

**Publications Prof. Sandrine ONGERI, Molécules fluorées et peptides d'intérêt thérapeutique (FLUOPEPIT), BioCIS UMR 8076, CNRS, Univ. Paris Sud, Université Paris Saclay.**

- 1- "A binuclear platinum(II) complex using trans-1,2-diaminocyclobutane as a bridging ligand"  
J. Aitken, H.-P. Husson, D. Nguyen-Huy, S. Ongeri, F. Vergne, B. Viossat, *Inorg. Chem. Comm.* **1998**, 1/8, 314-316.
- 2- "A Short Synthesis of trans-Cyclopentane-1,2-diamine"  
S. Ongeri, D. J. Aitken, H.-P. Husson, *Synth. Comm.* **2000**, 30, 2593-2597.
- 3- "Effect of Ring Size on Coordination Properties of trans-1,2-Cycloalcanediamine Ligands : Synthesis of Dinuclear Platinum(II) Complexes as potential DNA Cross-Linkers"  
S. Ongeri, D. J. Aitken, H.-P. Husson, J. Kozelka, B. Viossat, *Inorg. Chem.* **2000**, 39, 6131-6133.
- 4- "Synthesis, Modelling and NK1 Antagonist Evaluation of a non-rigid Cyclopropane-containing Analogue of CP 99994"  
D. J. Aitken, S. Ongeri, D. Vallée-Goyet, J.-C. Gramain, H.-P. Husson, *Bioorg. Med. Chem. Lett.* **2001**, 11, 659-661.
- 5- "Optimization of new Chiral Ligands for the Copper-Catalysed Enantioselective Conjugate Addition of Et<sub>2</sub>Zn to Nitroolefins by High-Throughput Screening of a Parallel Library"  
S. Ongeri, U. Piarulli, R. F. W. Jackson, C. Gennari, *Eur. J. Org. Chem.* **2001**, 803-807.
- 6- "Discovery of a New Efficient Chiral Ligand for Copper-Catalyzed Enantioselective Michael Additions by High-Throughput Screening of a Parallel Library"  
I. Chataigner, C. Gennari, S. Ongeri, U. Piarulli, S. Ceccarelli, *Chem. Eur. J.* **2001**, 7, 2628-2634.
- 7- "Enantioselective Binding of Dipeptides using Acyclic Receptors"  
E. Botana, S. Ongeri, R. Arienzo, M. Demarcus, J. G. Frey, U. Piarulli, D. Potenza, C. Gennari, J.D. Kilburn, *Chem. Comm.* **2001**, 1358-1359.
- 8- "Synthesis, Conformational Studies and Binding Properties of Acyclic Receptors for N-Protected Aminoacids and Dipeptides"  
E. Botana, S. Ongeri, R. Arienzo, M. Demarcus, J. G. Frey, U. Piarulli, D. Potenza, J. D. Kilburn, C. Gennari, *Eur. J. Org. Chem.* **2001**, 4625-4634.
- 9- "Synthesis and Screening of New Chiral Ligands for the Copper Catalysed Enantioselective Allylic Substitution"  
S. Ongeri, U. Piarulli, M. Roux, C. Monti, C. Gennari, *Helv. Chim. Acta*, **2002**, 85, 3388-3399.
- 10- "New Constrained Molecular Tongs Designed to dissociate HIV-1 Protease Dimer"  
N. Merabet, J. Dumond, B. Collinet, L. Van Baelinghem, N. Boggetto, S. Ongeri, F. Ressay, M. Reboud-Ravaux, S. Sicsic, *J. Med. Chem.* **2004**, 47, 6392-6400.
- 11- "Design and Synthesis of Specific Probes for Human 5-HT<sub>4</sub> receptor Dimerization studies"  
J.-L. Soulier, O. Russo, M. Giner, L. Rivail, M. Berthouze, S. Ongeri, B. Maigret, R. Fischmeister, F. Lezoual'ch, S. Sicsic, I. Berque-Bestel, *J. Med. Chem.* **2005**, 48, 6220-6228.

-12- "Molecular tongs containing amino acid mimetic fragments : new inhibitors of wild-type and mutated HIV-1 protease dimerization "

L. Bannwarth, A. Kessler, S. Pèthe, B. Collinet, N. Merabet, N. Boggetto, M. Reboud-Ravaux, S. Sicsic, S. Ongeri, *J. Med. Chem.* **2006**, 4657-4664.

