



Shaping the Future of Pediatrics aims at creating an ecosystem for innovation dedicated to different kinds of professional figures. A group of stellar speakers and amazing panels will show how the future of pediatrics will look like in a beautiful location, close to the Spanish Steps, in Rome, Italy. Everyone who dedicates his or her professional life to children's health will find in Shaping the Future of Pediatrics an occasion to predict their future, to meet people with a similar attitude and to establish a network to foster the process of innovation in pediatrics.

October 2

Opening session - Toward an Ecosystem for Innovation in Pediatrics

1.00 - 2.30 Fellini Hall

Opening remarks

Bruno Dallapiccola, Ospedale Pediatrico Bambino Gesù, Rome, Italy

The Rome Manifesto for an ecosystem fostering innovation in pediatrics

Alberto E Tozzi, Bambino Gesù Children's Hospital - Rome, Italy

A platform for solution matching and services for innovation

Sylvie Donansson, eHealthHub – Paris, France

An ecosystem for innovation for kids

Luca Tesauro – Giffoni for Kids, Naples, Italy

A session on ethics and the principles of openness that should guide innovation in pediatrics, and how to link all areas of expertise for fostering innovations based on actual needs. All stakeholders involved in innovation can contribute to discuss the path forward for expediting the development of new solutions.

Advances in clinical pediatrics and precision medicine

2.30 - 3.00 Fellini Hall

Engineering Immunity to Treat Cancer in Children

Franco Locatelli, Bambino Gesù Children's Hospital - Rome, Italy

Professor Locatelli will examine new technologies which allow us to "hack" the immune system to target cancer cells. First tested on leukemias, this innovative approach may be extended to solid tumors paving the way to a bright future in cancer therapy.





3.00 - 3.30 Fellini Hall

Innovation in Lung Transplant

Shaf Keshavjee University Health Network - Toronto, Canada

Many potential lung donors are turned away due to the low quality of the organs. Prof Keshavjee will describe a revolutionary technique to regenerate explanted lungs, a technique which has increased the number of potential donors, and the success rate of transplants, by 25%.

3.30 - 4.00 Fellini Hall

Less Genes More Genomes

Barbara Baggiani, Illumina - Milan, Italy

While many more genetic changes can be identified with whole exome and whole genome sequencing than with select gene sequencing, the significance of this information is sometimes uncertain. Sometimes, an identified variant is associated with a different genetic disorder that has not yet been diagnosed. The potential benefits of routine use of whole genome sequencing will be discussed in this lecture.

4.00 – 4.30 Networking coffee break

4.30 - 5.00 Fellini Hall

The Digital Disruption of Academic Medicine: Nothing Will Look the Same (Even for Surgeons)

Todd Ponsky, Cincinnati Children's Hospital - Cincinnati, USA

Prof Ponsky, a surgeon with a special focus on mininvasive surgery in children who is studying the adoption of AI for improving surgery in pediatrics, will discuss the recent changes that affect the routine clinical practices in surgery.

5.00 - 5.30 Fellini Hall

Panel - 3D Technologies for Surgical Planning

Luca Borro, Bambino Gesù Children's Hospital - Rome, Italy Andrea Del Fattore, Bambino Gesù Children's Hospital - Rome, Italy Alessandro Inserra, Bambino Gesù Children's Hospital - Rome, Italy Aurelio Secinaro, Bambino Gesù Children's Hospital - Rome, Italy

Surgical planning requires the translation from diagnostic images into solid or virtual models. This panel will discuss how complex surgery benefits from simulation and planning using these techniques and how 3D printers may even be used to print cells and organized tissues of different shapes.





5.30 - 6.00 Fellini Hall

Pediatric ECMO, How Collaboration led to Innovation

Kevin Maher, Center for Pediatric Nanomedicine Children's Healthcare of Atlanta – Atlanta, USA

ECMO support in children represents a lifesaving technology that is associated with numerous potential complications. We sought to address the recurring issue of ECMO circuit thrombosis through a collaboration with engineers to define the problem and devise a solution. A novel device for ECMO systems will be presented as the outcome of this collaborative effort.

October 3

How to foster innovation?

8.30 - 9.00 Fellini Hall

The Role of iSPI, an International Society Fostering Innovation in Pediatrics

Sherry Farrugia, GeorgiaTech - Atlanta, USA Dawn Wolff, Children's Mercy - Kansas City, USA

A global network of pediatric hospitals is an essential driver to boost innovation for children. Discover how the International Society for Pediatric Innovation aims to be the global hub for innovation in pediatrics, enabling exploration, fostering collaboration and driving insightful change to transform child health.

