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The Congenital Heart Defects Association visits ICFO

AACIC organization representatives visited ICFO facilities to see the progress of the TinyBrains project, which focuses on noninvasively evaluating the brain health of babies born with congenital heart defects noninvasively.

February 17, 2025

After more than four years of research, the European project [TinyBrains](#), coordinated by ICFO, is entering its final stage. During the past months, the team has focused their efforts on completing a monitoring device that is now being used to measure patients in the neonatal ICU at the Sant Joan de Deu Hospital. The project was [launched in early 2021](#) to develop an advanced neuroimaging device that could provide information about what happens in the brains of babies born with a congenital heart defect that must undergo surgery during the first months of life.

In this context, the Association of Congenital Heart Defects - [AACIC](#) visited the ICFO facilities last week. The organization cares for more than 4,000 children with congenital heart disease in Catalonia every year, accompanying children during hospitalizations, offering emotional support to families and giving advice and training to professionals.

Manager **Rosa Armengol** and health psychologist **Rosana Moyano**, representatives of the entity, visited the Medical Optics group laboratories and facilities guided by PhD student **Georgina Tresanchez** and ICREA Prof. at ICFO **Turgut Durduran**. During the visit, Armengol, also a member of the project Scientific Advisory Board, stressed the importance of devoting efforts to improving the quality of life of children who may suffer from cognitive disorders or neurodevelopmental problems.

The visit to ICFO was an exciting discovery, says Rosa Armengol. I was able to see that scientific research responds to the real needs of patients, increasing the amount of available information and helping us to understand the neurological difficulties that children with congenital heart diseases may have. Information and knowledge help us to understand and assess the neurodevelopment of children with those diseases. In this way, we can offer better guidance that contributes more appropriately to improve the potential and capabilities of each child.

Over the next few months, the TinyBrains team will continue to work to improve the measurements and analyse the data obtained. I would like to thank ICFO researchers for

their work and encourage them to continue focusing their interest on the world of the youngest children, children with congenital heart defects, i¿½ concludes Armengol.

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AACIC representatives Rosa Armengol and Rosana Moyano at the Medical Optics lab

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Group picture in front of the ICFO building