

# MARIO SCRIMA

## PERSONAL ADDRESS AND CONTACTS

Cda San Tommaso 6A int 1

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<https://it.linkedin.com/in/marioscrima>

[https://www.researchgate.net/profile/Mario\\_Scrima](https://www.researchgate.net/profile/Mario_Scrima)

**PRESENT POSITION:** Bouty SPA R&D

06/26/2014

## EDUCATION

**Degree in Pharmacy**

3/30/2005

*University of Salerno*

Experimental Thesis in Medicinal Chemistry . Title: "Conformational analysis of peptidomimetics derived by an inhibitory activity fragment of gp36"

**PhD in Pharmaceutical Sciences**

1/2/2006 — 2/23/2009

*Department of Pharmaceutical Sciences University of Salerno*

Title thesis: "Peptides, peptidomimetics and small proteins: conformational and dynamics studies by NMR techniques"

**PhD in Chemistry**

3/2/2014 — 12/05/2014

*Department of Chemistry and Biochemistry University of Salerno*

Title thesis: "Molecular Modelling of Self-Assembly phenomena" **INTERRUPTED**

## GRANTS AND AWARDS

**Fellowship**

5/1/2006 — 1/6/2007

*"Centro Regionale di Competenza in Diagnostica e Farmaceutica Molecolare" Naples*

Research focused on conformational analysis by NMR of peptides with biological properties

**Visiting student** July 2008 — October 2008  
*Department of Chemistry and Biochemistry of University of California San Diego*

Supervision of Prof. Stanley J. Opella

**Post Doctoral Fellowship** October 2008 — June 2011  
*Department of Pharmaceutical Sciences University of Salerno*

Several Post Doctoral fellowships under supervision of Prof. Anna Maria D'Ursi

**Post Doctoral Fellowship** Jun 2011 — February 2012  
*Laboratoire SOSCO Université de Cergy-Pontoise*

Post Doctoral fellowship under supervision of Prof. Jacques Auge

**Post Doctoral Fellowship** February 2012 — December 2013  
*Department of Pharmaceutical Sciences University of Salerno*

Several Post Doctoral fellowships under supervision of Prof. Anna Maria D'Ursi

### **Start Cup 2010 Award**

*University of Salerno*

Third prize -"Ph-Armyknife" Biomaterials and bioconjugates of peptidic nature

**Instruct-HUB Award** October 2013

Winner of Instruct Integrating Biology Proposal, Protein Expression and NMR acquisition. Proposal Title:  
Conformational analysis of Feline Immunodeficiency Virus MPER region

**CINECA ISCRA C Award** November 2013

Project Title: Molecular Dynamics Simulations of acetylcholinesterase ligands binding to A $\beta$  Peptides

## **REASERCH PROJECT COORDINATION**

Principal Investigator of Assigned budget of 70.000 hours at CINECA Super Computing Application and Innovation Department (ISCRA) for the "Molecular Dynamics Simulations of acetylcholinesterase ligands binding to Ab Peptides "- from November 2013 to July 2014

## **RESEARCH EXPERIENCE**

Eight years of research experience in NMR techniques, Circular Dichroism, Molecular Dynamics, Molecular Docking. Chromatographic analysis by HPLC of chemical compounds. Biologic analysis using Real Time PCR for relative quantification of target genes and experience on most common RNA/DNA extraction methods.

#### **Research Interests:**

- Biophysical and conformational studies by NMR, CD and Molecular Dynamics of peptides, peptidomimetics and small proteins.
- Drug Discovery and design principally based on Protein-Ligand interaction studies by NMR, CD and Molecular Docking
- Protein expression and purification
- Peptides-Polymer (PMMA, PS, ecc) interaction studies by MD simulations
- Protein aggregation
- In vitro studies of Hyaluronic acid and its analogues.

**Research projects:** a) antiobesity peptides b) Bradykinin antagonists c) Amyloid peptide d) CaM kinase e) Matrix metalloproteinases f) peptidomimetics of HIV gp41 region g) via click-chemistry cyclopeptides h) Vpu protein i) Mper protein l) antimicrobial peptides m) Farnesyl Pyrophosphate Synthase n) Peptides-Polymer interaction studies by MD simulations

## **TEACHING EXPERIENCE**

*Faculty of Pharmacy University of Salerno*

Teaching assistant, Medicinal Chemistry

First Semester 2013/2014

## **OTHER INFO**

I'm coauthor of 28 scientific papers, and 25 international meeting communications.

I'm reviewer of following international scientific journals:

Journal of Peptide Science

Protein & Peptide Letters

## **PEER-REVIEWED PUBLICATIONS**

Researchgate Profile: [https://www.researchgate.net/profile/Mario\\_Scrima](https://www.researchgate.net/profile/Mario_Scrima)

1. Amedeo Capobianco, Tonino Caruso, Anna Maria D'Ursi, Sandra Fusco, Annalisa Masi, Mario Scrima, Chryssostomos Chatgililoglu, Andrea Peluso: *Delocalized Hole Domains in Guanine-Rich DNA Oligonucleotides*. The Journal of Physical Chemistry B 04/2015; DOI:10.1021/acs.jpcc.5b02940