-13- "Peptidomimetic dimerization inhibitors of HIV-1 protease : Further Insights into structural variations and mechanism of action "

L. Bannwarth, T. Rose, S. Frutos, E. Giralt, R. Vanderesse, B. Jamart-Grégoire, A. Vidu, S. Ongeri, S. Sicsic, C. Pannecouque, E. De Clercq, M. Reboud-Ravaux, *Antiviral research* **2007**, 74; A64.

-14- "Platinum(II) and Palladium(II) Complexes with N-aminoguanidine "

D. J. Aitken, A. Albinati, A. Gaultier, H.-P. Husson, G. Morgant, D. Nguyen-Huy, J. Koselka, P. Lemoine, S. Ongeri, S. Rizzato, B. Viossat, *Eur. J. Inorg. Chem.* **2007**, 3327-3334.

-15- "Solid-Phase Synthesis and Conformational Studies of Pseudopeptides Containing an Unsymmetrical Triazine Scaffold "

E. Bourguet, I. Correia, B. Dorgeret, G. Chassaing, S. Sicsic, S. Ongeri, *J. Pept. Sci.* **2008**, 14, 596-609.

-16- "Synthesis of new triazole-based trifluoromethyl scaffolds " M. Martinelli, T. Milcent, S. Ongeri, B. Crousse, *Beilstein J. Org. Chem.* **2008**, 4, doi:10.3762/bjoc.4.19.

-17- "Novel fluorinated pseudopeptides as proteasome inhibitors "

L. Formicola, X. Maréchal, N. Basse, M. Bouvier-Durand, D. Bonnet-Delpon, T. Milcent, M. Reboud-Ravaux, S. Ongeri, *Bioorg. Med. Chem. Lett.* **2009**, 19, 83-86.

-18- "Cyclic RGD-Peptidomimetics Containing Bifunctional Diketopiperazine Scaffolds as New Potent Integrin Ligands "

Ressurreição, A. S. M.; Vidu, A.; Civera, M.; Belvisi, L.; Potenze, D.; Manzoni, L.; Ongeri, S.; Gennari, C.; Piarulli, U. *Chem. Eur. J.* **2009**, 15, 12184-12188.

-19- "Towards the first non peptidic molecular tong inhibitor of wild-type and mutated HIV-1 protease dimerization "

A. Vidu, L. Dufau, L. Bannwarth, J-L Soulier, S. Sicsic, U. Piarulli, M. Reboud-Ravaux, S. Ongeri, *ChemMedChem* **2010**, 5, 1899-1906.

-20- "Sugar-based peptidomimetics inhibit amyloid  $\beta$ -peptide aggregation "

B. Dorgeret, L. Khemtémourian, I. Correia, J-L Soulier, O. Lequin, S. Ongeri, *Eur. J. Med. Chem.*, **2011**, 46, 5959-5969.

-21- « Carbonylhydrazide-based molecular tongs inhibit wild-type and mutated HIV-1 protease dimerization »

L. Dufau, A. S. Marques Ressurreição, R. Fanelli, N. Kihal, A. Vidu, T. Milcent, J-L Soulier, J. Rodrigo, A. Desvergne, K. Leblanc, B. Crousse, M. Reboud-Ravaux, S. Ongeri, *J. Med. Chem.* **2012**, 55, 6762-6775.

-22- « Synthesis of fluorinated N-aminoaziridines: access to new CF<sub>3</sub>-peptidomimetics »

B. Schweitzer-Chaput, M. Keita, T. Milcent, S. Ongeri, B. Crousse, *Tetrahedron*, **2012**, 68, 7028-7034.

-23- "Access to Novel Amino Trifluoromethyl Cyclopropane Carboxylic Acids "

M. Keita, R. De Bona, M. Dos Santos, O. Lequin, S. Ongeri, T. Milcent, B. Crousse, *Tetrahedron*, **2013**, 69, 3308-3315.

-25- « *Non-Covalent Proteasome Inhibitors* »

J. Kaffy, G. Bernadat, S. Ongeri, *Current Pharmaceutical Design*, **2013**, 19 (22), 4115-4130.

-26- “ *$\alpha$ - and  $\beta$ - Hydrazino acid-based pseudopeptides inhibit the chymotrypsin-like activity of the eukaryotic 20S proteasome*” A. Bordessa, M. Keita, X. Maréchal, L. Formicola, N. Lagarde, J. Rodrigo, G. Bernadat, C. Bauvais, J.-L. Soulier, L. Dufau, T. Milcent, B. Crousse, M. Reboud-Ravaux, S. Ongeri, *Eur. J. Med. Chem.* , **2013**, 70, 505-524.

