

Identification of new plant and yeast genes by genomics and proteomics approaches

SENIOR SCIENTISTS:

- ▶ Marc BOUTRY
- ▶ Pierre MORSOMME
- ▶ Bénédicte PURNELLE
- ▶ Hervé DEGAND

Research Field and Subjects

This research group is involved in the systematic analysis of genomes and genome expression of several organisms. Deciphering whole genomes gives access to genes, functions and hence applications not reached by other approaches.

We have DNA sequencing facilities allowing the analysis of whole genomes (at the genomic or cDNA level). We have also developed facilities for systematic protein analysis by 1D or 2D gel electrophoresis, HPLC and sequencing.

Our current projects aim at identifying genes and proteins that are differently expressed according to the cell type and the environmental factors.

Products and Services

- ▶ DNA sequencing service
- ▶ Protein sequencing service
- ▶ Protein analysis by 1D and 2D gel electrophoresis

Main Equipment

- ▶ DNA sequencer ABI Genetic analyzer 3100
- ▶ Protein sequencer ABI 477
- ▶ IPGphor
- ▶ Image scanner
- ▶ All present-day molecular biology and biochemistry equipments

Representative References

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▶ JASINSKI M., DUCOS E., MARTINOIA E. and BOUTRY M. (2003) The ATP-binding-cassette transporters: structure, function and gene family comparison between rice and *Arabidopsis*. *Plant Physiol.* 131: 1169-1177.

Patents

- ▶ S. HAUNSO, J. CARLSEN, K. KJELDSSEN, T. JOHANSEN, P. LARSEN, U. JENSEN, S. FEY, M. BOUTRY, H. DEGAND (1999) Markers for organ rejection. PCT US 5939270.
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Awards

- ▶ M. Boutry, member of the Belgian Academy of Sciences

Partnership

- ▶ This group belongs to the *Institut des Sciences de la Vie*, Louvain-la-Neuve, Belgium.
- ▶ This research is financed by the *Région Wallonne*.

STAFF

Total: 4

KEY WORDS FOR R&D

function analysis
genome
plant
protein analysis
proteome
sequencing
yeast

SENIOR SCIENTISTS**Marc BOUTRY**

boutry@fysa.ucl.ac.be
tel. 32 (0)10 47 36 21

Pierre MORSOMME

morsomme@fysa.ucl.ac.be
tel. 32 (0)10 47 26 23

Bénédicte PURNELLE

purnelle@fysa.ucl.ac.be
tel. 32 (0)10 47 36 18

Hervé DEGAND

degandh@fysa.ucl.ac.be
tel. 32 (0)10 47 38 18

WEB SITES

<http://www.fysa.ucl.ac.be>
<http://www.isv.ucl.ac.be>