2. Agostino Bruno, Mario Scrima, Ettore Novellino, Gerardino D'Errico, Anna Maria D'Ursi, Vittorio Limongelli: *The Glycan Role in the Glycopeptide Immunogenicity Revealed by Atomistic Simulations and Spectroscopic Experiments on the Multiple Sclerosis Biomarker CSF114(Glc)*. *Sci Rep*. 2015 Mar 17;5:9200
3. Margherita Di Pisa, Simona Pascarella, Mario Scrima, Giuseppina Sabatino, Feliciana Real-Fernández, Mario Chelli, Daniela Renzi, Antonio Calabrò, Anna Maria D'Ursi, Anna Maria Papini, Paolo Rovero: *Synthetic Peptides Reproducing Tissue Transglutaminase–Gliadin Complex Neopeptides as Probes for Antibody Detection in Celiac Disease Patients' Sera*. *Journal of Medicinal Chemistry* 01/2015; 58(3). DOI:10.1021/jm5017126
4. Matilde Sublimi Saponetti, Manuela Grimaldi, Mario Scrima, Cristiano Albonetti, Stefania Lucia Nori, Annamaria Cucolo, Fabrizio Bobba, Anna Maria D'Ursi: *Aggregation of A $\beta$ (25-35) on DOPC and DOPC/DHA Bilayers: An Atomic Force Microscopy Study..* *PLoS ONE* 12/2014; 9(12):e115780. DOI:10.1371/journal.pone.0115780
5. Chiara Testa, Mario Scrima, Manuela Grimaldi, Anna Maria D'Ursi, Marvin Louie Servanez Dirain, Nadège Lubin-Germain, Anamika Singh, Carrie Haskell-Luevano, Michael Chorev, Paolo Rovero, Anna Maria Papini: *1,4-Disubstituted-[1,2,3]triazolyl-Containing Analogues of MT-II: Design, Synthesis, Conformational Analysis, and Biological Activity*. *Journal of Medicinal Chemistry* 10/2014; 57(22). DOI:10.1021/jm501027w
6. Mario Scrima, Gianluigi Lauro, Manuela Grimaldi, Sara Di Marino, Alessandra Tosco, Paola Picardi, Patrizia Gazzero, Raffaele Riccio, Ettore Novellino, Maurizio Bifulco, Giuseppe Bifulco, Anna Maria D'Ursi: *Structural Evidence of N6-Isopentenyladenosine As a New Ligand of Farnesyl Pyrophosphate Synthase*. *Journal of Medicinal Chemistry* 09/2014; 57(18). DOI:10.1021/jm500869x
7. Mario Scrima, Sara Di Marino, Manuela Grimaldi, Federica Campana, Giuseppe Vitiello, Stefano Piotta Piotta, Gerardino D'Errico, Anna Maria D'Ursi: *Structural features of the C8 antiviral peptide in a membrane-mimicking environment*. *Biochimica et Biophysica Acta* 12/2013; 1838(3). DOI:10.1016/j.bbame.2013.12.010
8. Amedeo Capobianco, Tonino Caruso, Maurizio Celentano, Anna Maria D'Ursi, Mario Scrima, Andrea Peluso: *Stacking Interactions between Adenines in Oxidized Oligonucleotides*. *The Journal of Physical Chemistry B* 07/2013; 117(30). DOI:10.1021/jp404133a
9. Isabel Gomez-Monterrey, Marina Sala, Maria Rosaria Rusciano, Sara Monaco, Angela Serena Maione, Guido Iaccarino, Paolo Tortorella, Anna Maria D'Ursi, Mario Scrima, Alfonso Carotenuto, Giuseppe De Rosa, Alessia Bertamino, Ermelinda Vernieri, Paolo Grieco, Ettore Novellino, Maddalena Illario, Pietro Campiglia: *Characterization of a selective CaMKII peptide inhibitor*. *European Journal of Medicinal Chemistry* 01/2013; 62C:425-434. DOI:10.1016/j.ejmech.2012.12.053
10. Shashank Pandey, Maria C Alcaro, Mario Scrima, Elisa Peroni, Ilaria Paolini, Sara Di Marino, Francesca Barbetti, Alfonso Carotenuto, Ettore Novellino, Anna Maria Papini, Anna Maria D'Ursi, Paolo Rovero: *Designed Glucopeptides Mimetics of Myelin Protein Epitopes As Synthetic Probes for the Detection of Autoantibodies, Biomarkers of Multiple Sclerosis*. *Journal of Medicinal Chemistry* 11/2012; 55(23). DOI:10.1021/jm301031r
11. Sara Di Marino, Mario Scrima, Manuela Grimaldi, Gerardino D'Errico, Giuseppe Vitiello, Maurizio Sanguinetti, Margherita De Rosa, Annunziata Soriente, Ettore Novellino, Anna Maria D'Ursi:

- Antifungal peptides at membrane interaction*. European Journal of Medicinal Chemistry 03/2012; 51:154-62. DOI:10.1016/j.ejmech.2012.02.037
12. Mario Scrima, Manuela Grimaldi, Sara Di Marino, Chiara Testa, Paolo Rovero, Anna Maria Papini, Michael Chorev, Anna Maria D'Ursi: *Solvent independent conformational propensities of [1,2,3]triazolyl-bridged parathyroid hormone-related peptide-derived cyclo-nonapeptide analogues*. Biopolymers 01/2012; 98(6):535-45. DOI:10.1002/bip.22139
  13. Mario Scrima, Sara Di Marino, Manuela Grimaldi, Antonia Mastrogiacomo, Ettore Novellino, Maurizio Bifulco, Anna Maria D'Ursi: *Binding of the Hemopressin Peptide to the Cannabinoid CB1 Receptor: Structural Insights*. Biochemistry 11/2010; 49(49):10449-57. DOI:10.1021/bi1011833
  14. Sang Ho Park, Bibhuti B Das, Anna A De Angelis, Mario Scrima, Stanley J Opella: *Mechanically, Magnetically, and "Rotationally Aligned" Membrane Proteins in Phospholipid Bilayers Give Equivalent Angular Constraints for NMR Structure Determination*. The Journal of Physical Chemistry B 10/2010; 114(44):13995-4003. DOI:10.1021/jp106043w
  15. Manuela Grimaldi, Margherita De Rosa, Sara Di Marino, Mario Scrima, Brunella Posteraro, Maurizio Sanguinetti, Giovanni Fadda, Annunziata Soriente, Anna Maria D'Ursi: *Synthesis of new antifungal peptides selective against Cryptococcus neoformans*. Bioorganic & medicinal chemistry 09/2010; 18(22):7985-90. DOI:10.1016/j.bmc.2010.09.033
  16. Manuela Grimaldi, Mario Scrima, Cinzia Esposito, Giuseppe Vitiello, Anna Ramunno, Vittorio Limongelli, Gerardino D'Errico, Ettore Novellino, Anna Maria D'Ursi: *Membrane charge dependent states of the  $\beta$ -amyloid fragment A $\beta$  (16–35) with differently charged micelle aggregates*. Biochimica et Biophysica Acta 03/2010; 1798(3):660-71. DOI:10.1016/j.bbamem.2009.12.012
  17. Mario Scrima, Alexandra Le Chevalier-Isaad, Paolo Rovero, Anna Maria Papini, Michael Chorev, Anna Maria D'Ursi: *Cu-I-Catalyzed Azide-Alkyne Intramolecular i-to-(i+4) Side-Chain-to-Side-Chain Cyclization Promotes the Formation of Helix-Like Secondary Structures*. European Journal of Organic Chemistry 01/2010; 2010(3):446-457. DOI:10.1002/ejoc.200901157
  18. Pietro Campiglia, Mario Scrima, Manuela Grimaldi, Giuseppina Cioffi, Alessia Bertamino, Marina Sala, Claudio Aquino, Isabel Gomez-Monterrey, Paolo Grieco, Ettore Novellino, Anna Maria D'Ursi: *A new series of 1,3-dihydro-imidazo[1,5-c]thiazole-5,7-dione derivatives: synthesis and interaction with A $\beta$ (25-35) amyloid peptide*. Chemical Biology & Drug Design 10/2009; 74(3):224-33. DOI:10.1111/j.1747-0285.2009.00853.x
  19. Maria Giovanna Chini, Mario Scrima, Anna Maria D'Ursi, Giuseppe Bifulco: *Fibril aggregation inhibitory activity of the  $\beta$ -sheet breaker peptides: a molecular docking approach*. Journal of Peptide Science 03/2009; 15(3):229-34. DOI:10.1002/psc.1095
  20. Cinzia Esposito, AiWei Tian, Mario Scrima, Karolina Kieres, Pietro Campiglia, Anna Maria D'Ursi, Tobias Baumgart: *The role of Cell Penetrating Peptides (CPPs) in membrane lipid phase behavior: a novel aspect elucidating peptide-mediated delivery*. Advances in Experimental Medicine and Biology 02/2009; 611:605-6. DOI:10.1007/978-0-387-73657-0\_262
  21. Sonia Cantel, Jose A Halperin, Michael Chorev, Mario Scrima, Anna M D'Ursi, Jay J Levy, Richard D DiMarchi, Alexandra Le Chevalier, Paolo Rovero, Anna M Papini: *Side chain-to-Side chain Cyclization by Intramolecular Click Reaction - Building Blocks, Solid Phase Synthesis and Conformational Characterization*. Advances in Experimental Medicine and Biology 02/2009; 611:175-6. DOI:10.1007/978-0-387-73657-0\_80

