

# Advanced Clinical and Experimental Audiology (AUDACE)

## About us

Based on a dual expertise and an original approach (translational and reverse translational research ) resulting from its close interaction with clinicians, the AudACE platform is a unique tool in France in the field of Auditory Neurosciences. Indeed, it brings together in a single unit (within the « UFR de Médecine et des Professions Paramédicales ») with dedicated premises to clinical trials (« RIPH », with volunteers or patients) and premises reserved for experimental in vivo investigations.

Thus, using animal models (in small rodents with induced or genetic hearing and neurodevelopment disorders), the development of new non-invasive functional evaluation methods (electrophysiological or acoustic) enables the pathogenesis of hearing and associated neural disorders to be better documented. Transposition (with little adaptation) to voluntary subjects enables these procedures to be used almost immediately, making them innovative diagnostic tools for patients. Thus, the progress of our fundamental knowledge enables and will enable better patient care by more effectively targeting the most appropriate rehabilitation and by participating in the screening of therapies in development.

## Our services

The experimental and clinical skills of the AudACE platform enable cover a wide range of services in many fields of intervention: audiology, paediatrics, neuropaediatrics, genetics, neurology, neuro-muscular, metabolic (diabetes) or chemical (oncology) diseases, speech therapy, hearing assessment and rehabilitation.

- Development or implementation of customised protocols for non-invasive audiological explorations.
- Clinical trials.
- Experimental research protocols (small rodents).
- Information, training, prevention.

## Some of our achievements

- Audiological evaluations of different of mutant mice batches (Hearing Institute- Institut Pasteur - Paris).
- Audiological patients assessments of (departments of Diabetology, Genetics, Neuropaediatrics, Paediatric Intensive Care, University Hospital of Clermont Fd / departments of medical oncology - Centre Jean Perrin / Centre Médico-Infantile de Romagnat).
- Audiological assessments & cochlear histology guinea pigs (Neural code & auditory perception - Institut de NeuroScience Paris-Saclay (NeuroPSI)).

## Partnerships

- University Hospital of Clermont-Fd (Departments of Diabetic Medicine, Genetics, Neuropediatrics, Pediatric Intensive Care, Neonatal Intensive Care), France.
- Comprehensive Cancer Center Jean PERRIN (department of Medical Oncology), Clermont-Fd, France.
- Center for Research and Innovation in Human Audiology (CERIAH) - Hearing Institute / Institut Pasteur - Paris, France.
- Children's Medical Center, Romagnat, France.



### Contact

**Scientific & technical expert**

**[Fabrice Giraudet](mailto:audace%2Eucapartner%40uca%2Efr)**

### Address

Département de Biophysique Médicale  
UFR de Médecine et des Professions Paramédicales  
Université Clermont Auvergne - TSA 50400  
28 place Henri Dunant  
63000 Clermont-Fd cedex 1

## Partner laboratory



(<https://neurodol.uca.fr/>)

<https://partner.uca.fr/english-version/our-area-of-expertise/biology-and-health-technologies/advanced-clinical-and-experimental-audiology-audace>(<https://partner.uca.fr/english-version/our-area-of-expertise/biology-and-health-technologies/advanced-clinical-and-experimental-audiology-audace>)