

Partner search – Horizon Europe (Health Cluster 2026)

Organisation: Heim Pál National Paediatric Institute (Hungary)

About us

The Heim Pál National Paediatric Institute, Budapest, is one of the largest and most comprehensive paediatric healthcare centres in Central Europe. The institute provides highly specialised care across all major paediatric disciplines and serves as a national reference centre for complex and rare diseases.

Our focus

AI-driven early detection and risk stratification of paediatric diseases using large-scale, real-world clinical data, enabling scalable clinical validation across diverse populations.

Ongoing research and AI focus

The institute actively applies artificial intelligence in paediatric healthcare, with a focus on early detection and screening of diseases.

Current research programmes focus on the use of AI to identify predictive factors in childhood that support early screening and risk stratification for later-life diseases, including cardiovascular, metabolic, and mental health conditions. This work builds on large-scale, real-world clinical data and aims to enable earlier detection, prevention, and personalised care pathways in paediatric populations.

We aim to further develop and validate multimodal AI-based screening tools combining clinical, imaging, laboratory, and genetic data.

Clinical capacity and patient volume

- ~30,000 inpatient cases/year
- ~500,000 outpatient visits/year
- ~30,000 emergency cases/year

This large and diverse patient population enables robust clinical validation and real-world evaluation of digital and AI-based solutions.

Clinical and research strengths

- Advanced paediatric care across all specialties: pulmonology, dermatology, neurology, orthopaedics, infectious diseases, psychiatry
- Strong expertise in rare diseases, including cystic fibrosis
- Established genetic diagnostics and access to gene therapy
- Intensive care with ECMO capability
- European-recognised paediatric sleep laboratory
- Full surgical portfolio across all paediatric disciplines
- Advanced orthodontics and craniofacial care

Diagnostic infrastructure

- Advanced imaging capabilities: CT and MRI
- Laboratory diagnostics, including molecular diagnostics
- PCR-based diagnostic capacity
- Integrated clinical and diagnostic data environment

Data and interoperability approach

We support federated data analysis approaches, where data remain within institutional boundaries while enabling collaborative AI model development across multiple centres. Our data management practices align with the principles of the European Health Data Space (EHDS), including interoperability, data protection, and secure cross-border use of health data for research and innovation.

What we offer

- Large-scale, high-quality clinical datasets
- Real-world clinical validation environment
- Access to diverse paediatric populations, including rare diseases
- Multimodal data (clinical, imaging, laboratory, genetic)
- Capacity to support large-scale, multi-centre AI validation across diverse populations
- Experience in handling high-volume, real-world paediatric data suitable for AI development and validation
- Multidisciplinary clinical expertise
- Capability to lead or co-lead clinical work packages

Role in consortium

- Clinical validation partner
- Pilot site leader, particularly in paediatric populations
- Contributor to study design and data collection

Interest in Horizon Europe 2026 calls

- HORIZON-HLTH-2026-TOOL (AI diagnostics and screening)
- HORIZON-HLTH-2026-DISEASE (risk prediction and early detection)

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