22. Sonia Cantel, Alexandra Le Chevalier Isaad, Mario Scrima, Jay J Levy, Richard D DiMarchi, Paolo Rovero, Jose A Halperin, Anna Maria D'Ursi, Anna Maria Papini, Michael Chorev: *Synthesis and conformational analysis of a cyclic peptide obtained via i to i+4 intramolecular side-chain to side-chain azide - Alkyne 1,3-dipolar cycloaddition*. The Journal of Organic Chemistry 05/2008; 73(15):5663-74. DOI:10.1021/jo800142s
23. Cinzia Esposito, Mario Scrima, Alfonso Carotenuto, Annamaria Tedeschi, Paolo Rovero, Gerardino D'Errico, Anna Maria Malfitano, Maurizio Bifulco, Anna Maria D'Ursi: *Structures and Micelle Locations of the Nonlipidated and Lipidated C-Terminal Membrane Anchor of 2',3'-Cyclic Nucleotide-3'-phosphodiesterase†*. Biochemistry 12/2007; 47(1). DOI:10.1021/bi701474t
24. Mario Scrima, Pietro Campiglia, Cinzia Esposito, Isabel Gomez-Monterrey, Ettore Novellino, Anna Maria D'Ursi: *Obestatin conformational features: a strategy to unveil obestatin's biological role?*. Biochemical and Biophysical Research Communications 12/2007; 363(3):500-5. DOI:10.1016/j.bbrc.2007.08.200
25. Simone Giannecchini, Anna Maria D'Ursi, Cinzia Esposito, Mario Scrima, Elisa Zabogli, Giulia Freer, Paolo Rovero, Mauro Bendinelli: *Antibodies generated in cats by a lipopeptide reproducing the membrane-proximal external region of the feline immunodeficiency virus transmembrane enhance virus infectivity..* Clinical and Vaccine Immunology 09/2007; 14(8):944-51. DOI:10.1128/CVI.00140-07
26. Pietro Campiglia, Cinzia Esposito, Mario Scrima, Isabel Gomez-Monterrey, Alessia Bertamino, Paolo Grieco, Ettore Novellino, Anna Maria D'Ursi: *Conformational stability of A beta-(25-35) in the presence of thiazolidine derivatives*. Chemical Biology & Drug Design 03/2007; 69(2):111-8. DOI:10.1111/j.1747-0285.2007.00482.x
27. Cinzia Esposito, Annamaria Tedeschi, Mario Scrima, Gerardino D'errico, M Francesca Ottaviani, Paolo Rovero, Anna Maria D'ursi: *Exploring interaction of  $\beta$ -amyloid segment (25–35) with membrane models through paramagnetic probes*. Journal of Peptide Science 12/2006; 12(12):766-74. DOI:10.1002/psc.811
28. Maria C Alcaro, Valerio Vinci, Anna M D'Ursi, Mario Scrima, Mario Chelli, Sandro Giuliani, Stefania Meini, Marcello Di Giacomo, Lino Colombo, Anna Maria Papini: *Bradykinin antagonists modified with dipeptide mimetic beta-turn inducers*. Bioorganic & Medicinal Chemistry Letters 06/2006; 16(9):2387-90. DOI:10.1016/j.bmcl.2006.01.125

## ORAL PRESENTATIONS

May 2007 PeptLab Symposium, May 14 2007 Florence, Italy

## POSTER COMMUNICATIONS

14th Naples Workshop on Bioactive Peptides (June 12-14 2014, Naples Italy) Gp41 MPER in membrane mimetics characterized by mixed lipid composition

14th Naples Workshop on Bioactive Peptides (June 12-14 2014, Naples Italy) Molecular Dynamics studies of PMMA polymer film- c02 peptide interfacial phenomena

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). The aggregation of A beta (25-35) blunts the phosphorylation of cPLA2 in LAN-2 cholinergic cell line.

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). Environmental factors affecting the aggregation state of Ass 25-35: role of Omega3 dependent membrane fluidity

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). The methylated compounds affect the aggregation of amyloid peptide (25-35)

\_CECAM-HQ-EPFL (September 24-27, 2013, CECAM-HQ-EPFL, Lausanne, Switzerland) Investigating the Binding Mechanism of the Glycosylated and Non-Glycosylated CSF114 Peptide to Membrane Coupling between protein, water, and lipid dynamics in complex biological systems: Theory and Experiments

SCI XXII National Meeting on Medicinal Chemistry Italian Chemical Society Division of Medicinal Chemistry ( September 10-13, 2013 Roma – Italy) Binding of N6-ISOPENTENYLADENOSINE to Farnesyl Diphosphate Synthase: an NMR investigation

“ChimAlSi\_2012” IX° Italian Congress of Food Chemistry. “Food, Functional Foods and Nutraceuticals” ( June 03-07, 2012, Ischia (NA), Italy) Modification of membrane fluidity in response to variable contents of cholesterol and PUFA: Role in beta-amyloid aggregation

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Stabilization of  $\beta$ -Turn Conformation in Melanocortin Like Peptide by Click Side Chain-to-Side Chain Cyclization

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Molecular Dynamics Calculation and NMR Conformational Studies of Heterodetic Triazolyl Cyclo-Nonapeptides: A Comparative Study

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Binding of Hemopressin Peptide with Cannabinoid CB1 Receptor: A Structural Study

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Synthesis of a PEG Conjugated HIV Gp41 MPER Fragment: A New Gp41 Helix Bundle Mimic

EUROMAR 2010 and 17th ISMAR Conference (July 4-9, 2010, Florence, Italy) Validation by QM method of the solution structure of MTII-tryazolyl cyclopeptides

