

## CURRICULUM VITAE



**Name** MATTEO  
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**Date and Birthplace** 06-01-1974, Livorno, Italy  
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### **Qualifications**

08/05/2003: PhD in “Chemistry and Technology of Bioactive Substances” at the Department of Bioorganic Chemistry and Biopharmaceutics, School of Pharmacy, University of Pisa (Italy). Supervisor Prof. Ivano Morelli. Thesis title: “Different approaches in phytochemical study of plants with biological activities” (language: English).

04/2001: State examination to become an approved pharmacist (obtained after 6 months of work experience), marks: 345/450.

12/11/1999: University degree (5 years; MSc equivalent) in CHEMISTRY AND PHARMACEUTICAL TECHNOLOGIES at the School of Pharmacy, University of Pisa. Experimental thesis: "Phytochemical study of *Bauhinia tarapotensis*", marks: 108/110 (language: Italian).

07/1993: Scientific Diploma at the “Liceo Scientifico Sperimentale F. Cecioni” of Livorno, marks: 56/60.

### **Languages**

ITALIAN (mother tongue)  
ENGLISH (good knowledge of spoken and written language)  
SPANISH (good knowledge of spoken and written language)  
FRENCH (good knowledge of spoken language)  
PORTUGUESE (good knowledge of spoken language)

### **Awards**

10/2001-06/2002: University award for a foreign experiences during the PhD. Training periods on HPLC/MS and HPLC/NMR methods in phytochemistry at the Phytochemistry and Pharmacognosy Institute (IPP) directed by Prof. Kurt Hostettmann at the University of Lausanne, Switzerland.

2000-2003: University award for the PhD project.

1994-1998: University scholarships from the D.S.U. (Organization for the Right to University Studies) supplied on the basis of personal merits demonstrated during previous years.

## **Employments**

16/01/2009-15/01/2012: Grantholder (Experienced Researcher). Project title: "Chemometrics applied on chemical profiles and spectroscopic data". Project number: IHCP2008-GH19-I05. Institute for Health and Consumer Protection, System Toxicology unit, Joint Research Centre of the European Commission, Ispra (VA), Italy.

17/09/2007-31/12/2008: Marie Curie Research Fellow (Experienced Researcher). European Union funded consortium project (Fp6, Research Training Network). Project title: "Innovative Solutions for Extracting High Value Natural Compounds (INSOLEX)". Superior School of Biotechnology, Catholic University of Portugal, Centre of Biotechnology and Fine Chemistry, Porto (Portugal). Supervisor Prof. Paula Castro. Contract number: MRTN-CT-2006-036053.

22/02/2006-14/06/2007: Marie Curie Research Fellow (Experienced Researcher). European Union funded consortium project (Fp6, Small and Medium Enterprises Co-operative Research). Project title: "Standardised extracts of Cannabis for use in the treatment of migraine and rheumatoid arthritis (CANNABIS)". The School of Pharmacy, University of London, Department of Pharmaceutical and Biological Chemistry, Centre for Pharmacognosy and Phytotherapy, London (UK). Supervisor Prof. Michael Heinrich. Contract number: COOP-CT-2004-512696.

01/04/2004-31/03/2006: Marie Curie Research Fellow (Experienced Researcher). European Union funded consortium project (Fp5, Research Training Network). Project title: "Glycidic Scaffolds, new carbohydrate-derived scaffolds for the generation of bioactive libraries (GLYCIDIC SCAFFOLDS)". Biological Investigation Centre, Spanish Research Council (CSIC), Madrid (Spain). Supervisor: Prof. Dr. Jesús Jiménez-Barbero. Contract number: HPRN-CT-2002-00173.

01/10/2003-31/03/2004: Marie Curie Research Fellow (Experienced Researcher). European Union funded consortium project (Fp5, Research Training Network). Project title: "The Oligosaccharide Signalling in Plants Network (SACC-SIG-NET)". Biological Investigation Centre, Spanish Research Council (CSIC), Madrid (Spain). Supervisor: Prof. Dr. Jesús Jiménez-Barbero. Contract number: HPRN-CT-2002-00251.

## **Peer reviewed publications**

17) "Direct metabolic fingerprinting of commercial herbal tinctures by Nuclear Magnetic Resonance (NMR) spectroscopy and Mass Spectrometry (MS)"; Matteo Politi, Mire Zloh, Manuela Pintado, Paula Castro, Michael Heinrich, Jose Prieto. *Phytochemical analysis* 2009, 20(4), 328-334.

