

The first Child Health Technology Conference (CHT2021) is taking place virtually on 2-5 March 2021. CHT2021 will include both oral and poster presentations.

All abstracts must be original empirical research that has not been previously published. Abstracts must relate to child health technology and fit into one of the abstract categories. Case studies are not permitted. All abstracts will be peer-reviewed. Successful abstracts will be published in the digital conference abstract booklet.

Please refer to the conference website for full guidance about submitting an abstract. Please contact us if you have any questions.

Successful oral abstract presenters will need to pre-record a video of their talk and submit the video file to the conference team via Dropbox no later than Friday 5th February 2021.

Successful poster abstract presenters will need to submit a pdf of their poster to the conference team via Dropbox no later than Friday 5th February 2021. Poster presenters will also have the option to submit a two-minute audio file explaining their poster, which will accompany the poster in the virtual poster gallery.

Detailed guidance will be circulated to successful abstract presenters.

The deadline for submitting an abstract is 17:00 on Friday 20th November 2020. Applicants will be informed of the outcome by Friday 15th January 2021. Successful applicants will be eligible for the early bird registration fee.

Please complete the sections below to submit an abstract to Child Health Technology 2021.

## Title\* (15 words)

Please enter the FULL TITLE of your abstract. This title will be used in the conference programme

The European Paediatric Translational Research Infrastructure to foster research on paediatric medical devices

## Categories\*

Please choose a sub-category which best describes your abstract. Categories are broken down into sub-categories in the drop-down menu below.

- Artificial intelligence and machine learning
- Robotics
- Personalised medicine
- Big data
- Active implantable devices
- In-vitro diagnostics
- Sensor technology
- Virtual and augmented reality
- Medical imaging and diagnostics
- Assistive technology
- 3D printing
- mHealth
- Telehealth
- E-prescribing



- Health informatics
- Interoperability
- Cyber security
- Co-design and co-production
- Dissemination and public awareness
- Other (please specify)

## Abstract\* (300 words)

If your category is 'Other' please specify the category on the first line of this section. Use the format 'Category: (Category name here)'.

Abstracts must be written in plain English for a general audience. Abstracts must include the following headings: background, aims, methods, results, discussion. Keywords are not permitted.

You may include one table. Tables must include a title and fit on one A4 page. Please note that tables should be inserted as images rather than using the "Insert Table" function below. If you use the "Insert Table" function, the words will count towards the abstract word limit.

You may include one figure. Figures must include a legend. Colour figures should be at least 72 dpi in RGB colours. Greyscale figures and line art should be at least 72 dpi.

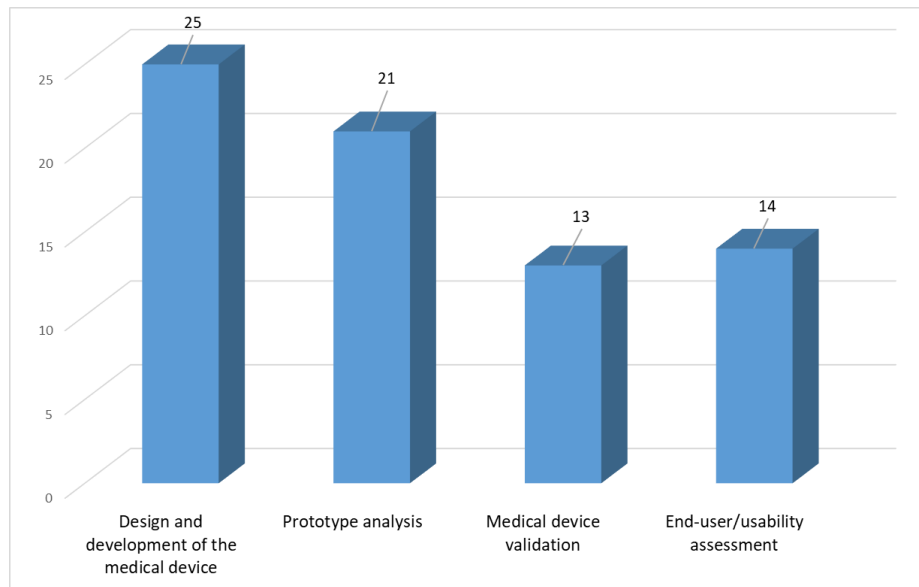
**Background:** Currently few medical devices are designed for children, most are borrowed from adult applications and used without a specific indication. Designing paediatric medical devices can be challenging because children are smaller and more restive than adults, body structures and functions change throughout childhood, and children may be long-term device users bringing new concerns about device longevity and risks.