12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides (June 4-7, 2010, Naples, Italy) Side chain-to-Side chain (Sc2Sc) clicked-cyclo peptides. Synthesis, conformation and biological activity

12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides (June 4-7, 2010, Naples, Italy) Structural behaviour of selective anti-Cryprococcus peptides in membrane mimicking environments

Magnetic Resonance in the Life Sciences: What's New NMR TO LAY THE BRICKS FOR MOLECULAR SYSTEMS BIOLOGY (December 14-18 2008 - Montecatini Terme, Italy) A new library of cyclic peptides obtained via i-to-i+4 intramolecular side chain-to-side chain azide-alkyne 1,3- dipolar cycloaddition: CD and NMR conformational analysis

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Cyclic i-to-i+4 side chain-to-side chain 1,4-disubstituted [1,2,3]triazolyl-bridged PTHrP(11-19) derivatives

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) A new library of cyclic peptides obtained via i-to-i+4 intramolecular side chain-to-side chain azide-alkyne 1,3- dipolar cycloaddition: CD and NMR conformational analysis

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) A $\beta$ 16-35 peptide: structural features in membrane mimicking systems

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Effect of flavonoids on A $\beta$ (25-35) /DLPC vesicle interaction

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Spin-label aided investigation of feline immunodeficiency virus Gp36 derived peptide in presence of membrane models

11th Naples Workshop on Bioactive Peptides (May 24-27, 2008, Naples, Italy) Synthesis and Conformational Analysis of a Cyclic Peptides Obtained via i-to-i+4 Intramolecular Side-Chain-to-Side-Chain Azide-Alkyne 1,3-Dipolar Cycloaddition

11th Naples Workshop on Bioactive Peptides (May 24-27, 2008, Naples, Italy) Preliminary docking studies on fibril aggregation inhibitory activity of the  $\beta$ -sheet breaker peptides



European School of Medicinal Chemistry (XXVII Advanced Course of Medicinal Chemistry and "E. Duranti" National Seminar for PhD Students) UNIVERSITÀ DEGLI STUDI DI URBINO "CARLO BO" Driving forces enhancing the modulation of membrane lipid polymorphism by membrane-active peptides.

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) The role of Cell Penetrating Peptides (CPPs) in Membrane Lipid Phase Behavior: a Novel Aspect Elucidating Peptide-Mediated Delivery

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) Conformational Stability of A $\beta$ (25-35) in the Presence of Thiazolidine and Imidazo[1,5-c]thiazole-5,7-dione Derivatives.

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) Side Chain-to-Side chain Cyclization by Intramolecular Click Reaction - Building Blocks, Solid Phase Synthesis and Conformational Characterization

29th European Peptide Symposium, (September 3-8, 2006 Gdansk, Poland) Inhibition of A $\beta$ (25-35) aggregation by nicotine and its synthetic analogues

29th European Peptide Symposium, (September 3-8, 2006 Gdansk, Poland) Conformational analysis of the new obesity related peptide obestatin

## MEETINGS AND SCHOOLS

March 2006 School of Metabolomic analysis , Latina, Italy, 25th March 2006

March 2006 Maga Circe Conference on metabolic systems analysis, Sabaudia, Italy, dal 26-29 March 2006

June 2006 Aspetti della Ricerca Farmaceutica e Tecnologica in Italy, Fisciano, Italy, 21th June 06

September 2006 GIDRM, XXXVI National Congress on Magnetic Resonance, Vietri sul Mare, Italy, dal 20-23 September 06

September 2006 Epigenetic targets in chemotherapy, Salerno, Italy il 29 September 06

January 2007 WISPOC 2007, Winter School on Physical Organic Chemistry, Società Chimica Italiana, Genueva 11-18, 2007, Bressanone, Italy.

February 2007 "I meeting Nuove Prospettive in Chimica Farmaceutica", Fisciano, February 22- 23 23 2007 Salerno, Italy

April 2007 PERSPECTIVES OF NMR IN DRUG DISCOVERY, April 10-12 2007, CERM, Florence, Italy

May 2007 PeptLab Symposium, May 14 2007 Florence, Italy

June 2007 "20th American Peptide Society Symposium June 26-30 2007, Montreal, Canada,

November 2007 Practical and theoretical course for PhD students on "Spettroscopia IR e Raman", November 6-7 2007, Salerno, Italy.

January 2008 WISPOC 2008, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 27-01/02/08, Bressanone, Italy.

May 2008 "Nuove Prospettive in Chimica Farmaceutica" 16/05/08 al 17/05/08 Catanzaro, Italy

May 2008 11th Naples Workshop on Bioactive Peptides 24/05/08 al 27/05/08 Napoli, Italy

June 2008 Advanced Solid-State NMR Training Course 2008 June 02-06 2008, Sonderborg, Denmark

August 2008 XXIII Conferences on Magnetic Resonance in Biological Systems (ICMRBS), August 24-29 2008 San Diego, USA

December 2008 Magnetic Resonance in the Life Sciences: What's New NMR TO LAY THE BRICKS FOR MOLECULAR SYSTEMS BIOLOGY December 14-18 2008 - Montecatini Terme, Italy

February 2009 WISPOC 2009, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 01/02-06/02/09, Bressanone, Italy

September 2009 XXXIX National Congress on Magnetic Resonance 21-24 september 2009, Palermo, Italy

January-February 2010 WISPOC 2010, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 30/01-04/02/10, Bressanone, Italy

June 2010 12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides June 4-7, 2010 Naples, Italy

September 2010 31th European Peptide Symposium September 5-9, 2010, Copenhagen, Denmark.

December 2013 In Cell NMR, Florence, Italy

VERSIONE IN ITALIANO

# MARIO SCRIMA

## INFORMAZIONI PERSONALI E CONTATTI

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**POSIZIONE ATTUALE:** Ricercatore presso R&D Bouty SPA

26/06/2014

## ISTRUZIONE E FORMAZIONE

**Laurea in Farmacia**

30/3/2005

*Università degli studi di Salerno*

Tesi sperimentale in Chimica Farmaceutica . Titolo: "Analisi conformazionale di peptidomimetici derivanti da un frammento ad attività inibitoria della gp36"

**Dottore di Ricerca in Scienze Farmaceutiche**

2/1/2006 — 23/2/2009

*Dipartimento di Scienze Farmaceutiche Università degli Studi di Salerno*

tesi dal titolo: "Peptides, peptidomimetics and small proteins: conformational and dynamics studies by NMR techniques"

**Inizio Dottorato di Ricerca in Chimica e Biologia**

2/3/2014 — 05/12/2014

*Dipartimento di Chimica e Biologia Università degli Studi di Salerno*

tesi dal titolo: "Molecular Modelling of Self-Assembly phenomena" **Interrotto**

## **Borse di studio e riconoscimenti/premi**

### **Borsa di Studio**

1/5/2006 — 6/1/2007

*“Centro Regionale di Competenza in Diagnostica e Farmaceutica Molecolare” Napoli*

attività di ricerca focalizzata sull'analisi conformazionale mediante tecniche NMR di peptidi con attività biologica

### **Visiting student**

Luglio 2008 — Ottobre 2008

*Dipartimento di Chimica e Biochimica, University of California San Diego,*

supervisione del Prof. Stanley J. Opella.

