



Francesca Reineri

Cuneo (Italy) 03-april-1975

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Education:

- February 2002 **PhD in Chemistry**, University of Torino
Title of the thesis "Hyperpolarized gases: NMR studies"
- December 1999 **Master degree**, University of Torino, Faculty of **Chemistry**.

Positions

- 02 / 2002 - 02 / 2005 Post-Doc position at the University of Torino, Dept. Chemistry
The research was carried out within the collaboration between the Dept. of Chemistry and Glaxo-SmithKline, in a project entitled "Synthesis of parahydrogenated substrates for MRS/MRI applications"
- 05 / 2005 – 08 / 2008 Post-Doc associate at the University of Torino, Dept. Chemistry
Within the UE funded project "Adventure with Spin Isomers: Separation, Physical Chemistry and Applications of Ortho- and Para-Water"
- 09 / 2008 – present Assistant Professor, University of Torino, Dept. Molecular Biotechnology and Health Sciences. Dr. Reineri has supervised more than 10 Master Degree and PhD students. She currently leads the hyperpolarization group at the Molecular Imaging Center in the Dept. of Molecular Biotechnology.

Research activity

Francesca Reineri carries out research in the field of MR hyperpolarization since the beginning of her career and she developed a broad knowledge in hyperpolarization methods and their diagnostic applications.

In particular, concerning the development of new hyperpolarized probes for imaging studies of cancer disease, she recently conceived and published a cost effective and powerful method to obtain hyperpolarized pyruvate using parahydrogen.

Awards

- TRIDEO Award 2015, AIRC-Fondazione Cariplo, project title "Metabolic Imaging with ParaHydrogen Polarized tracers for cancer detection and treatment monitoring" .

Research support

Ongoing projects:

- Trideo award 2015: title "Metabolic Imaging with ParaHydrogen Polarized tracers for cancer detection and treatment monitoring"

Period: jan 2016-dec 2017,

total budget 99.946,0 euros

role: PI of the project

- Athenaeum/CSP 2016 call, n. of the project CSTO164550

Period: maj 2017-nov 2019

title of the project " Hyperpolarized metabolites for MRI of cancer"

total budget 70800,00 euros

role: PI of the project

Teaching activity

- Master Degree in Molecular Biotechnology, teaching course title " Molecular Imaging techniques: MRI and MRS"

- National School of Magnetic Resonance (GiDRM national school), for PhD students "Processing of the NMR signal" and "MRI with hyperpolarized probes".

Professional Memberships

Since 2009 Member of the American Chemical Society

Since 2009 member of the Italian Chemical Society

Since 2015 member of the European Society of Molecule Imaging (ESMI)

Conferences and meetings

The research work has been presented to many national and international conferences among which, in the last five years:

- EMIM (European Molecular Imaging Meeting)
- 18-20 march 2015 Tubingen (Germany)
"Hyperpolarization using paraHydrogen of biologically relevant substrates: acetate and pyruvate"
- HYP2015 (hyperpolarized magnetic resonance) and 5th international DNP symposium
31aug-4 sept 2015 Egmond Aan Zee, The Netherlands,
"Hyperpolarization strategies for side-arm hydrogenation of Pyruvate with p^H2"
- Contrast media research (CMR)

- 07-09 nov 2015 Berlin (Germany)
"MR hyperpolarization of [1-13C]pyruvate using parahydrogen"
- Fourth international workshop on hyperpolarized 13C and its applications in metabolic imaging"
25-27 feb 2016 Philadelphia (USA)
"ParaHydrogen Hyperpolarization of Pyruvate for Metabolic Studies"
 - EMIM 2016
08-10 march 2016
educational session "Hyperpolarized MR"
title "Advances on PHIP: Instrumental approaches and chemical perspectives"
 - World Molecular Imaging Meeting 2017,
13-16 Sept 2017 Philadelphia,
title "Detecting metabolic pathways in vivo using parahydrogen hyperpolarized [1-13C]pyruvate: a cost effective, powerful tool for metabolic imaging studies."

Patents

"A PROCESS FOR THE PREPARATION OF AQUEOUS SOLUTIONS OF HYPERPOLARIZED MOLECULES" Aime S.; Giovenzana G.B.; Gobetto R.; Uggeri F.; Santelia D.; Dastru' W.; Viale A.; Reineri F. , WO2010037771

since 08-04-2010 brevetto "PROCESS FOR THE PREPARATION OF HYPERPOLARIZED CARBOXYLATE COMPOUNDS" Autori: Silvio Aime; Erika Cerutti; Tommaso Boi; Francesca Reineri, Numero di deposito: 13190409.6
dal 20-08-2013 a oggi