16) "Antioxidant Principles and Volatile Constituents from the North-western Iberian mint "erva-peixeira", *Mentha cervina*"; Matteo Politi, César L Rodrigues, Maria S Gião, Manuela E Pintado and Paula L Castro. *Natural Product Communications* 2008, 3(12), 2065-2068.

- 15) "Different approaches to study the traditional remedy of 'hierba del canto', *Sisymbrium officinale* (L.) Scop."; Politi M, Braca A, Altinier G, Sosa S, Ndjoko K, Wolfender JL, Hostettmann K, Jimenez-Barbero J. *Boletín Latinoamericano y del Caribe de Plantas Medicinales y Aromáticas*, 2008, 7(1), 30-37.
- 14) "Direct NMR analysis of cannabis water extracts and tinctures and semi-quantitative data on  $\Delta^9$ -THC and  $\Delta^9$ -THC-acid"; Politi M, Peschel W, Wilson N, Zloh M, Prieto JM, Heinrich M. *Phytochemistry* 2008, 69(2), 562-570.
- 13) "Natural and Synthetic Cholera Toxin Antagonists"; I. A. Velter, M. Politi, C. Podlipnik, F. Nicotra. *Mini-Reviews in Medicinal Chemistry* 2007, 7, 159-170.
- 12) "Current analytical methods to study plant water extracts: the example of two mushrooms species, *Inonotus hispidus* and *Sparassis crispa*"; M. Politi, A. Silipo, T. Siciliano, M. Tebano, G. Flamini, A. Braca, J. Jiménez-Barbero. *Phytochemical analysis* 2007, 18, 33-41.
- 11) "Phenylphenalenone type compounds from the leaf fibers of Abaca (*Musa textilis*)"; Jose C. del Rio, Jesus Jiménez-Barbero, Maria Isabel Chavez, Matteo Politi, Ana Gutierrez. *Journal of Agricultural and Food Chemistry* 2006, 54(23), 8744-8748.
- 10) "Screening garlic water extract for binding activity with Cholera Toxin B pentamer by NMR spectroscopy. An old remedy giving a new surprise"; M. Politi, J. Alvaro-Blanco, P. Groves, A. Prieto, J.A. Leal, F.J. Cañada, J. Jiménez-Barbero. *European Journal of Organic Chemistry* 2006, 9, 2067-2073.
- 9) "Useful applications of DOSY experiments for the study of mushroom polysaccharides"; M. Politi, P. Groves, M.I. Chávez, F.J. Cañada, J. Jiménez-Barbero. *Carbohydrate Research* 2006, 341(1), 84-89.
- 8) "Screening by NMR: a new approach for the study of bioactive natural products? The example of *Pleurotus ostreatus* hot water extract"; M. Politi, M.I. Chávez, F.J. Cañada, J. Jiménez-Barbero. *European Journal of Organic Chemistry* 2005, 7, 1392-1396.
- 7) "Extracts and constituents of *Lavandula multifida* with topical anti-inflammatory activity"; S. Sosa, G. Altinier, R. Della Loggia, M. Politi, A. Braca, I. Morelli. *Phytomedicine* 2005, 12, 271-277.
- 6) "HPLC-UV/PAD and HPLC-MSn Analyses of Leaf and Root Extracts of *Vismia guineensis* and Isolation and Identification of Two New Bianthrone"; M. Politi, R. Sanogo, K. Ndjoko, D. Guilet, J.-L. Wolfender, K. Hostettmann, I. Morelli. *Phytochemical analyses* 2004, 15, 355-364.
- 5) "Chemical composition and antioxidant activity of phenolic compounds from wild and cultivated *Sclerocarya birrea* (Anacardiaceae) leaves"; A. Braca, M. Politi, R. Sanogo, H. Sanou, I. Morelli, C. Pizza, N. De Tommasi. *Journal of Agricultural and Food Chemistry* 2003, 51(23), 6689 - 6695.
- 4) "Antimicrobial diterpenes from the seeds of *Cephalotaxus harringtonia* var. *drupacea*"; M. Politi, A. Braca, N. De Tommasi, I. Morelli, A. Manunta, L. Battinelli, G. Mazzanti. *Planta Medica* 2003, 69(5), 468-470.