9.00 - 9.30 Fellini Hall

Innovation for Universal Health Coverage

Stefano Vella, Istituto Superiore di Sanità - Rome, Italy

Health care must become more accessible to people living in low income countries. Professor Vella discusses the need to consider innovation as a means for fostering equity in healthcare.

9.30 - 10.00 Fellini Hall

Disrupting Healthcare Systems Through Innovation

Tony Young, NHS - London, UK

Innovation can be used to make healthcare more sustainable. Prof Young will discuss the solutions that the NHS UK has developed to create simpler patient flows and to generate better performance of traditional healthcare at a lower cost by leveraging AI and digital technologies.

10.00 – 10.30 Networking Coffee Break





Artificial Intelligence in Pediatrics

10.30 - 11.00 Fellini Hall

Human, with Machine Intelligence

Anthony Chang, Children's Hospital Orange County - Orange County, USA

Medicine will not become an automatic, technology-driven process, but will be improved through the combination of human knowledge and AI technologies. Professor Chang will discuss how AI methodologies demand a close collaboration, not competition, between the physician and the data scientist. It behooves us to start thinking how we can design studies in which machine and man, can work together to be even more accurate than either can be alone.

11.00 - 11.30 Fellini Hall

Artificial Intelligence for Diagnostic Images

Gregor Thoermer, Siemens Healthineers - Erlangen, Germany

Radiologists will not be extinguished by AI but will be given super-powers to make better diagnoses even in complex cases. Human sight cannot recognize fine patterns that artificial intelligence tools can, and AI can be used to integrate varied clinical information with images. The future of radiology will become a very complex science in which AI will help recognizing complex patterns and increase the diagnostic power of this discipline.

11.30 – 12.30 Fellini Hall Selected Abstract Presentations

12.30 – 1.30 Networking Lunch

The Hospital of the Future

1.30 - 2.00 Fellini Hall

Pop-Up Hospitals

Narendra Kini, Nicklaus Children's Hospital - Miami, USA

With a magic wand we could create health services when needed and then make them disappear. This is not impossible, Pop Up Hospitals give the opportunity to deliver health care services that can be created on the spot, removed, and moved to other locations.

Professor Kini will describe this innovative solution that is paving the way for a revolutionary model of pediatric healthcare.

2.00 - 2.30 Fellini Hall

Voice Technologies for Digital Communication

John Brownstein, Boston Children's Hospital - Boston, USA





Talking is much faster than typing. Boston Children's Hospital is innovating communications with digital voice technologies both within and without the hospital utilizing Amazon Echo and the knowledge base curated by the hospital. Combining the advantages of a phone call with digital voice applications allows institutions to standardize and speed up the communication process. In addition, voice technologies are becoming a way to allow institutions to collect subtle clinical signs of diseases

2.30 - 3.00 Fellini Hall

Building a Brand New Hospital

Pekka Lahdenne, Helsinki University Hospital - Helsinki, Finland

Imagine that you need to build a new hospital. How would you coordinate all of the activities? Instead of listening to an engineer, Professor Lahdenne helmed an innovative hospital in Helsinki which was designed by pediatricians, patients and other professionals, with patient comfort and lean strategies as it's focus while utilizing an amazing crowdfunding campaign.

3.00 – 3.30 Networking Coffee Break

3.30 - 4.00 Fellini Hall

The digital hospital evolution: creating a framework for the healthcare system of the future

Lina Shadid, IBM – Abu Dhabi, United Arab Emirates

The Cleveland Clinic Abu Dhabi (CCAD), a new 2.2 million-square-foot multi-specialty digital hospital modeled after the world-renowned U.S. medical center, will offer the latest technologies in surgery, imaging, telemedicine and electronic medical records, integrating systems in a manner that will be the first of its kind in the country and the Middle East region.

4.00 - 4.30 Fellini Hall

Panel - Patient advocacy and collaboration at the next level

David Cole – Thinking of Oscar - Oxford, UK Francesca Fedeli – FightTheStroke - Milan, Italy

Learn how patient associations may drive health innovation with outstanding initiatives. From supporting innovation fellowships to integration of artificial intelligence in diagnostic procedures to creation of an entire ecosystem for rehabilitation of children with disabilities.