**Aims:** The H2020 EU funded European Paediatric Translational Research Infrastructure (EPTRI) is working to establish thematic research platforms by networking the paediatric researchers and providing solutions to improve the development of medical devices dedicated to children as well as other fields of paediatric research.

**Methods:** During the context analysis performed by EPTRI, a survey has been conducted at Pan-European level to map paediatric research facilities and expertise in several areas as, among others, the paediatric medical devices.

**Results:** 27 research units from 24 Institutions based in 12 different countries (particularly in UK, Italy and Germany) expressed their competence in medical devices research. They have mainly expertise in the design, development and prototype analysis of medical devices. Furthermore, over half of the respondents declared also expertise in end-user/usability assessment and device validation.





Discussion: A large gap exists in paediatrics between the idea, the development and the clinical application of medical devices in the paediatric population, due to the physiological and ethical issues and the development costs. EPTRI will convey the identified experts in medical devices and will work to expand the critical mass of experts through an advanced survey and networking actions to provide services to the scientific community to develop tailored MD for paediatrics populations to help overcoming the gaps and needs in MD research, keeping pace with evolving technologies and innovations.

## Authors and affiliations

Please enter the names and affiliations of ALL authors in the order you wish them to appear in the digital conference abstract booklet. Names omitted here will not be included in conference materials. The first author is the primary contact for the abstract and has responsibility for the content of the abstract on behalf of all co-authors. The submitting author must be listed as an author of the abstract. The submitting author is responsible for ensuring that each author has legitimately contributed to the research and guaranteeing the final version of the abstract. There is no maximum number of authors.

**Name:** Donato **Surname:** Bonifazi **Institution:** Consorzio per Valutazioni Biologiche e Farmacologiche **City:** Bari **Country:** Italy  Presenting Author

**Name:** Valeria **Surname:** Pignataro **Institution:** Consorzio per Valutazioni Biologiche e Farmacologiche **City:** Bari **Country:** Italy

**Name:** Mariangela **Surname:** Lupo **Institution:** TEDDY Network of Excellence **City:** Pavia **Country:** Italy

**Name:** Giovanni **Surname:** Migliaccio **Institution:** Consorzio per Valutazioni Biologiche e Farmacologiche **City:** Bari **Country:** Italy

**Name:** Fedele **Surname:** Bonifazi **Institution:** Fondazione Gianni Benzi Onlus **City:** Bari **Country:** Italy

**Name:** Angela **Surname:** Lopedota **Institution:** Università degli Studi di Bari **City:** Bari **Country:** Italy

**Name:** Nunzio **Surname:** Denora **Institution:** Università degli Studi di Bari **City:** Bari **Country:** Italy

**Name:** Adriana **Surname:** Ceci **Institution:** Fondazione Gianni Benzi Onlus **City:** Bari **Country:** Italy

**Ethical approval\***



I confirm that an appropriate ethics committee or review board approved the research and that informed consent was obtained for all participants where required.

**Author approval\***

I confirm that all named authors have approved the submission of this abstract.

**Conflicts of Interest Declaration\***

I declare that one or more of the named authors have a conflict of interest. Please specify below.

I declare that none of the named authors have any conflicts of interest.

**If yes, please specify below**