### **Assegni di Ricerca**

Ottobre 2008 — Giugno 2011

*Dipartimento di Scienze Farmaceutiche Università degli Studi di Salerno*

Diversi assegni di ricerca sotto la supervisione della Prof. Anna Maria D'Ursi focalizzati su: Caratterizzazione strutturale e Biofisica mediante tecniche Spettroscopiche e Computazionali di peptidi Peptidomimetici e Proteine in sistemi mimetici di membrane biologiche, studi di interazione proteina ligando mediante tecniche NMR. Espressione e purificazione di proteine. Caratterizzazione di peptide e piccole proteine mediante di HPLC e Spettrometria di Massa

### **Borsa Post-Doc**

Giugno 2011 — Febbraio 2012

*Laboratoire SOSCO Université de Cergy-Pontoise*

supervisione del Prof. Jacques Auge

### **Assegno di Ricerca**

Febbraio 2012 — Dicembre 2013

*Dipartimento di Scienze Farmaceutiche Università degli Studi di Salerno*

supervisione della Prof. Anna Maria D'Ursi

### **Start Cup 2010**

*Università degli Studi di Salerno*

Terzo posto con progetto dal titolo “Ph-Armyknife” Biomaterials and bioconjugates of peptidic nature. Il premio ottenuto ha permesso di accedere alle fasi finali del PNI 2010 (Premio Nazionale Innovazione).

### **Instruct-HUB Award**

Ottobre 2013

Vincitore dell'Instruct Integrating Biology Proposal con progetto incentrato sull'espressione ed acquisizione NMR del dominio proteico MPER FIV. Titolo: Conformational analysis of Feline Immunodeficiency Virus MPER region

Titolo progetto finanziato : Molecular Dynamics Simulations of acetylcholinesterase ligands binding to A $\beta$  Peptides

## COORDINAMENTO DI PROGETTI DI RICERCA

: Sono stato Principal Investigator del progetto dal titolo " Molecular Dynamics Simulations of acetylcholinesterase ligands Binding to A $\beta$  Peptides ", finanziato in ore di calcolo dal CINECA Super Computing Application and Innovation Department (ISCRA-C) da ottobre 2013 a luglio 2014. Ho gestito in autonomia diversi progetti riguardanti in particolar modo l'espressione e l'analisi conformazionale della proteina MPER, studi di interazione tramite NMR e tecniche di chimica computazionale di nuovi inibitori della Farnesil Pirofosfato Sintasi e caratterizzazioni biofisiche di frammenti del peptide  $\beta$ Amiloide.

## ESPERIENZE DI RICERCA

Competenze consolidate nell'utilizzo di apparecchiature quali HPLC, Spettrometria di Massa, per caratterizzazione di peptidi e piccole proteine. Otto anni di esperienza nel campo della Risonanza Magnetica Nucleare (NMR) in soluzione, Dicroisimo Circolare (CD), Dinamica Molecolare (MD), Molecular Docking. Analisi biologiche mediante Real Time PCR per quantizzazione relativa di geni d'esperienza dei piú comuni metodi di estrazione di DNA/RNA.

### *Interessi di Ricerca:*

- Studi Biofisici e conformazionali mediante NMR, CD e Dinamica Molecolare di peptidi, peptidomimetici e piccole proteine.
- Studi di Drug Discovery and design, focalizzati principalmente su analisi mediante NMR, CD e Molecular Docking di interazioni possibili tra proteine e potenziali ligandi
- Espressione e purificazione di proteine
- Caratterizzazione di peptidi e piccole proteine mediante HPLC e Spettrometria di Massa.

Principali Target biologici studiati : a) peptidi anti-obesità b) antagonisti della bradichinina c) peptide beta amiloide d) CaM chinasi e) Matrix metalloproteinasi f) peptidomimetici della gp36 del virus FIV g) ciclopeptidi ottenuti mediante click-chemistry h) proteina Vpu i) proteina mper del virus HIV l) peptidi antimicrobici l) Farnesyl Pirofosfato Sintasi

## ATTIVITA' DIDATTICA

Facoltà di Farmacia Università degli studi di Salerno

Culture della materia in Chimica Farmaceutica I

AA 2013/2014

## ALTRE INFORMAZIONI

Sono coautore di 28 pubblicazioni scientifiche di carattere internazionale e di 25 comunicazioni a congressi.

Infine, sono reviewer delle seguenti riviste scientifiche internazionali:

Journal of Peptide Science

Protein & Peptide Letters

## PUBBLICAZIONI

Researchgate Profile: [https://www.researchgate.net/profile/Mario\\_Scrima](https://www.researchgate.net/profile/Mario_Scrima)

1. Amedeo Capobianco, Tonino Caruso, Anna Maria D'Ursi, Sandra Fusco, Annalisa Masi, Mario Scrima, Chrysostomos Chatgililoglu, Andrea Peluso: *Delocalized Hole Domains in Guanine-Rich DNA Oligonucleotides*. The Journal of Physical Chemistry B 04/2015; DOI:10.1021/acs.jpcc.5b02940
2. Agostino Bruno, Mario Scrima, Ettore Novellino, Gerardino D'Errico, Anna Maria D'Ursi, Vittorio Limongelli: *The Glycan Role in the Glycopeptide Immunogenicity Revealed by Atomistic Simulations and Spectroscopic Experiments on the Multiple Sclerosis Biomarker CSF114(Glc)*. Sci Rep. 2015 Mar 17;5:9200
3. Margherita Di Pisa, Simona Pascarella, Mario Scrima, Giuseppina Sabatino, Feliciano Real-Fernández, Mario Chelli, Daniela Renzi, Antonio Calabrò, Anna Maria D'Ursi, Anna Maria Papini, Paolo Rovero: *Synthetic Peptides Reproducing Tissue Transglutaminase–Gliadin Complex Neo-epitopes as Probes for Antibody Detection in Celiac Disease Patients' Sera*. Journal of Medicinal Chemistry 01/2015; 58(3). DOI:10.1021/jm5017126
4. Matilde Sublimi Saponetti, Manuela Grimaldi, Mario Scrima, Cristiano Albonetti, Stefania Lucia Nori, Annamaria Cucolo, Fabrizio Bobba, Anna Maria D'Ursi: *Aggregation of A $\beta$ (25-35) on DOPC and DOPC/DHA Bilayers: An Atomic Force Microscopy Study*. PLoS ONE 12/2014; 9(12):e115780. DOI:10.1371/journal.pone.0115780
5. Chiara Testa, Mario Scrima, Manuela Grimaldi, Anna Maria D'Ursi, Marvin Louie Servanez Dirain, Nadège Lubin-Germain, Anamika Singh, Carrie Haskell-Luevano, Michael Chorev, Paolo Rovero, Anna Maria Papini: *1,4-Disubstituted-[1,2,3]triazolyl-Containing Analogues of MT-II: Design, Synthesis, Conformational Analysis, and Biological Activity*. Journal of Medicinal Chemistry 10/2014; 57(22). DOI:10.1021/jm501027w
6. Mario Scrima, Gianluigi Lauro, Manuela Grimaldi, Sara Di Marino, Alessandra Tosco, Paola Picardi, Patrizia Gazerro, Raffaele Riccio, Ettore Novellino, Maurizio Bifulco, Giuseppe Bifulco, Anna Maria

