

**Dominique DETAILLE**

Avenue de Ninove,124

B-5580 Jemelle (Rochefort)

Cell Phone: +34 (0)645 446 404

E-mail: [domidet@usal.es](mailto:domidet@usal.es) or [domidet@hotmail.com](mailto:domidet@hotmail.com)**Born on september 17<sup>th</sup>, 1969**

Belgian, single

Driving licence B

Present residence in Salamanca, Spain

**PhD in Biology (cell biology and physiology)****Project: Research Associate - R&D Scientist in a Biotechnology company or in the public sector, on human healthcare topics****Professional experiences****# 04/2007 – 12/2008: Research Associate, University of Salamanca, Spain**

Scientist in charge or collaborator on various projects (Advisers: Professors Y. El-Mir and J.M. Lopez-Novoa), funded by the spanish State or by private funds:

- Metformin and gentamicin-induced nephrotoxicity: *in vivo* studies and mitochondrial function
- Silibinin and hepatic mitochondrial metabolism in nutritional models of insulin resistance
- Direct effects of glitazones upon hepatic energy metabolism

- Supervision of 2 PhD students and joint management of 1 postgraduate diploma (DEA)
- Organisation and development of laboratory activities: technology transfer, support for equipment purchase
- Cowriting of scientific projects: PHC Picasso with France (U. Schlattner); Integrated Actions with Algeria

**# 08/2002 – 03/2007: Post-Doc researcher, INSERM U884 (LBFA), University of Grenoble 1, France**

Project: Mitochondrial effects of metformin and derivatives on the control of oxidative stress-induced cellular death in endothelial and neural cells (Funded by the pharmaceutical industry Merck-Santé, Lyon, France)

- Self- and team working (Direction: Xavier Leverve), as well collaborations with research units from France (M. Rigoulet), Belgium (B. Guigas and L. Hue) or Spain (Y. El-Mir)
- Initiation of a research program about a new pharmacological drug in relation with diabetes treatment: *in vivo* studies and cultured cells experiments
- Set-up of new experimental protocols
- Reports and scientific articles writing, data presentation in international congresses, regular apprenticeship of technology to trainees, stock inventory in cell culture

**# 06/1995 – 07/2002: Scientist, then PhD student at the University of Namur (FUNDP), inside the Research Unit in Biology of the Organisms (Laboratory of Comparative Biochemistry and Physiology)**

Fellowship from Merck-Lipha: convention with this pharmaceutical group for the identification of cellular and molecular events whereby metformin enhances insulin-dependent glucose metabolism in *X. laevis* oocytes

- Contacts with academic research teams: Belgium (UMH, UCL), France (LBFA of Grenoble)
- Supervision of 1 master student; continuous training of technology (microinjection, use of liposomes)
- Order, receipt, and maintenance of animals

**# 03/1994 – 06/1994: Scientist at the University of Namur**

Fixed term contract in convention with the Walloon Region and the University of Liège for the study of hormonal factors similar to crustacean prolactins and somatotrophic hormone.

## Education

**2002 - Ph.D in Biology** (University of Namur, Belgium)

Thesis: The *Xenopus laevis* oocyte as experimental tool for the study of an antidiabetic drug, metformin, controlling insulin-regulated glucose metabolism (Adviser: Professor Pierre Devos).

**1993 - License (master degree) in Biochemical Sciences** (University of Liège, Belgium)

Dissertation: Study of xenobiotic compounds degradation pathways by microorganisms.

**1991 - License (master degree) in Zoological Sciences** (University of Namur, Belgium)

Dissertation: Fructose 2,6-bisphosphate and bioamines as regulators of ion transport in isolated gills of the Chinese crab, *Eriocheir sinensis*, acclimated to fresh water.

## Acquired skills

### - technical

Physiology: Spectrometry, osmometry, perfusion of crustacean gills, microinjection of nucleic acids or drugs into oocytes, use of radioisotopes ( $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^3\text{H}$ ,  $^{125}\text{I}$ ), isolation of mitochondria from liver and kidney tissues, bioenergetic parameters (oxygraphy, calcium retention capacity, ROS production, etc...)

Biochemistry/molecular biology: HPLC, subcellular fractionation, SDS-PAGE in one dimension, RIA, ELISA, Western Blot, synthesis of transcripts from cDNA, spectrofluorimetry, protein and enzymatic assays

Cell culture: bacteria strains (*Pseudomonas*, *Arthrobacter*, *Bacillus*) in flasks or small fermentors; cell lines (KB, HMEC-1, C6, HL-1, Caco-2) and primary cells (BAEC, HUVEC, neurons); microscopy (phase contrast, classical fluorescence and confocal), immunocytochemistry and cell death determination by flow cytometry

Animal handling: use of fasted/starved Wistar rats: subcutaneous and/or intraperitoneal injection of various compounds (antidiabetic drugs, anaesthetics, etc...)

### - communication and organizational skill

Scientific writing: 17 publications including 9 as first author; 14 abstracts including 7 self-presented as a poster form in french, english, or spanish; experience in reports and projects writing; peer-reviewing of papers

Oral communication: in addition to data presentation in congresses/seminars, co-animation of a workshop: "The cell revisited using confocal imaging" (Fête de la Science 2005, Grenoble)

Organisation: students supervision, experiments planning, management

## Languages and computer skills

- French (mother tongue)
- English (good level)
- Spanish (middle level)
- Dutch (school level)
- Processing Data tools: Windows (Word, Excel, PowerPoint); Imaging (Leica Confocal Software, ImageJ, IrfanView, Graphic Converter); Internet searches: PubMed, Medline, professional networking (Viadeo)

## Miscellaneous

- 2 memberships: Groupe Français de Bioénergétique since 2003; Société Belge de Biochimie et de Biologie Moléculaire since 1993
- Various trainings in geology, marine biology and fresh water ecology
- Hobbies: music, cinema, walking
- Voluntary worker in a music festival (Les Vans, France) since 2007