4.30 - 5.30 Fellini Hall

Panel - Innovations Created by and For Young Patients

Claudio Fracasso, Pfizer - Rome, Italy;

Begonya Nafria Escalera MsC, Institut de Recerca Saint Joan De Deu and Fundaciò Sant Juan De Deu – Barcelona, Spain

Donato Bonifazi, Consorzio per le valutazioni Biologiche e Farmacologiche CVBF - Bari, Italy





Mariangela Lupo, TEDDY European Network of Excellence for Pediatric Clinical Research - Bari, Italy

Young Persons Advisory Group, YPAG Barcelona and Bari Alessandra Simonetti, Bambino Gesù Children's Hospital - Rome Italy Leanne West - iCan research - Altanta, USA

A panel to understand how young patients can invent and develop real innovations in networks for young innovators.

5.30 - 6.00 Fellini Hall

Smart communities for patiets: Share4Rare

Begonya Nafria Escalera MsC, Institut de Recerca Saint Joan De Deu and Fundaciò Sant Juan De Deu – Barcelona, Spain

A sneak peak on Share4rare where online communities are monitored to measure engagement and activation of patients.

October 4

Digital Therapeutics and Digital Communication

8.30 - 9.30 Fellini Hall

Panel - The Impact of Digital Therapeutics in Pediatrics

Roberto Ascione, Healthware International - Salerno, Italy Giuseppe Recchia, Fondazione Smith Kline - Verona, Italy Startups to be determined

Digital therapeutics are real treatments that need a fast track to be evaluated. Since the development of new drugs takes a very long time, there is an increasing interest by pharmaceutical companies to develop digital products that may complement existing traditional drugs, or that exert a therapeutic effect on their own. Two startups will present their work in the field of behavioral therapies. A discussion will follow about the opportunities and challenges of digital therapeutics in pediatrics.

9.30 - 10.00 Fellini Hall

The Internet of Pediatrics: How to Globally Connect Devices and People

Timothy Chou, Stanford University - Stanford, USA

Clinical information often remains unused simply because the devices collecting them are not connected to each other. What if we could connect not only all devices in a single hospital, but in a network of hospitals? Professor Chou will discuss on how this can take us to completely different pediatric care models in which patients and their information move seamlessly across a global network of hospitals.





10.00 - 10.30 Fellini Hall

Digitally Supported Collection of Patients Reported Outcomes in Pre-School and Literate Children

Francesco Patalano, Novartis Pharma AG – Varese, Italy

Clinical studies often require the collection of clinical information when patients are outside the hospital. Digital tools offer plenty of choices for collecting patient reported outcomes, from tailored questionnaires to data collected through wearable sensors. Children may autonomously manage digital applications with important benefits for clinical studies.

10.30 – 11.00 Networking Coffee Break

11.00 - 12.00 Fellini Hall

Panel - Digital Communication for Promoting Childhood Immunization Programmes

Anna Odone, Università Vita Salute S Raffaele - Milan, Italy Michael Edelstein, National Infection Services, PHE - London, UK Sally Jackson, Bambino Gesù Children's Hospital – Rome, Italy Caterina Rizzo, Bambino Gesù Children's Hospital – Rome, Italy

A panel discussing how digital tools and new media can be used to identify where and how to best communicate vaccination campaigns to parents as well as the use of innovative techniques to tailor informed consent processes in clinical trials on vaccines.

12.00 - 12.30 Fellini Hall

Panel - Digital Applications for Children and Adolescents

Elena Bozzola, Bambino Gesù Children's Hospital - Rome, Italy Lucia Pannese, Imaginary - Milan , Italy

Francesco Marino. Bambino Gesù Children's Hospital – Rome, Italy

Digital applications can be responsibly used by children for therapeutic purposes with no risk of addiction. Often parents are advised to avoid early exposure to digital applications for their children. Some digital tools like serious games may be part of a pediatric therapeutic plan, including rehabilitation and therapy. The apparent contradictions between these aspects is discussed in a panel with the objective of finding the right balance between a negative effect and a positive impact on child health.

12.00 - 1.30 Fellini Hall

The MakeToCare ecosystem

Barbara Parini, Polifactory, Milan, Italy Filippo Cipriani, Sanofi Genzyme, Milan, Italy

The model of MakeToCare, an ecosystem for finding out user-centered innovations fostering the culture of makers.





Startup Pitch Competition

Innovators from around the world will present creative and innovative ideas for potentially game-changing innovations to Reduce Anxiety or Pain in Hospital Settings.

1.30 – 2.00 Fellini Hall **Closing and farewell**