- D'Ursi: *Structural Evidence of N6-Isopentenyladenosine As a New Ligand of Farnesyl Pyrophosphate Synthase*. *Journal of Medicinal Chemistry* 09/2014; 57(18). DOI:10.1021/jm500869x
7. Mario Scrima, Sara Di Marino, Manuela Grimaldi, Federica Campana, Giuseppe Vitiello, Stefano Piotto Piotto, Gerardino D'Errico, Anna Maria D'Ursi: *Structural features of the C8 antiviral peptide in a membrane-mimicking environment*. *Biochimica et Biophysica Acta* 12/2013; 1838(3). DOI:10.1016/j.bbamem.2013.12.010
  8. Amedeo Capobianco, Tonino Caruso, Maurizio Celentano, Anna Maria D'Ursi, Mario Scrima, Andrea Peluso: *Stacking Interactions between Adenines in Oxidized Oligonucleotides*. *The Journal of Physical Chemistry B* 07/2013; 117(30). DOI:10.1021/jp404133a
  9. Isabel Gomez-Monterrey, Marina Sala, Maria Rosaria Rusciano, Sara Monaco, Angela Serena Maione, Guido Iaccarino, Paolo Tortorella, Anna Maria D'Ursi, Mario Scrima, Alfonso Carotenuto, Giuseppe De Rosa, Alessia Bertamino, Ermelinda Vernieri, Paolo Grieco, Ettore Novellino, Maddalena Illario, Pietro Campiglia: *Characterization of a selective CaMKII peptide inhibitor*. *European Journal of Medicinal Chemistry* 01/2013; 62C:425-434. DOI:10.1016/j.ejmech.2012.12.053
  10. Shashank Pandey, Maria C Alcaro, Mario Scrima, Elisa Peroni, Ilaria Paolini, Sara Di Marino, Francesca Barbetti, Alfonso Carotenuto, Ettore Novellino, Anna Maria Papini, Anna Maria D'Ursi, Paolo Rovero: *Designed Glucopeptides Mimetics of Myelin Protein Epitopes As Synthetic Probes for the Detection of Autoantibodies, Biomarkers of Multiple Sclerosis*. *Journal of Medicinal Chemistry* 11/2012; 55(23). DOI:10.1021/jm301031r
  11. Sara Di Marino, Mario Scrima, Manuela Grimaldi, Gerardino D'Errico, Giuseppe Vitiello, Maurizio Sanguinetti, Margherita De Rosa, Annunziata Soriente, Ettore Novellino, Anna Maria D'Ursi: *Antifungal peptides at membrane interaction*. *European Journal of Medicinal Chemistry* 03/2012; 51:154-62. DOI:10.1016/j.ejmech.2012.02.037
  12. Mario Scrima, Manuela Grimaldi, Sara Di Marino, Chiara Testa, Paolo Rovero, Anna Maria Papini, Michael Chorev, Anna Maria D'Ursi: *Solvent independent conformational propensities of [1,2,3]triazolyl-bridged parathyroid hormone-related peptide-derived cyclo-nonapeptide analogues..* *Biopolymers* 01/2012; 98(6):535-45. DOI:10.1002/bip.22139
  13. Mario Scrima, Sara Di Marino, Manuela Grimaldi, Antonia Mastrogiacomo, Ettore Novellino, Maurizio Bifulco, Anna Maria D'Ursi: *Binding of the Hemopressin Peptide to the Cannabinoid CB1 Receptor: Structural Insights*. *Biochemistry* 11/2010; 49(49):10449-57. DOI:10.1021/bi1011833
  14. Sang Ho Park, Bibhuti B Das, Anna A De Angelis, Mario Scrima, Stanley J Opella: *Mechanically, Magnetically, and "Rotationally Aligned" Membrane Proteins in Phospholipid Bilayers Give Equivalent Angular Constraints for NMR Structure Determination*. *The Journal of Physical Chemistry B* 10/2010; 114(44):13995-4003. DOI:10.1021/jp106043w
  15. Manuela Grimaldi, Margherita De Rosa, Sara Di Marino, Mario Scrima, Brunella Posteraro, Maurizio Sanguinetti, Giovanni Fadda, Annunziata Soriente, Anna Maria D'Ursi: *Synthesis of new antifungal peptides selective against Cryptococcus neoformans*. *Bioorganic & medicinal chemistry* 09/2010; 18(22):7985-90. DOI:10.1016/j.bmc.2010.09.033
  16. Manuela Grimaldi, Mario Scrima, Cinzia Esposito, Giuseppe Vitiello, Anna Ramunno, Vittorio Limongelli, Gerardino D'Errico, Ettore Novellino, Anna Maria D'Ursi: *Membrane charge dependent*

