecilia Carlesi
Luca Fanucci
Michelangelo Mancuso
Dino Pedreschi
Giulia Ricci
Giovanni Santi
Erika Schirinzi

Lunetta Christian - Pavia, Italy
Mandrioli Jessica - Modena, Italy
Manera Umberto - Turin, Italy
Mancuso Michelangelo - Pisa, Italy
McFarlane Robert - Dublin, Ireland
Metzger Marjorie - Dublin, Ireland
Micera Silvestro - Pisa, Italy
Morandi Daniela - Pistoia, Italy
Nyoungui Elisabeth - Goettingen, Germany
Ottoboni Linda - Milan, Italy
Pedreschi Dino - Pisa, Italy
Pellicanò Giannantonio - Firenze, Italy
Proietti Tommaso - Pisa, Italy
Sansone Valeria - Milan, Italy
Santi Giovanni - Pisa, Italy
Siciliano Gabriele - Pisa, Italy
Silani Vincenzo - Milan, Italy
Spinelli Edoardo - Milan, Italy
Ticozzi Nicola - Milan, Italy

General topics:

- Phenotypic determinants
- Natural history prediction
- Diagnostic flow charts
- Pathogenic mechanisms
- Therapeutic approaches and druggable molecules
- Assistive technology and Smart Cities

ID Evento: 362-441460

Per l'evento sono stati assegnati nr. 10 crediti formativi E.C.M per le seguenti professioni e discipline

Professione	Disciplina
BIOLOGO	Biologo
LOGOPEDISTA	Logopedista
PSICOLOGO	Psicoterapia; Psicologia
FISICO	Fisica
MEDICO CHIRURGO	Genetica Medica; Malattie Dell'apparato Respiratorio; Medicina Fisica e Riabilitazione; Neurologia; Neuropsichiatria Infantile; Otorinolaringoiatria; Biochimica Clinica; Laboratorio di Genetica Medica; Neurofisiopatologia; Neuroradiologia; Medicina Generale (Medici Di Famiglia); Continuità Assistenziale; Cure Palliative; Chimica; Chimico
INFERMIERE	Infermiere

General information

- Free registration
- Abstracts deadline: 15 February 2025
- For further information please contact: info@fclassevents.com

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International meeting PISA per la SLA

*Artificial Intelligence
driving research and cure in ALS
and other Motor Neuron Diseases*

21 - 22 March 2025
Pisa, Italy

Palazzo della Sapienza,
Aula Magna Storica e Aula Magna Nuova
Via Curtatone e Montanara, 15, Pisa



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Artificial Intelligence
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Scientific Program

March 21, 2025

- 08.30 - 09.00 Participants' registration
- 09.00 - 09.15 Authorities welcoming
- 09.15 - 09.30 Introduction: Human centered AI - *Dino Pedreschi (Pisa, Italy)*

SESSION 1: Big data analysis for population-based studies
Chairs: *Dino Pedreschi (Pisa, Italy), Mario Bochicchio (Bari, Italy)*

- 09.30 - 09.50 ALS epidemiology: from genetics to environmental risk factors in population-based studies
Alessia Giugno and Stefano Giannoni (Bari-Tricase, Italy)
- 09.50 - 10.10 Big data for human phenotype ontology in neuromuscular diseases: from disease registries to precision medicine
Antonio M. Atalaia (Paris, France)
- 10.10 - 10.30 Unravelling pathogenic role of habits and metabolic factors
Christian Lunetta (Pavia, Italy)
- 10.30 - 10.50 Federated learning as a new strategy for artificial intelligence stepforward: the Screen4care project
Elisabeth Nyoungui (Goettingen, Germany)

- 10.50 - 11.05 Discussion
- 11.05 - 11.20 Coffee break

SESSION 2: Artificial intelligence for phenotype determinants analysis and natural history prediction
Chairs: *Silvestro Micera (Pisa, Italy), Jessica Mandrioli (Modena, Italy)*

- 11.20 - 11.40 Machine Learning for ALS phenotype stratification: Achievements, Pitfalls, and Future Directions.
Umberto Manera (Turin, Italy)
- 11.40 - 12.00 EEG-derived functional network disruption in ALS cognitive phenotypes
Marjorie Metzger (Dublin, Ireland)
- 12.00 - 12.20 Machine learning for speech analysis
Andrea Bandini (Pisa, Italy)
- 12.20 - 12.40 Gait analysis in ALS and other motorneurone diseases
Roberto Di Marco (Verona, Italy)
- 12.40 - 13.00 Modeling new phenotypes with disease modifying therapies in SMA
Giorgia Coratti (Rome, Italy)

