

**Elvina Sakellariou, PhD**  
**Molecular Biologist**

**Working Experience**

**Apr. 2016-Today:** Scientific support of the European project 'HEAT-SHIELD'. School of Physical Education and Sport Science, University of Thessaly (Greece).

**May 2015-Today:** Scientific support of the European project 'SCAFFY'. Biomechanical Solutions, Karditsa (Greece).

**Mar. 2015-Feb 2016:** Scientific support of the European project 'GI-Neu'. Centre for Research and Technology Hellas, Volos (Greece).

**Mar 2012-Oct 2013:** Postdoctoral Fellow, Department of Physiology, University of Maryland, School of Medicine, Baltimore (USA).

**Education**

**2007-2012:** PhD in Medical genetics, Department of Medical Genetics, University of Athens, School of Medicine, Children's Hospital 'Aghia Sophia,' Athens, Greece. Title of thesis: «*Molecular investigation of Facioscapulohumeral Muscular Dystrophy (FSHD)*».

**2005-2006:** MSc in Prenatal Diagnosis and Fetal Medicine, University College London (UCL), London, Great Britain. Title of thesis: «*Gene transfer to human fetal tissues in vitro using viral vectors for prenatal treatment of congenital disease*».

**2001-2004:** BSc in Cell and Molecular Biology (First class degree), Oxford Brookes University, Oxford, Great Britain.

**Postgraduate education and training**

**26-30 Aug. 2013:** Myology Course, Nationwide Children's Hospital, Columbus, Ohio.

**Nov. 2008- Dec. 2008 :** Training in molecular techniques for FSHD diagnosis, Miogen, Laboratory, University of Modena e Reggio Emilia, Italy.

**Fellowships**

**2012-2013:** Postdoctoral Fellowship. FSH Society (Lexington, MA, USA). «*Postdoctoral Fellowship Training Grant in Muscle Biology.FSHS (22011.04)*».

## Research Activities

**Apr.2016-Today:** School of Physical Education and Sport, University of Thessaly (Greece).

- Assessment of health and productivity of current and future climatic scenarios.
- Dissemination and exploitation of the results.

**May 2015-Today:** Biomechanical Solutions, Karditsa.

- Scientist in Charge for the European project 'SCAFFY'.

**Mar. 2015-Feb 2017:** Centre for Research and Technology Hellas (Greece).

- Development of a mouse model for the study of muscular dystrophy.

**Mar. 2012- Nov.2013 & Jul.-Okt. 2014:** Department of Physiology, School of Medicine, University of Maryland, Baltimore, USA. **Research Project:** *Investigating mouse models of FSHD.*

- Development of human skeletal muscle in immunodeficient mice (*Rag1<sup>null</sup>IL2 $\gamma$ <sup>null</sup>*) mediated by intramuscular injection of immortalized human myoblasts (both dystrophic and control).
- Investigation of the most suitable conditions for the transplantation, survival, and differentiation of human myoblasts into myofibers within the microenvironment of skeletal muscle in immunodeficient mice.

**2007-2012:** Department of Medical Genetics, University of Athens School of Medicine, Children's Hospital 'Aghia Sophia,' Athens, Greece. **Research Project:** *Molecular investigation of Greek FSHD patients.*

- Molecular investigation of Facioscapulohumeral muscular dystrophy (FSHD).
- Molecular diagnosis of FSHD in Greek patients.

**May 2006- Sept. 2006:** Collaboration between University College London (UCL) and Gene Therapy Research Group (Imperial College), London, Great Britain.

- Investigation of the efficiency of gene transfer (reporter genes LacZ/GFP) to human fetal tissues, particularly skin and liver, in vitro using viral vector delivery systems (HIV-1 and 1<sup>st</sup> generation adenovirus).

## Patents

**2014:** "Methods of Generating Mature Human Muscle Fibers in Mice". US Patent application 15/029,191. UMB Docket: RB-2014-039 (USA).

## Publications

1. Flouris AD, Shidlovskii YV, Shaposhnikov AV, Yepiskoposyan L, Nadolnik L, Karabon L, Kowalska A, Carrillo AE, Metsios GS, **Sakellariou P**. Role of *UCP1* Gene Variants in Interethnic Differences in the Development of Cardio-Metabolic Diseases. *Front Genet.* 2017;8:7.
2. Flouris AD, Dinas PC, Valente A, Andrade CM, Kawashita NH, **Sakellariou P**. Exercise-induced effects on UCP1 expression in classical brown adipose tissue: a systematic review. *Horm Mol Biol Clin Investig* 2017 Jan 13. Epub 2017 Jan 13.
3. **Sakellariou P**, Valente A, Carrillo AE, Metsios GS, Nadolnik L, Jamurtas AZ, et al. Chronic l-menthol-induced browning of white adipose tissue hypothesis: A putative therapeutic regime for combating obesity and improving metabolic health. *Med Hypotheses.* 2016;93:21-6.
4. **Sakellariou P**, O'Neill A, Mueller AL, Stadler G, Wright WE, Roche JA, et al. Neuromuscular electrical stimulation promotes development in mice of mature human muscle from immortalized human myoblasts. *Skelet Muscle.* 2016;6:4. 6.
5. Papanikos F, Skoulatou C, **Sakellariou P**, Kekou K, Christopoulos TK, Kanavakis E, et al. A simplified approach for FSHD molecular testing. *Clin Chim Acta.* 2014;429:96-103.
6. **Sakellariou P**, Kekou K, Fryssira H, et al. Mutation spectrum and phenotypic manifestation in FSHD Greek patients. *Neuromuscular Disorders* 2012; 24(4):339-49.

## Proffered Communications

1. Xenografting human myoblasts into mouse tibialis anterior muscle: Towards the development of a new mouse model of FSHD». **Sakellariou P.**, O'Neill A., Roche JA., Stadler, G., Wright WE., Bloch RJ. FSH Society FSHD International Research Consortium workshop (Poster presentation), 21-22 October, Massachusetts Institute of Technology, Cambridge, Boston, USA.
2. Xenografting human normal and FSHD myoblasts into mouse tibialis anterior muscle: towards the development of a new mouse model of FSHD». **Sakellariou P.**, O'Neill A., Roche JA., Wright WE., Bloch RJ. Retreat in Cardiovascular and Muscle Biology (Poster presentation), University of Maryland, 3 December 2012, Baltimore, USA.
3. Mutation spectrum and phenotypic manifestation in FSHD Greek patients». **Sakellariou P**, Kekou K, Fryssira H, Sophocleous C, Manta P, Panousopoulou A, Gounaris K, Kanavakis E. Golden Helix® Symposium 'Genetic Analysis in Translational Medicine' (Poster presentation), 1-4 December 2010, Athens, Greece.