- states of the  $\beta$ -amyloid fragment A $\beta$  (16–35) with differently charged micelle aggregates. *Biochimica et Biophysica Acta* 03/2010; 1798(3):660–71. DOI:10.1016/j.bbamem.2009.12.012
17. Mario Scrima, Alexandra Le Chevalier-Isaad, Paolo Rovero, Anna Maria Papini, Michael Chorev, Anna Maria D'Ursi: *Cu-I-Catalyzed Azide-Alkyne Intramolecular i-to-(i+4) Side-Chain-to-Side-Chain Cyclization Promotes the Formation of Helix-Like Secondary Structures*. *European Journal of Organic Chemistry* 01/2010; 2010(3):446–457. DOI:10.1002/ejoc.200901157
  18. Pietro Campiglia, Mario Scrima, Manuela Grimaldi, Giuseppina Cioffi, Alessia Bertamino, Marina Sala, Claudio Aquino, Isabel Gomez-Monterrey, Paolo Grieco, Ettore Novellino, Anna Maria D'Ursi: *A new series of 1,3-dihydro-imidazo[1,5-c]thiazole-5,7-dione derivatives: synthesis and interaction with A $\beta$ (25-35) amyloid peptide*. *Chemical Biology & Drug Design* 10/2009; 74(3):224–33. DOI:10.1111/j.1747-0285.2009.00853.x
  19. Maria Giovanna Chini, Mario Scrima, Anna Maria D'Ursi, Giuseppe Bifulco: *Fibril aggregation inhibitory activity of the  $\beta$ -sheet breaker peptides: a molecular docking approach*. *Journal of Peptide Science* 03/2009; 15(3):229–34. DOI:10.1002/psc.1095
  20. Cinzia Esposito, AiWei Tian, Mario Scrima, Karolina Kieres, Pietro Campiglia, Anna Maria D'Ursi, Tobias Baumgart: *The role of Cell Penetrating Peptides (CPPs) in membrane lipid phase behavior: a novel aspect elucidating peptide-mediated delivery*. *Advances in Experimental Medicine and Biology* 02/2009; 611:605–6. DOI:10.1007/978-0-387-73657-0\_262
  21. Sonia Cantel, Jose A Halperin, Michael Chorev, Mario Scrima, Anna M D'Ursi, Jay J Levy, Richard D DiMarchi, Alexandra Le Chevalier, Paolo Rovero, Anna M Papini: *Side chain-to-Side chain Cyclization by Intramolecular Click Reaction - Building Blocks, Solid Phase Synthesis and Conformational Characterization*. *Advances in Experimental Medicine and Biology* 02/2009; 611:175–6. DOI:10.1007/978-0-387-73657-0\_80
  22. Sonia Cantel, Alexandra Le Chevalier Isaad, Mario Scrima, Jay J Levy, Richard D DiMarchi, Paolo Rovero, Jose A Halperin, Anna Maria D'Ursi, Anna Maria Papini, Michael Chorev: *Synthesis and conformational analysis of a cyclic peptide obtained via i to i+4 intramolecular side-chain to side-chain azide - Alkyne 1,3-dipolar cycloaddition*. *The Journal of Organic Chemistry* 05/2008; 73(15):5663–74. DOI:10.1021/jo800142s
  23. Cinzia Esposito, Mario Scrima, Alfonso Carotenuto, Annamaria Tedeschi, Paolo Rovero, Gerardino D'Errico, Anna Maria Malfitano, Maurizio Bifulco, Anna Maria D'Ursi: *Structures and Micelle Locations of the Nonlipidated and Lipidated C-Terminal Membrane Anchor of 2',3'-Cyclic Nucleotide-3'-phosphodiesterase $\dagger$* . *Biochemistry* 12/2007; 47(1). DOI:10.1021/bi701474t
  24. Mario Scrima, Pietro Campiglia, Cinzia Esposito, Isabel Gomez-Monterrey, Ettore Novellino, Anna Maria D'Ursi: *Obestatin conformational features: a strategy to unveil obestatin's biological role?*. *Biochemical and Biophysical Research Communications* 12/2007; 363(3):500–5. DOI:10.1016/j.bbrc.2007.08.200
  25. Simone Giannecchini, Anna Maria D'Ursi, Cinzia Esposito, Mario Scrima, Elisa Zabogli, Giulia Freer, Paolo Rovero, Mauro Bendinelli: *Antibodies generated in cats by a lipopeptide reproducing the membrane-proximal external region of the feline immunodeficiency virus transmembrane enhance virus infectivity*. *Clinical and Vaccine Immunology* 09/2007; 14(8):944–51. DOI:10.1128/CVI.00140-07



26. Pietro Campiglia, Cinzia Esposito, Mario Scrima, Isabel Gomez-Monterrey, Alessia Bertamino, Paolo Grieco, Ettore Novellino, Anna Maria D'Ursi: *Conformational stability of A beta-(25-35) in the presence of thiazolidine derivatives*. *Chemical Biology & Drug Design* 03/2007; 69(2):111-8. DOI:10.1111/j.1747-0285.2007.00482.x
27. Cinzia Esposito, Annamaria Tedeschi, Mario Scrima, Gerardino D'errico, M Francesca Ottaviani, Paolo Rovero, Anna Maria D'ursi: *Exploring interaction of  $\beta$ -amyloid segment (25–35) with membrane models through paramagnetic probes*. *Journal of Peptide Science* 12/2006; 12(12):766-74. DOI:10.1002/psc.811
28. Maria C Alcaro, Valerio Vinci, Anna M D'Ursi, Mario Scrima, Mario Chelli, Sandro Giuliani, Stefania Meini, Marcello Di Giacomo, Lino Colombo, Anna Maria Papini: *Bradykinin antagonists modified with dipeptide mimetic beta-turn inducers*. *Bioorganic & Medicinal Chemistry Letters* 06/2006; 16(9):2387-90. DOI:10.1016/j.bmcl.2006.01.125

## PRESENTAZIONI ORALI

May 2007 PeptLab Symposium, May 14 2007 Florence, Italy

## COMUNICAZIONI A CONGRESSI

14th Naples Workshop on Bioactive Peptides (June 12-14 2014, Naples Italy) Gp41 MPER in membrane mimetics characterized by mixed lipid composition

14th Naples Workshop on Bioactive Peptides (June 12-14 2014, Naples Italy) Molecular Dynamics studies of PMMA polymer film- cO2 peptide interfacial phenomena

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). The aggregation of A beta (25-35) blunts the phosphorylation of cPLA2 in LAN-2 cholinergic cell line.

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). Environmental factors affecting the aggregation state of Ass 25-35: role of Omega3 dependent membrane fluidity

IX Congresso Sindem: Italian Association for the study of Dementia linked to the Italian Neurological Society (SIN) (March 13–15, 2014, Firenze, Italy). The methylated compounds affect the aggregation of amyloid peptide (25-35)

\_CECAM-HQ-EPFL (September 24-27, 2013, CECAM-HQ-EPFL, Lausanne, Switzerland) Investigating the Binding Mechanism of the Glycosylated and Non-Glycosylated CSF114 Peptide to Membrane Coupling between protein, water, and lipid dynamics in complex biological systems: Theory and Experiments

SCI XXII National Meeting on Medicinal Chemistry Italian Chemical Society Division of Medicinal Chemistry (September 10-13, 2013 Roma – Italy) Binding of N6-ISOPENTENYLADENOSINE to Farnesyl Diphosphate Synthase: an NMR investigation

“ChimAlSi\_2012” IX° Italian Congress of Food Chemistry. “Food, Functional Foods and Nutraceuticals” (June 03-07, 2012, Ischia (NA), Italy) Modification of membrane fluidity in response to variable contents of cholesterol and PUFA: Role in beta-amyloid aggregation

