

Laboratory of Excellence

ARBRE

Advanced Research
on the Biology of Tree
and Forest Ecosystems

**ARBRE IS A LABORATORY OF EXCELLENCE AWARDED
SUPPORT FROM THE 2012 FRENCH STIMULUS
INITIATIVE 'INVESTMENTS FOR THE FUTURE'**

ARBRE aims to explore and analyze the mechanisms behind the evolution of trees, their associated microbes and the functioning of forest ecosystems in the context of global change, to propose new options for their preservation and management and to develop new uses for wood that will enhance the exploitation of forest resources.

Our immediate practical objectives are:

- To develop and disseminate tools for improved forest management, sustainability and transformation,
- To enhance and valorize ecosystem services for improved economic viability of forest management,
- To provide decision makers with information and forecasts on qualitative forest evolution,
- To improve and diversify uses for wood and derivative wood products.

In collaboration with the University of Lorraine and AgroParis Tech, ARBRE actively supports higher learning programs for students working towards a masters degree, engineering degrees or a PhD placing particular emphasis on e-learning initiatives. ARBRE offers an attractive variety of internships, thesis and post-doctoral fellowships.

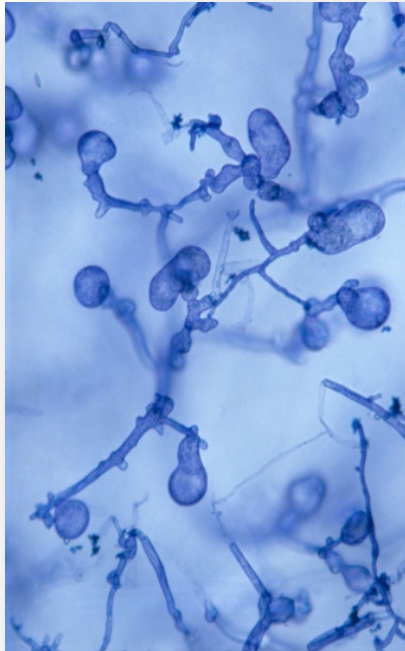
ARBRE is also engaged in developing an active communication policy for training and research approach intended for the non-specialist public.

THEMATIC ACTIONS

ARBRE IS ORGANIZED AROUND FOUR THEMATIC AREAS AND SUPPORTS ALL RESEARCH / TRAINING-DISSEMINATION / VALORIZATION PROJECTS ASSOCIATED WITH THESE THEMES. THE CREATION OF INTER-DISCIPLINARY COLLABORATIVE PROJECTS IS PARTICULARLY ENCOURAGED.

1 INTEGRATIVE BIOLOGY

Identifying genetic determinants controlling tree-organisms-soil interactions as well as tree development and functioning.



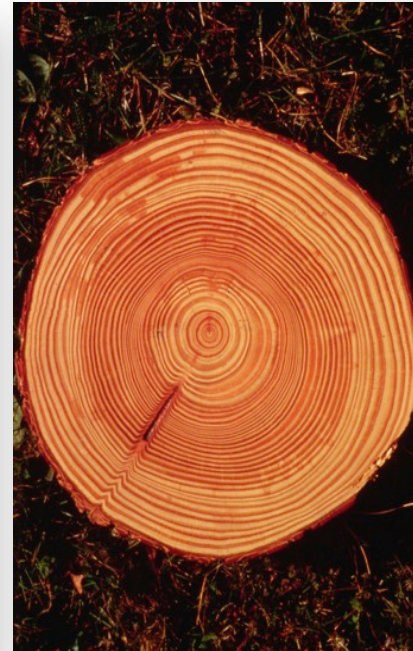
2 FUNCTIONAL ECOLOGY

Understanding the functioning of forest ecosystems in a changing environment.



3 WOOD MATERIAL

Improving our understanding of wood as a material and promoting interactions between the supply side of the forest industry and uses for wood as a finished product.



4 FOREST ECONOMY

Developing original economic methods aimed at enhancing biodiversity as an economic service.



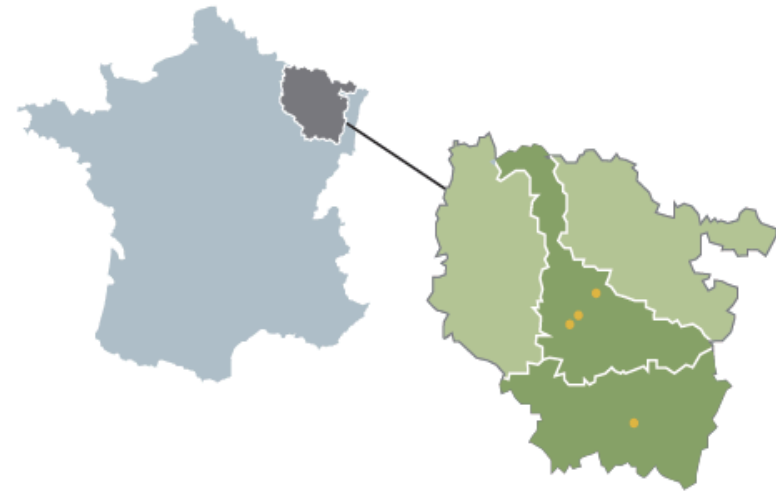
ARBRE is supported by the University of Lorraine and managed by INRA. It is a partnership project associating AgroParis Tech, the French National Office of Forests (ONF), the French National Center for Forest Owners (CRPF), the Resource Center for Wood Industries (CRITT) and the European Forest Institute (EFI).

With a budget of 7,500,000 € for allocation over eight years, a staff of 135 scientists, 110 doctoral and post-doctoral students, 88 technicians and administrative personnel, ARBRE offers unique opportunities in Europe for research and training and is at the forefront in plans to construct the future Institute for Forests and Wood anticipated to attract to the Lorraine region both students and renowned scientists alike.

Seven research units bring together a broad range of complementary expertise (chemistry, biophysics, biochemistry, genomics, bio/eco-computing, genetics, physiology, ecology, forest economy and cultivation):

- Research Unit for Forest Ecosystem Biogeochemistry (BEF)
- Joint Research Unit for Dynamics of Genomes and Microbial Adaptation (DynaMIC)
- Joint Research Unit for Forest Ecology and Ecophysiology (EEF)
- Joint Research Unit for Tree/Microorganism Interactions (IAM)
- Joint Research Unit for Forest Economics Laboratory (LEF)
- Joint Research Unit for Forest and Wood Resource Studies (LERFOB)
- Research Unit for the Study and Research of Wood Materials (LERMAB)

ARBRE research relies on a network of experimentation work sites divided into three technical platforms (Functional Ecology, Eco-genomics and Xylosciences), each equipped with high performance, state of the art instrumentation accessible to the entire national and international scientific community.



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CAMPUSES IN LORRAINE

- Champenoux
- Nancy
- Vandœuvre
- Epinal

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Twitter - @labexARBRE