-27- “*Highly Stereoselective aza-Baylis–Hillman Reactions of CF<sub>3</sub>-Sulfinylimines: Straightforward Access to  $\alpha$ -Methylene  $\beta$ -CF<sub>3</sub>  $\beta$ -Amino Acids*” T. Milcent, J. Hao, K. Kawada, V. A. Soloshonok, S. Ongeri, B. Crousse. *Eur. J. Org. Chem.* **2014**, 3072–3075.

-28- “*Introduction of polar groups on the naphthalene scaffold of molecular tongs inhibiting wild-type and mutated HIV-1 protease dimerization*” R. Fanelli, A. S. Ressurreiçao, L. Dufau, J.-L. Soulier, A. Vidu, N. Tonali, G. Bernadat, M. Reboud-Ravaux, S. Ongeri. *MedChemComm* **2014**, 5, 719 - 727

-29- “*<sup>19</sup>F NMR Monitoring of the Eukaryotic 20S Proteasome Chymotrypsin-like Activity: Investigative tool for studying Allosteric Regulation*” M. Keita, J. Kaffy, C. Troufflard, E. Morvan, B. Crousse and S. Ongeri. *Org. Biomol. Chem.* **2014**, 12, 4576 – 4581.

-30- *Structure-activity Relationships of Sugar-based peptidomimetics as modulators of amyloid  $\beta$ -peptide early oligomerization and fibrillization*; J. Kaffy, D. Brinet, J-L Soulier, L. Khemtémourian, O. Lequin, M. Taverna, B. Crousse, S. Ongeri, *Eur. J. Med. Chem.* **2014**, 86, 752-758.

-31- *An improved CE method for the In vitro monitoring of the challenging early steps of the  $A\beta_{1-42}$  peptide oligomerization: application to anti-Alzheimer’s drug discovery.* D. Brinet, J. Kaffy, F. Oukacine, S. Glumm, S. Ongeri, M. Taverna, *Electrophoresis*, **2014**, 35, 3302–3309.

-32- *Access to Novel Functionalized Trifluoromethyl  $\beta$ -Lactams By Ring Expansion of Aziridines*, S. Décamps, L. Seville, S. Ongeri, B. Crousse, *Org. Biomol. Chem.* **2014**, 12, 6345-8.

-33- *Synthesis and Conformational Studies of a Stable Peptidomimetic  $\beta$ -Hairpin Based on a Bifunctional Diketopiperazine Turn Inducer.* L. Vahdati, R. Fanelli, G. Bernadat, I. Correia, O. Lequin, S. Ongeri, U. Piarulli, *New J. Chem.* **2015**, 39, 3250-3258.

-34- *Electrophilic amination of fluoroalkyls groups on azodicarboxylate*; M. Mamone, E. Morvan, T. Milcent, S. Ongeri and B. Crousse, *J. Org. Chem.*, **2015**, 80 (3), 1964–1971.

-35- *Designed Glycopeptidomimetics Disrupt Protein–Protein Interactions Mediating Amyloid  $\beta$ -Peptide Aggregation and Restore Neuroblastoma Cell Viability.* J. Kaffy, D. Brinet, J-L Soulier, I. Correia, N. Tonali, K. F. Fera, Y. Iacone, A. R. F. Hoffmann, L. Khemtémourian, B. Crousse, M. Taylor, D. Allsop, M. Taverna, O. Lequin, S. Ongeri, *J. Med. Chem.* **2016**, 59, 2025–2040.

-36-  *$\beta$ -Hairpin mimics containing a piperidine-pyrrolidine scaffold modulate the  $\beta$ -amyloid aggregation process preserving the monomer species*, S. Pellegrino, N. Tonali, E. Erba, J. Kaffy, M. Taverna, A. Contini, M. Taylor, D. Allsop, M. L. Gelmi, S. Ongeri *Chemical Science*, **2017**, 8, 1295 - 1302.

-37- *In vitro monitoring of amyloid  $\beta$ -peptide oligomerization by Electrospray differential mobility analysis: an alternative tool to evaluate Alzheimer's disease drug candidate.* D. Brinet, F. Gaie-Levrel, V. Delatour, J. Kaffy, S. Ongeri, M. Taverna *Talanta*, **2017**, 165, 84-91.