- 13.00 - 13.30 Discussion
- 13.30 - 14.30 Lunch break and posters viewing

SESSION 3: Timely and differential diagnosis issues
Chairs: *Vincenzo Silani (Milan, Italy), Gabriele Siciliano (Pisa, Italy), Monica Povedano (Barcellona, Spain)*

- 14.30 - 14.50 Connectomics and tractography in motor neuron diseases
Edoardo Spinelli (Milan, Italy)
- 14.50 - 15.10 Deep learning predictions of survival based on brain and spinal cord MRI morphometry
Giannantonio Pellicanò (Firenze, Italy)
- 15.10 - 15.30 Computational approaches to biological marker development
Alfredo Iacoangeli (London, UK)
- 15.30 - 15.50 Machine Learning for Supporting Diagnosis of ALS and SMA with electromyography
Piervito Lopriore (Pisa, Italy)
- 15.50 - 16.00 Future perspectives in genetic prevention by IVF and PGT
Mariabeatrice Dal Canto (Monza, Italy) and Laura Girardi (Marostica, Italy)
- 16.00 - 16.15 Coffee break

SESSION 4: Artificial Intelligence and robotics in supporting treatment and assisting patients with motor neuron diseases
Chairs: *Michelangelo Mancuso (Pisa, Italy), Luca Fanucci (Pisa, Italy)*

- 16.15 - 16.35 Robotics in assisting patients' life
Tommaso Proietti (Pisa, Italy)
- 16.35 - 16.55 Artificial intelligence in telemonitoring and in telemedicine
Luce Barbat du Clozel (Marseille, France)
- 16.55 - 17.15 Virtual reality and digital tools in SMA
Valeria Sansone (Milan, Italy)
- 17.15 - 17.30 Discussion
- 17.30 - 18.30 Posters Session

21 marzo | 15:00 - 18:30 Rotary & AISLA session - focused debate: "Qui ed ora con la SLA"
Aula Magna Storica, ground floor

20.00 - 22.30 Charity Dinner "Together for ALS" at S. Ranieri Hotel

March 22, 2025

22 marzo | 08.30 - 13.30 Ottava Giornata Nazionale per le Malattie Neuromuscolari - GMN 2025

SESSION 5: Modelling pathogenetic mechanisms towards new treatment avenues
Chairs: *Adriano Chiò (Turin, Italy), Francesco Fornai (Pisa Italy)*

- 09.00 - 09.20 Digital analyses in advanced tissue models and organoids: the role of proteomics
Linda Ottoboni (Milan, Italy)
- 09.20 - 09.40 Systems-Level Functional Connectivity Biomarker Signature in ALS
Raffaele Conte (Pisa, Italy)
- 09.40 - 10.00 Artificial Intelligence for genetic and genomic data interpretation in ALS
Nicola Ticozzi (Milan, Italy)
- 10.00 - 10.20 Combining multi-omics and human models to identify disease signatures of selective vulnerability in ALS
Alberto Catanese (Ulm, Germany)
- 10.20 - 10.40 Machine learning and data analysis for the development of new molecules
Robert McFarlane (Dublin, Ireland)
- 10.40 - 11.00 Discussion
- 11.00 - 11.30 Coffee break

SESSION 6: One health future perspectives in MND: from lab to smart daily leaving

11.30 - 12.30 Round Table - Chair: *Giovanni Santi (Pisa, Italy)*

From Smart Cities to Healthy&Active Cities: Built Environments for inclusion and fragile users
Giovanni Santi (Pisa, Italy)
Urban space and well-being: healthy cities beyond smartness
Valerio Cutini (Pisa, Italy)
Landscape design and gardens for well-being and human care
Monica Botta (Novara, Italy)
Pros and cons on the appropriate use of AI in ALS: patient perspectives
Daniela Morandi (Pistoia, Italy)

Farewell and closing remarks - *Gabriele Siciliano (Pisa, Italy)*

Welcome to Pisa!
Gabriele Siciliano

waiting for

