

## **CURRICULUM VITAE ET STUDIORUM DEL PROF. LEONETTI FRANCESCO**

Il prof. Leonetti Francesco è nato a Rossano (CS-----). Si è laureato *summa cum laude* in Chimica e Tecnologia Farmaceutiche presso l'Università degli Studi di Bari il 07-04-1995.

Nel 1999 il prof. Leonetti ha conseguito il titolo di dottore di ricerca in Chimica del Farmaco discutendo una tesi dal titolo: “*Rational Design, Combinatorial Synthesis and Molecular Modeling of Enzyme Inhibitors and Receptor Ligands*”.

Nel 1998 il prof. Leonetti si è trasferito per un anno presso l'Università di Berkeley (California, USA), nei laboratori del prof. Jonathan Ellman dove si è occupato di sintesi combinatoriale su fase solida di derivati benzodiazepinici per il trattamento di alcune sindromi autoimmuni in particolare il *Lupus Eritematoso Sistemico*.

Nel 1999 il prof. Leonetti ha conseguito una borsa di studio presso il Dipartimento di Chimica dell'Università di Berkeley (California) ed in qualità di Post-doc, ha continuato a lavorare per altri due anni presso i laboratori del prof. Ellman, occupandosi delle sintesi di librerie di molecole su fase solida.

Nel 2001 è stato nominato ricercatore presso la facoltà di Farmacia dell'Università degli Studi di Bari. La sua attività di ricerca è stata rivolta al disegno, sintesi e valutazione dell'attività biologica di composti attivi verso patologie neoplastiche (inibitori dell'aromatasi, delle proteine chinasi e delle MMPs) e sindromi neurodegenerative (inibitori AChE and MAO) e composti in grado di inibire la MDR (Multidrug resistance).

Dal 2001 svolge attività tutoria nei confronti di laureandi e dottorandi di ricerca ed è stato relatore e correlatore di numerose tesi.

Dall'a.a 2002-2003 ha tenuto diversi moduli di insegnamenti in corsi dedicati sia a studenti laureandi che ai dottoranti del Dottorato di Ricerca in Scienze Farmaceutiche.

Dall'anno accademico 2005-2006 il dott. Leonetti è docente incaricato (Professore aggregato) del corso di “Analisi dei Medicinali II” (“Analisi Chimico Farmaceutiche e Tossicologiche II”, dall'anno accademico 2011-2012) del corso di laurea specialistica in Farmacia.

A partire dall'anno accademico 2009/2010 il dott. Leonetti è anche docente incaricato (Professore aggregato) del corso di “Preparazione ed Analisi di Molecole Bioattive” presso la Facoltà di Scienze Biotecnologiche.

Il prof. Leonetti è stato docente proponente e membro del comitato scientifico del master di secondo livello: “I Regolamenti Reach e CLP: valore alla sostenibilità dei processi produttivi ed alla tutela della salute”.

Il prof. Leonetti è stato coordinatore e docente proponente del master di secondo livello: “Contraffazione dei prodotti farmaceutici, sanitari e diritto alla salute”.

Nel corso del 2011 il prof. Leonetti è stato nominato membro della commissione per la revisione dello statuto dell'Università degli Studi di Bari, “Aldo Moro” così come previsto dalla legge 240/2010.

Dal 31/01/2012 al 04/08/2015 il prof. Leonetti è stato nominato componente del consiglio di amministrazione dell'Università degli Studi di Bari, carica che ha ricoperto anche dal 14/03/2016 al 02/09/2016 e dal 17/03/2017 al 31/10/2018.

Il 17/02/2017 il prof. Leonetti è stato nominato professore associato presso il dipartimento di Farmacia-Scienze del Farmaco.

Il 01/11/2018 il prof. Leonetti è stato nominato direttore del dipartimento di Farmacia-Scienze del Farmaco. Nello stesso anno il prof. Leonetti è stato nominato componente del senato accademico dell'Università degli Studi di Bari.

Il prof. Leonetti è (co)autore di 77 pubblicazioni e ha partecipato a diversi progetti di ricerca nazionali ed internazionali ammessi al finanziamento sulla base di bandi competitivi.

