

BIOGRAPHICAL SKETCH

NAME João Pais		POSITION TITLE PhD Student	
EDUCATION / TRAINING			
INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Universidade de Lisboa, Faculdade de Ciências	PhD	Ongoing	Organic Chemistry
Universidade de Lisboa, Faculdade de Ciências	Master	12/11	Chemistry - Chemistry, Health and Nutrition
Universidade de Lisboa, Faculdade de Ciências	Graduation	7/09	Chemistry

Research Interests

Organic synthesis, Microbiology

Professional experience

12.2011- 02.2013: researcher in the project FACIB –Novos fármacos a partir de açúcares para o combate de infeções por Bacillus (*New sugar based drugs against Bacillus infections*; QREN – SI I&DT Co-Promoção Projecto nº 21547). Carbohydrate Chemistry Group, Centre of Chemistry and Biochemistry, Faculdade de Ciências, Universidade de Lisboa (CQB-FCUL); Pharmaceutical company AtralCipan.

10.2009 to 10.2010: research fellowship Bolsa de Iniciação à Investigação (BII), entitled: “Síntese de novos agentes antimicrobianos derivados de açúcares com aplicações nas áreas da saúde e cosmética”; Centre of Chemistry and Biochemistry, Faculdade de Ciências, Universidade de Lisboa (CQB-FCUL)

Publications

A. Martins, M. S. Santos, C. Dias, P. Serra, V. Cachatra, J. Pais, J. Caio, V. H. Teixeira, M. Machuqueiro, M. S. Silva, A. Pelerito, J. Justino, M. Goulart, F. V. Silva, and A. P. Rauter. Tuning the Bioactivity of Tensioactive Deoxy Glycosides to Structure: Antibacterial Activity versus Selective Cholinesterase Inhibition Rationalized by Molecular Docking. *European Journal of Organic Chemistry*, 8, **2013**: 1448-1459.

A. Martins, M. S. Santos, C. Dias, P. Serra, V. Cachatra, J.Pais, J. Caio, V. H. Teixeira, M. Machuqueiro, M. S. Silva, A. Pelerito, J. Justino, M. Goulart, F.V. Silva, and A. P. Rauter. Tuning the Bioactivity of Tensioactive Deoxy Glycosides to Structure: Antibacterial Activity Versus Selective Cholinesterase Inhibition Rationalized by Molecular Docking. *European Journal of Organic Chemistry*, **2013**: 1448–1459.

Patents

Rauter AP., Martins A., Caio J., **Pais J.**, Serra P., Santos MS., Gonçalves A., Justino J., Dias R., Tenreiro R., Compostos Derivados de açúcar inibidores de espécies de bacillus, processo de obtenção e respectivas utilizações, patente n.º PT105475, submetida 11-01-2011

A. P. Rauter, A. Martins, J. Caio, **J. P. Pais**, P. Serra, M.- S. Santos, A. Pelerito, J. P. Gomes, J. Justino, R. Dias, R. Tenreiro, Sugar derivatives having tensioactive and antimicrobial activity, patente n.º WO 2012095792 A1 (submitted 10-01-2012, pub. date: 19-07-2012).

Conferences (communications, participation, organization)

Oral Communications

J. Pais, A. Martins, A. P. Rauter, R. Dias, R. Tenreiro, Structure-guided synthesis and mechanism of action of antimicrobial 2,6-dideoxy glycosides, Glupor 9 - 9th International Meeting of Portuguese Carbohydrate Chemistry Group and 5th Iberian Carbohydrate Meeting, Vila Real, Portugal, Septembre 2011.

Poster communications (as presenting author)

J. Pais, L. Sobral, A. P. Rauter, R. Tenreiro, R. Dias. Impact of 2,6-dideoxy-arabino glycosides with antimicrobial activity on *Bacillus cereus* metabolome. CQB Day, Lisbon, Portugal, July 2014.

J. Pais, R. Dias, A. Martins, A. P. Rauter, *Synthesis and Biological Studies of new 2,6-dideoxy-arabino-hexopiranosides*. 6th Spanish Portuguese Japanese Organic Chemistry Symposium, Lisbon, Portugal, July 2012.

J. P. Pais, A. Martins, A. P. Rauter, Exploratory chemistry focused on the synthesis of 2,6-dideoxy glycopyranosides. XXII Encontro Nacional da SPQ, Braga, Portugal, July 2011.

J. P. Pais, A. Martins, A. P. Rauter. Síntese de glicopiranosídeos 2,6-didesoxigenados com potencial como antibióticos. Ciência QB – 1º Encontro dos alunos de doutoramento do DQB-FCUL, Lisbon, Portugal, May 2011.

J. P. Pais, J. Sardinha, A. Martins, A. P. Rauter, *Exploratory chemistry focused on the synthesis of 6-deoxy-D-glucal*. 2nd PyCheM, Aveiro, Portugal, April 2010.

As member of the local organizing committee

6th Spanish-Portuguese-Japanese Organic Chemistry Symposium, Lisbon, Portugal, July 2012.

Glycosciences in the International Year of Chemistry – Applications to Human Health and Disease, Lisbon, Portugal, Septiembre 2011.

EuroGlycoScience Forum – 2nd Steering Committee Meeting, Lisbon, April 2010.

(CORM V) Carbohydrates as Organic Raw Materials V - Building a Sustainable Future, Lisbon, Portugal, January 2009.

Other activities

Other formation activities

- Update course of two days lectured by Prof. Dr. Jesus Jimenez-Barbero entitled “NMR and Molecular Recognition” at Faculdade de Ciências da Universidade de Lisboa, Portugal, February 2011.
- Update course of three days lectured by Prof. Dr. Hans Peter Wessel (Hoffman-La Roche) entitled “Industrial Drug Research”, with final classification of 15 (0- 20), at Faculdade de Ciências da Universidade de Lisboa, Portugal, May 2010.
- Update course of three days lectured by Prof. Dr. Beat Ernst entitled “Molecular Mechanisms of Drugs”, with final classification of 18 (0- 20), at Faculdade de Ciências da Universidade de Lisboa, Portugal, Septiembre 2009.

Languages

Native language: Portuguese

Other languages:

- English: excellent level of speaking, reading and writing.