- 38- *Synthesis and characterization of hairpin mimics that modulate amyloid beta-peptide early oligomerization and fibrillization.* L. Vahdati, D. Brinet, G. Bernadat, I. Correia, S. Panzeri, R. Fanelli, O. Lequin, M. Taverna, S. Ongeri, U. Piarulli, *Eur. J. Org. Chem.* **2017**, 2971–2980.
- 39- *N-difluoromethyl-triazole as constrained scaffold in peptidomimetics.* M; Mamone, R. S. B. Gonçalves, F. Blanchard, G. Bernadat, S. Ongeri, T. Milcent, B Crousse, *ChemComm* **2017**, 53, 5024 - 5027.
- 40- *The use of 4,4,4-trifluorothreonine to stabilize extended peptide structures and mimic  $\beta$ -strands,* Yaochun Xu, Isabelle Correia, Tap Ha-Duong, Nadjib Kihal, Jean-Louis Soulier, Julia Kaffy, Benoît Crousse, Olivier Lequin, S. Ongeri, *Beilstein J. Org. Chem.* **2017**, 13, 2842–2853.
- 41- *Asymmetric synthesis of new cyclic fluorinated amino-acids.* Hao J., Milcent T., Soloshonok V., Ongeri S., Crousse B.; *Eur J. Org. Chem.* **2018**, 3688–3692. **Special issue on Fluorine chemistry in Europe.**
- 42- *Structure-activity Relationships of  $\beta$ -Hairpin Mimics as Modulators of Amyloid  $\beta$ -Peptide Aggregation.* N. Tonali, J. Kaffy, J.-L. Soulier, M.L. Gelmi, E. Erba, M. Taverna, C. van Heijenoort, T. Ha-Duong, S. Ongeri; *Eur. J. Med. Chem.*, **2018**, 154, 280-293.
- 43- *Binding modes of a glycopeptidomimetic molecule on A $\beta$  protofibrils: Implication in its inhibition mechanism.* L. Tran, J. Kaffy, S. Ongeri; T. Ha-Duong, *ACS Chem. Neurosci.* **2018**, 9, 2859-2869.
- 44- *“Towards a general synthesis of di-aza-amino acids containing peptides”* F. Bizet, N. Tonali, J.-L. Soulier, A. Oliva, J. Kaffy, B. Crousse, S. Ongeri, *New J. Chem.*, **2018**, 42, 17062-17072.
- 45- *“A capillary electrophoresis method to investigate the oligomerization of the human Islet Amyloid Polypeptide involved in Type 2 Diabetes”* C. Berardet, J. Kaffy, S. Ongeri, M. Taverna, *J. Chromatogr. A.* **2018**, 1578, 83-90.
- 46- *“Peptides and peptidomimetics as inhibitors of protein-protein interactions involving  $\beta$ -sheet secondary structures”* J. Laxio-Arenas, J. Kaffy, S. Ongeri, *Curr. Opin. Chem. Biol.* **2019**, 52, 157-167.
- 47- *“Real-time BODIPY-binding assay to screen inhibitors of the early oligomerization process of A $\beta$  1-42 peptide”* N. Tonali, V. I. Doderio, J. Kaffy, L. Hericks, S. Ongeri, N. Sewald, *ChemBioChem*, **2020**, 21, 1129-1135.
- 48- *“Introducing sequential aza-amino acids units induces repeated  $\beta$ -turns and helical conformations in peptides”* N. Tonali, I. Correia, J. Lesma, G. Bernadat, S. Ongeri, O. Lequin, *Org. Biomol. Chem.* **2020**, 18, 3452-3458. **HOT article collection.** Cover picture.
- 49- *“Evidence for different in vitro oligomerization behavior of synthetic hIAPP obtained from different sources”* C. Berardet, J. Kaffy, F. Halgand, G. Van der Rest, S. Ongeri, M. Taverna *Anal. Bioanal. Chem.* **2020**, 412, 3103–3111.
- 50- *“Helical  $\gamma$ -peptide foldamers as dual inhibitors of amyloid- $\beta$  peptide and islet amyloid polypeptide oligomerization and fibrillization”,* J. Kaffy, C. Berardet, L. Mathieu, B. Legrand, M. Taverna, F. Halgand, G. Van Der Rest, L. Maillard, S. Ongeri, *Chem. Eur. J.* **2020**, doi.org/10.1002/chem.202001716. **Hot Topic: Amyloids** Wiley-VCH