- h-index = 31;
- numero di citazioni = 3765

## Pubblicazioni

1. Carrieri, A.; Brasili, L.; Leonetti, F.; Pigini, M.; Giannella, M.; Bousquet, P. and Carotti, A. 2-D and 3-D modeling of imadazoline receptor ligands: insights into pharmacophore. *Bioorganic and Medicinal Chemistry*, **1997**, 5, 5, 843.
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3. Pigini, M.; Bousquet, P.; Brasili, L.; Carrieri, A.; Dontenwill, M.; Gentili, F.; Giannella, M.; Leonetti, F.; Piergentili, A.; Quaglia, W. and Carotti, A. Binding of tracizolines to the imidazoline receptor. Role of lipophilicity in quantitative structure-activity relationship models. *Ann. N.Y. Acad. Sci.* **1999**, 881, 118.
4. Backes, B. J.; Harris, J. L.; Leonetti, F.; Craik, C. S. and Ellman, J. A. Synthesis of positional-scanning libraries of fluorogenic peptide substrates to define the extended substrate specificity of plasmin and thrombin. *Nature Biotechnology* **2000**, 18(2), 187-193.
5. Harris, J. L.; Backes, B. J.; Leonetti, F.; Mahrus, S.; Ellman, J. A. and Craik, C. S. Rapid and general profiling of protease specificity by using combinatorial fluorogenic substrate libraries. *Proceedings of the National Academy of Science of USA*, **2000** 97(14), 7754-7759.
6. Gnerre, C.; Catto, M.; Leonetti, F.; Weber, P.; Carrupt, P. A.; Altomare, C.; Carotti, A. and Testa, B. Inhibition of monoamine oxidases by functionalized coumarin derivatives: biological activity, QSARs, and 3-D QSARs. *Journal of Medicinal Chemistry*, **2000**, 43, 4747-4758.
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8. Maly, D. J., Leonetti, F., Backes, B. J., Dauber, D. S., Harris, J. L., Craik, C. S. and Ellman, J. A. Expedient solid-phase synthesis of fluorogenic protease substrates using the 7-amino-4-carbamoylmethylcoumarin (ACC) *Journal of Organic Chemistry*, **2002**, 67, 910-915.
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10. Stefanachi, A., Leonetti, F., Cappa, A., Carotti, A. Fast and highly efficient one-pot synthesis of 9-deazaxanthines. *Tetrahedron Letters*, **2003**, 44, 2121-2123.

11. Bednarski, J. J.; Warner, R. E.; Rao, T.; Leonetti, F.; Yung, R.; Richardson, B. C.; Johnson, K. J.; Ellman, J. A.; Opipari, A. W. Jr.; Glick, G. D. Attenuation of autoimmune disease in fas-deficient mice by treatment with a cytotoxic benzodiazepine. *Arthritis & Rheumatism*, **2003**, 48 (3), 757-766.
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14. Leonetti, F.; Favia, A.; Rao, A.; Aliano, R.; Paluszak, A.; Hartmann, R.W. and Carotti, A. Design, synthesis, and 3D QSAR of novel potent and selective aromatase inhibitors. *Journal of Medicinal Chemistry* **2004**, 47, 6792-803.
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16. Choe, Y.; Leonetti, F.; Greenbaum, D. C.; Lecaille, F.; Bogyo, M.; Brömme, D.; Ellman, J. A.; Craik, C. S. Substrate profiling of cysteine proteases using a combinatorial peptide library identifies functionally unique specificities. *Journal of Biological Chemistry* **2006**, 281 (18), 12824.
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Pyridazine-, Pyrimidine- and 1,2,4-Triazine-Containing Tricyclic Derivatives *Journal of Medicinal Chemistry* **2007**, *50*, 5364-5371.

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lipophilicity tuning by intramolecular hydrogen bonding. *Journal of Medicinal Chemistry*, **2014**, 57, 6403-6418.

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Enhancing the Sensitivity of Biotinylated Surfaces by Tailoring the Design of the Mixed Self-Assembled Monolayer Synthesis.

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1. Cellamare S.; Carotti A.; Stefanachi A.; **Leonetti F.**; Nicolotti O.; Catto M.; Pisani L.; Tardia P.; Introcaso A.; Leo V.; Addabbo F.; Montagnani M.; Nacci C.  
Gallyl benzamide-based compounds as JNK modulators (**2014**) International Application Number PCT/IB2013/000679; International Publication Date 23/10/2014; International Publication Number WO 2014/170706 A1; Priority number(s): WO2013IB00679 20130415(<http://patentscope.wipo.int/search/en/WO2014170706>)

## **Comunicazioni a congressi**

### **a) Comunicazioni orali**

- 1) Leonetti, F.; Harris, J.L.; Backes B.J.; Craik, C.S. and Ellman J.A. Positional Scanning Libraries of Fluorogenic Peptide Substrates for Determining Protease Specificity. *XX Congresso Nazionale della Società Chimica Italiana, Rimini 4-9 giugno 2000*. Plenary lecture **SC-PL001**.
- 2) Leonetti, F. Sintesi su fase solida di peptidi e di strutture peptico-like: alcune recenti applicazioni. *Secondo Laboratorio di Metodologie Sintetiche in Chimica Farmaceutica. Siena 16-20 Febbraio 2003*.
- 3) Leonetti, F.; Capaldi, C. and Carotti A. Microwave-assisted solid phase synthesis of Imatinib, a blockbuster anticancer drug. *XXII European Colloquium on Heterocyclic Chemistry*. Short Lecture, **Bari 2-6 september 2006. SO8**.
- 4) Francesco Leonetti, Angela Stefanachi, Giovanni Pellegrino, Orazio Nicolotti, Marco Catto, Muncipinto Giovanni, Angelo Carotti. **A multitarget approach in cancer research**. *Joint Meeting on Medicinal Chemistry*. Keynote Lecture, **Budapest, Hungary, 24-27 June, 2009. KL-3**, pp. 43