- 3) "Structure and absolute configuration of new diterpenes from *Lavandula multifida*"; M. Politi, N. De Tommasi, G. Pescitelli, L. Di Bari, I. Morelli, A. Braca. *Journal of Natural Products* 2002, 65(11), 1742-1745.
- 2) "Antioxidant activity of flavonoids from *Licania licaniaeflora*"; A. Braca, C. Sortino, M. Politi, I. Morelli, J. Mendez. *Journal of Ethnopharmacology* 2002, 79(3), 379-381.
- 1) "Antioxidant principles from *Bauhinia tarapotensis*"; A. Braca, N. De Tommasi, L. Di Bari, C. Pizza, M. Politi and I. Morelli. *Journal of Natural Products* 2001, 64(7), 892-895.

## **Presentations in congresses**

### Oral communications

- 4) "NMR analysis of cannabis aqueous extracts and tinctures and their potential as anti-inflammatory agents" Politi M, Peschel W, Prieto JM, Heinrich M. Presented at the Future Trends in Phytochemistry: A young scientists symposium, Gargnano (Italy), 6<sup>th</sup>-9<sup>th</sup> June 2007.
- 3) "Cannabis extracts low in  $\Delta^9$ -THC; optimization of extraction procedures using NMR spectroscopy" Politi M, Peschel W, Wilson N, Prieto JM, Heinrich M. Presented at the 7<sup>th</sup> meeting of the Spanish Society for Cannabinoids Research, Toledo (Spain), 23<sup>rd</sup>-25<sup>th</sup> November, 2006.
- 2) "NMR for the screening of plants water extracts: a rapid approach to better link ethobotanical data with further phyto-pharmacological investigations" M. Politi, M.I Chávez, J. Alvaro-Blanco, F.J. Cañada, J. Jiménez-Barbero. Presented at the 53rd International Congress of the Society for Medicinal Plant Research (GA), Florence (Italy), 21<sup>st</sup>-25<sup>th</sup> August, 2005.
- 1) "Comparison between the constituents of leaves and roots of *Vismia guineensis* by LC/UV-DAD and LC/MS analysis" M. Politi, K. Ndjoko, R. Sanogo, J.L. Wolfender, K. Hostettmann, I. Morelli. Presented at the 11th National Congress of the Phytochemical Society of Italy (SIF), Riolo Terme (Italy), 6<sup>th</sup>-9<sup>th</sup> October, 2002.

### Posters

- 15) "Carrots cultivated with organic and conventional agricultural systems: discrimination using spectroscopic data and chemometric analysis" Politi M, Dasko L, Alonso-Salces RM, Segebarth N, Mattarucchi E, Reniero F, Giordano G, Maquet A, Guillou C. Presented at the International Workshop on Organic Food Authentication: Challenge or Utopia? Geel (Belgium), 30<sup>th</sup> November-1<sup>st</sup> December 2009.
- 14) "Antimicrobial and antioxidant activity of different extracts of *Mentha cervina* from Portugal" J. Rocha, S.P. Carvalho, M. Politi, P.M.L. Castro and M.E. Pintado. Presented at the Microbiotec congress, Vilamoura (Portugal), 28<sup>th</sup>-30<sup>th</sup> November 2009.
- 13) "Chemometric analysis of NMR and UPLC-QTOF/MS data on extracts from carrots cultivated with organic and conventional agricultural systems" Politi M, Dasko L, Alonso-

Salces RM, Segebarth N, Mattarucchi E, Reniero F, Giordano G, Maquet A, Guillou C. Presented at the Conferentia Chemometrica 2009, Siofok (Hungary) 27<sup>th</sup>-30<sup>th</sup> September 2009.