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Stabilization of  $\beta$ -Turn Conformation in Melanocortin Like Peptide by Click Side Chain-to-Side Chain Cyclization

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Molecular Dynamics Calculation and NMR Conformational Studies of Heterodetic Triazolyl Cyclo-Nonapeptides: A Comparative Study

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Binding of Hemopressin Peptide with Cannabinoid CB1 Receptor: A Structural Study

31th European Peptide Symposium (September 5-9, 2010, Copenhagen, Denmark) Synthesis of a PEG Conjugated HIV Gp41 MPER Fragment: A New Gp41 Helix Bundle Mimic

EUROMAR 2010 and 17th ISMAR Conference (July 4-9, 2010, Florence, Italy) Validation by QM method of the solution structure of MTII-triazolyl cyclopeptides

12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides (June 4-7, 2010, Naples, Italy) Side chain-to-Side chain (Sc2Sc) clicked-cyclo peptides. Synthesis, conformation and biological activity

12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides (June 4-7, 2010, Naples, Italy) Structural behaviour of selective anti-Cryprococcus peptides in membrane mimicking environments

Magnetic Resonance in the Life Sciences: What's New NMR TO LAY THE BRICKS FOR MOLECULAR SYSTEMS BIOLOGY (December 14-18 2008 - Montecatini Terme, Italy) A new library of cyclic peptides obtained via i-to-i+4 intramolecular side chain-to-side chain azide-alkyne 1,3- dipolar cycloaddition: CD and NMR conformational analysis

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Cyclic i-to-i+4 side chain-to-side chain 1,4-disubstituted [1,2,3]triazolyl-bridged PTHrP(11-19) derivatives

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) A new library of cyclic peptides obtained via i-to-i+4 intramolecular side chain-to-side chain azide-alkyne 1,3- dipolar cycloaddition: CD and NMR conformational analysis

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) A $\beta$ 16-35 peptide: structural features in membrane mimicking systems

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Effect of flavonoids on A $\beta$ (25-35) /DLPC vesicle interaction

30th European Peptide Symposium (31 August - 5 September Helsinki, Finland) Spin-label aided investigation of feline immunodeficiency virus Gp36 derived peptide in presence of membrane models

11th Naples Workshop on Bioactive Peptides (May 24-27, 2008, Naples, Italy) Synthesis and Conformational Analysis of a Cyclic Peptides Obtained via i-to-i+4 Intramolecular Side-Chain-to-Side-Chain Azide-Alkyne 1,3- Dipolar Cycloaddition

11th Naples Workshop on Bioactive Peptides (May 24-27, 2008, Naples, Italy) Preliminary docking studies on fibril aggregation inhibitory activity of the  $\beta$ -sheet breaker peptides

European School of Medicinal Chemistry (XXVII Advanced Course of Medicinal Chemistry and "E. Duranti" National Seminar for PhD Students) UNIVERSITÀ DEGLI STUDI DI URBINO "CARLO BO" Driving forces enhancing the modulation of membrane lipid polymorphism by membrane-active peptides.

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) The role of Cell Penetrating Peptides (CPPs) in Membrane Lipid Phase Behavior: a Novel Aspect Elucidating Peptide-Mediated Delivery

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) Conformational Stability of A $\beta$ (25-35) in the Presence of Thiazolidine and Imidazo[1,5-c]thiazole-5,7-dione Derivatives.

20th American Peptide Society Symposium (June 26 - 30, 2007, Montréal, Quebec, Canada) Side Chain-to-Side chain Cyclization by Intramolecular Click Reaction - Building Blocks, Solid Phase Synthesis and Conformational Characterization

29th European Peptide Symposium, (September 3-8, 2006 Gdansk, Poland) Inhibition of A $\beta$ (25-35) aggregation by nicotine and its synthetic analogues

29th European Peptide Symposium, (September 3-8, 2006 Gdansk, Poland) Conformational analysis of the new obesity related peptide obestatin

## MEETINGS E SCUOLE

March 2006 School of Metabolomic analysis , Latina, Italy, 25th March 2006

March 2006 Maga Circe Conference on metabolic systems analysis, Sabaudia, Italy, dal 26-29 March 2006

June 2006 Aspetti della Ricerca Farmaceutica e Tecnologica in Italy, Fisciano, Italy, 21th June 06

September 2006 GIDRM, XXXVI National Congress on Magnetic Resonance, Vietri sul Mare, Italy, dal 20-23 September 06

September 2006 Epigenetic targets in chemotherapy, Salerno, Italy il 29 September 06

January 2007 WISPOC 2007, Winter School on Physical Organic Chemistry, Società Chimica Italiana, Genuary 11-18, 2007, Bressanone, Italy.

February 2007 "I meeting Nuove Prospettive in Chimica Farmaceutica", Fisciano, February 22- 23 23 2007 Salerno, Italy

April 2007 PERSPECTIVES OF NMR IN DRUG DISCOVERY, April 10-12 2007, CERM, Florence, Italy

May 2007 PeptLab Symposium, May 14 2007 Florence, Italy

June 2007 "20th American Peptide Society Symposium June 26-30 2007, Montreal, Canada,

November 2007 Pratical and theoric course for PhD students on "Spettroscopia IR e Raman", November 6-7 2007, Salerno, Italy.

January 2008 WISPOC 2008, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 27-01/02/08, Bressanone, Italy.

May 2008 "Nuove Prospettive in Chimica Farmaceutica" 16/05/08 al 17/05/08 Catanzaro, Italy

May 2008 11th Naples Workshop on Bioactive Peptides 24/05/08 al 27/05/08 Napoli, Italy

June 2008 Advanced Solid-State NMR Training Course 2008 June 02-06 2008, Sonderborg, Denmark

August 2008 XXIII Conferences on Magnetic Resonance in Biological Systems (ICMRBS), August 24-29 2008 San Diego, USA

December 2008 Magnetic Resonance in the Life Sciences: What's New NMR TO LAY THE BRICKS FOR MOLECULAR SYSTEMS BIOLOGY December 14-18 2008 - Montecatini Terme, Italy

February 2009 WISPOC 2009, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 01/02-06/02/09, Bressanone, Italy

September 2009 XXXIX National Congress on Magnetic Resonance 21-24 september 2009, Palermo, Italy

January-February 2010 WISPOC 2010, Winter School on Physical Organic Chemistry, Società Chimica Italiana, 30/01-04/02/10, Bressanone, Italy

June 2010 12th Naples Workshop on Bioactive Peptides and 2nd Italy-Korea Symposium on Antimicrobial Peptides June 4-7, 2010 Naples, Italy

September 2010 31th European Peptide Symposium September 5-9, 2010, Copenhagen, Denmark.

December 2013 In Cell NMR, Florence, Italy