### **b) Posters**

- 1) Barreca, M.L.; Altomare, C.; Leonetti, F.; Carotti, A.; Ferappi, M.; Carrupt, P.A. and Testa, B. Lipophilicity in Molecular Modeling of MAO Inhibitors. *11<sup>th</sup> European Symposium on Quantitative Structure-Activity Relationships. Lausanne CH, 1996. P-8.D*
- 2) Barreca, M.L.; Altomare, C.; Leonetti, F.; Carotti, A.; Weber, P.; Gaillard, P.; Carrupt, P.A. and Testa, B. Modeling of MAO-A/MAO-B Inhibitory Activity and Selectivity: 2D- and

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- 3) Leonetti, F.; Backes B.J.; Harris, J.L; Craik, C.S. and Ellman J.A. Positional Scanning Libraries of Fluorogenic Substrates for Determining Protease Specificity, Incorporating P1 Diversity. *217<sup>th</sup> ACS National Meeting, Anaheim CA, 21-25 March 1999.* ORGN Division, **160**.
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  - 5) Leonetti, F.; Maccallini, C.; Cellammare, S.; Jabes, D. and Carotti, A. New peptidyl-β-lactams: solution-solid phase synthesis for the preparation of antibiotic libraries. *Peptides 2002*, 208-209, E. Benedetti and C. Pedone (Eds.) Edizioni Ziino, Napoli, Italy (ISBN 88-900948-1-8).
  - 6) Leonetti, F.; Cellammare, S.; Maccallini, C.; Jabes, D. and Carotti, A. Convergent Solution Phase and Solid Phase Synthesis for the Preparation of β-Lactam Antibiotic Libraries. *XVII<sup>th</sup> International Symposium on Medicinal Chemistry, Barcellona Spain, 1-5 September 2002.* **P 337**.
  - 7) Leonetti, F.; Cappa, A.; Catto, M. and Carotti, A. Structure-Based Design, Solid Phase Synthesis and SAFIR of New Dual Binding Site Acetylcholinesterase (AChE) Inhibitors. *XXI Congresso Nazionale della Società Chimica Italiana, Torino Italy 22-27 June 2003.* **FA-CP-034**.
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  - 12) Giangreco, I.; Nicolotti, O.; Miscioscia, T. F.; Tedeschi, P.; Carotti, A.; Leonetti, F.; Carotti, A. An integrated methodology to interface structure- and ligand-based drug design. *Strasbourg Summer School on Chemoinformatics: CheminfoS3. VVF Obernai (France), 22-25/06/2008*
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  - 15) G. Pellegrino, F. Leonetti, O. Nicolotti, M. Catto, A. Stefanachi, L. Pisani, A. Carotti. Solid phase synthesis of potential PKs inhibitors *III Meeting-Workshop in Nuove Prospettive in Chimica Farmaceutica. Pisa (Italy), 12-14/02/2009*

- 16) Giangreco, O. Nicolotti, T. F. Miscioscia, M. Convertino, G. F. Mangiatordi, L. Siragusa, M. Catto, F. Leonetti, A. Stefanachi, A. Carotti A Multi-Objective Optimization Algorithm for Molecular Design. *III Meeting-Workshop in Nuove Prospettive in Chimica Farmaceutica. Pisa (Italy), 12-14/02/2009*
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- 18) L. Pisani, M. Catto, O. Nicolotti, F. Leonetti, A. Stefanachi, A. Carotti Heterodimeric dual binding site cholinesterase inhibitors: surfing on the sub-nanomolar affinità. *XXIII National Meeting of Italian Chemical Society. Sorrento (Italy), 05-10/07/2009*
- 19) Leonetti F., Muncipinto G., Stefanachi A., Pellegrino G., Nicolotti O., Catto M., Cellamare S., Pisani L., Carotti A. Ring closing metathesis mediated synthesis of d-, g- and e-N-HydroxylactaMS as potential coordinating molecular fragments of biologically relevant bivalent metals *XX National Meeting on Medicinal Chemistry, Abano Terme (Italy), 12-16/09/2010*
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Bari, 24/11/2022

In fede  
F.to Francesco Leonetti