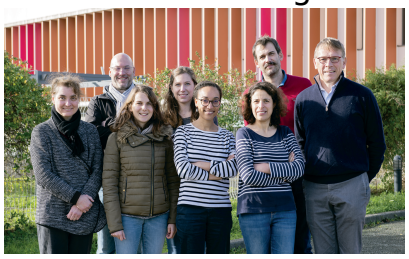
At the IUT Angers-Cholet, research activities are carried out in collaboration with industrialists and associations: Fondation pour la Recherche Médicale, Ligue Contre le Cancer, AFM Téléthon, Siemens, Bjorg-Bonneterre, Terrena, GRT Gaz, DGA, Latoxan, Aquasys, Knapp, Commerce Equitable France, etc. Collaborations have also been developed with international organisations (China, Ireland, Poland, Czech Republic, Ukraine, Canada, Italy, Great Britain, Lebanon, Chile, New Zealand, USA, Algeria and Tunisia).

Focus on one of the IUT Angers-Cholet's research activities: the biomedical field. A number of lecturer-researchers are working on assisting medical diagnosis and understanding biophysical phenomena using innovative signal and image processing methods of their own devising.



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One of these projects involves understanding the (re)organisation of a child's brain following a non-progressive brain injury sustained during foetal life or in the first two years of life. This work, carried out in close collaboration with the CHU d'Angers,

will make it possible to promote re-education to manage the motor disability associated with cerebral lesions. This will involve the development of algorithms for processing children's brain MRI images in order to quantify the "disorder" generated by the lesion. The innovation proposed by the teacher-researchers at the IUT Angers-Cholet is based on quantifying this "disorder" using methods based on the notion of entropy, focusing here on the organisation of the pixels in the MRI images.

This work, carried out in close collaboration with medical teams from different centres, involves constant technological monitoring. The initial results obtained by the teacher-researchers at the IUT Angers-Cholet are promising and have already led to publications in international journals.

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