- 12) "Direct metabolic fingerprinting by NMR spectroscopy as a new method for the analysis of herbal tinctures" Politi M, Prieto JM, Heinrich M. Presented at 55<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant Research, Graz (Austria) 2<sup>nd</sup>-6<sup>th</sup> September 2007.
- 11) "Evaluating CYP3A4 inhibitory activity of Echinacea extracts using NMR and multivariate data analysis" Modarai M, Wilson N, Politi M, Suter A, Kortenkamp A, Heinrich M. Presented at 55<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant Research, Graz (Austria) 2<sup>nd</sup>-6<sup>th</sup> September 2007.
- 10) "Cannabis tinctures and extracts – in vitro profiling for cytotoxic and anti-inflammatory effects" Peschel W, Politi M, Wilson N, Costanti A, Prieto JM, Heinrich M. Presented at 55<sup>th</sup> International Congress and Annual Meeting of the Society for Medicinal Plant Research, Graz (Austria) 2<sup>nd</sup>-6<sup>th</sup> September 2007.
- 9) "NMR spectroscopic study of Cannabis tinctures and their potential as anti-inflammatory agents" Politi M, Peschel W, Wilson N, Prieto JM, Heinrich M. Presented at Phytochemical Society of Europe (PSE) 50TH ANNIVERSARY CONFERENCE, Churchill College, Cambridge, UK 11<sup>st</sup>-14<sup>th</sup> April 2007.
- 8) "Medicinal Cannabis: preliminary phyto/pharmacological data on the hot water extract from *Cannabis sativa* in the search of new potentials anti-inflammatory agents" Politi M, Adiga F, Wilson N, Peschel W, Prieto JM, Heinrich M. Presented at XV Italo-Latinoamerican Congress of Ethnomedicine "Ivano Morelli", Perugia (Italy) 23<sup>rd</sup>-27<sup>th</sup> September 2006.
- 7) "Screening Garlic for binding activity with Cholera Toxin B pentamer by NMR. An old remedy giving a new surprise" M. Politi, J. Alvaro-Blanco, P. Groves, A. Prieto, J.A. Leal, F.J. Cañada, J. Jiménez-Barbero. Presented at the Marie Curie Conference "Making Europe more attractive for researches", Pisa/Livorno (Italy), 28<sup>th</sup>-30<sup>th</sup> September 2005.
- 6) "NMR for screening of bioactive natural products: the example of *Pleurotus ostreatus* hot water extract" M. Politi, M.I. Chavez, F.J. Cañada, J. Jiménez-Barbero. Presented at the II Biennial of NMR of the Spanish Royal Society of Chemistry (RSEQ), Santiago de Compostela (Spain), 19<sup>th</sup>-22<sup>nd</sup> September 2004.
- 5) "Different approaches to study the traditional remedy of *Sisymbrium officinale* (L.)" M. Politi, K. Ndjoko, A. Braca, G. Altinier, S. Sosa, K. Hostettmann, J. Jiménez-Barbero. Presented at the Young Scientist's Symposium, "Future Trends in Phytochemistry", of the Phytochemical Society of Europe (PSE) and the Phytochemical Society of Italy (SIF), Gargnano (Italy), 5<sup>th</sup>-8<sup>th</sup> May 2004.
- 4) "Phytochemical investigation of *Vismia guineensis* by LC/UV-DAD and LC/MS<sup>nm</sup>" M. Politi, K. Ndjoko, D. Guilet, R. Sanogo, J.-L. Wolfender, K. Hostettmann, I. Morelli. Presented at: 50<sup>th</sup> Annual Congress of the Society for Medicinal Plant Research, Barcelona (Spain), 8<sup>th</sup>-12<sup>nd</sup> September 2002.

- 3) "Phytochemical and Pharmacological studies of *Sclerocarya birrea* (A. Rich.)" A. Braca, M. Politi, R. Sanogo, H. Sanou, I. Morelli, N. De Tommasi, F. De Simone. Presented at the International Symposium of the International Organization for Chemical Sciences in Development (IOCD), Bamako (Mali), 6<sup>th</sup>-8<sup>th</sup> March 2002.
- 2) "LC/UV-DAD and LC/MS analysis of *Vismia guineensis*" M. Politi, R. Sanogo, K. Ndjoko, J.L. Wolfender, K. Hostettmann, I. Morelli. Presented at the International Symposium of the International Organization for Chemical Sciences in Development (IOCD), Bamako (Mali), 6<sup>th</sup>-8<sup>th</sup> March 2002.
- 1) "New Diterpenes from *Lavandula Multifida*" M. Politi, A. Braca, N. De Tommasi, G. Pescitelli, I. Morelli. Presented at the International Symposium of the Phytochemical Society of Europe (PSE), University of Lausanne (Switzerland), 12<sup>nd</sup>-14<sup>th</sup> September 2001.

#### Referees:

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