



CONVEGNO MONOTEMATICO
SOCIETÀ ITALIANA DI FARMACOLOGIA
Gruppo di Lavoro Farmacognosia

FARMACOGNOSIA
nuove opportunità terapeutiche dal mondo vegetale

Hotel Royal Continental, Via Partenope, 38
NAPOLI 20-21 giugno 2014



Programma e Abstract

Comitato Scientifico

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Con il patrocinio di

Università degli Studi di Napoli Federico II

Ente Parco Nazionale del Vesuvio

Venerdi 20 Giugno

12.30-14.00 Registrazione dei Partecipanti

14.00-14.20 Benvenuto (Presidente SIF, Comitato Organizzatore, Direttore Dipartimento di Farmacia Napoli Federico II)

14.20-15.00 Lettura magistrale: **Bioactive molecules from natural sources in the prevention of chronic degenerative diseases: my ten years research story with Sulforaphane**
Hrelia P. (Bologna)

15.00-16.00 Sessione Orale 1

Moderatori: Cantelli Forti G. (Bologna) – Cirino G. (Napoli)

15.00-15.15 **On the antitumor activity of *Citrus bergamia* juice**
Cirmi S., Ferlazzo N, Lombardo GE, Calapai G, Navarra M (Messina)

15.15-15.30 **Antileukemic activity of sulforaphane in hypoxic conditions and in primary blasts from patients affected by myelo- and lympho-proliferative disorders**
Turrini E., Sestili P, Carulli G, Cantelli-Forti G, Fimognari C, Hrelia P (Bologna, Urbino, Pisa)

15.30-15.45 **Cynaropicrin inhibits stat3 phosphorylation through gsh depletion and induces cell death in du145 cell line**
Chiavegato G., Butturini E, Carcereri de Prati A, Rigo A, Cavalieri E, Darra E, Mariotto S (Verona)

15.45-16.00 **Effect of the hydrogen sulfide (H₂S) donor diallyl trisulfide (DATS) on melanoma**
De Cicco P., Panza E, Armogida C, Bucci M, Cirino G, Ianaro A. (Napoli)

16.00-16.30 *Coffee break*

16.30 -18.00 Sessione Orale 2

Moderatori: De Pasquale R. (Messina) – Calignano A. (Napoli)

16.30-16.45 **Neuroprotective effects of Co-ultraPEALut on inflammatory process induced by traumatic brain injury**
Impellizzeri D., Cordaro M, Paterniti I, Bruschetta G, Siracusa R, Cuzzocrea S, Esposito E (Messina)

16.45-17.00 **Phytocannabinoid modulation of neuropathic pain-associated neuroinflammation**
Guida F., Luongo L, Boccella S, de Novellis V, Maione S (Napoli)

17.00-17.15 ***In vitro* anti-inflammatory activity of *Fragaria* spp. in human gastric epithelial cells**
Sangiovanni E., Fumagalli M, Vrhovsek U, Colombo E, Brunelli C, Gasperotti M, Mattivi F, Bosisio E, De Fabiani E, Dell'Agli M (Milano, San Michele all'Adige)

17.15-17.30 ***Vitis vinifera* L.: anti-inflammatory activity on the gastrointestinal tract**
Colombo E., Sangiovanni E, Di Lorenzo C, Fumagalli M, Restani P, Dell'Agli M (Milano)

17.30-17.45 Antinociceptive and anti-inflammatory effects of bergamot essential oil in *in vivo* models

Lombardo GE, Mannucci C, Cirimi S, Ferlazzo N, Calapai G, Navarra M (Messina)

17.45-18.00 *Astragalus membranaceus* extract is effective in a rat model of rheumatoid arthritis

Di Cesare Mannelli L, Micheli L, Cinci L, Corti F, Bartolucci G, Vannacci A, Mugelli A, Ghelardini C (Firenze)

18.00-19.00 Riunione del Gruppo di Lavoro di Farmacognosia

20.30 *Serata Pizza*

Sabato 21 Giugno

8.30-10.30 Sessione Orale 3

Moderatori: Perfumi M. (Camerino) – Mascolo N. (Napoli)

8.30-8.45 **The Italian Phytovigilance System**

Menniti-Ippolito F, Raschetti R, Santuccio C, Bruno B, Scarpa B, Dalfrà S, Floridi F, Calapai G, Zuccotti G, Colombo ML, Firenzuoli F, Moro P, Valeri A, Mazzanti G (Roma, Messina, Milano, Torino, Firenze, Modena)

8.45-9.00 **Vascular L-type Ca²⁺ channel mediated activity of murrayafoline A from *Glycosmis stenocarpa*: electrophysiological and molecular docking studies**

Durante M, Sgaragli G, Huong TT, Cuong NM, Fusi F (Siena, Hanoi)

9.00-9.15 **Cardioprotective effects of naringenin in elderly rats submitted to ischemia-reperfusion.**

Testai L, Martelli A, Breschi MC, Calderone V (Pisa)

9.15-9.30 **Tanshinone IIA, a major component of *Salvia miltiorrhiza* Bunge, inhibits *in vitro* rat platelet activation via Erk-2 signaling pathway**

Maione F, De Feo V, Pilla A, Russo R, Caiazzo E, Pieretti S, Cicala C, Mascolo N (Napoli, Salerno, Roma)

9.30-9.45 **Cyanidin-3-O-glucoside prevents endothelial cells dysfunction via Nrf2 pathway**

Speciale A, Fratantonio D, Ferrari D, Anwar S, Cimino F, Saija A (Messina)

9.45-10.00 **Pharmacological activity of compounds isolated from the leaves of the tree *Artocarpus tonkinensis* used in Vietnamese traditional medicine**

Pozzesi N, Riccardi C, Delfino DV (Perugia)

10.00-11.00 Coffee break e sessione poster

11.00-12.45 Sessione Orale 4

Moderatori: Ghelardini C. (Firenze) – Russo A. (Catania)

11.00-11.15 **The non-psychotropic plant cannabinoids, cannabidivarin (cbdv) and cannabidiol (cbd), activate and desensitize transient receptor potential vanilloid 1 (trpv1) channels *in vitro*: potential for the treatment of neuronal hyperexcitability**

Iannotti FA, Hill CL, Leo A, Soubrane C, Mazzarella E, Russo E, Whalley BJ, Di Marzo V, Stephens GJ (Pozzuoli, Reading, Catanzaro)

11.15-11.30 **A new approach for the identification of natural drugs targeting Leukemic Stem Cell (LSC)**

Ferruzzi L, Mulaw MA, Ihme S, Fimognari C, Buske C (Bologna, Ulm)

11.30-11.45 **Role of salidroside, active compound of *Rhodiola rosea* L., in the prevention and treatment of morphine tolerance and dependence**

Mattioli L (Camerino)

11.45-12.00 Bee propolis in the treatment of *Helicobacter pylori*: in the right way to clinical application

Biagi M, Tilli V, Montini L (Siena)

12.00-12.15 Evaluation of the interaction of plant polyphenolic derivatives with STAT1 as a likely mechanism of their inhibitory effect on cytokine signalling pathways

Masullo M, Menegazzi M, Di Micco S, Bifulco G, Pizza C, Masiello P, Piacente S (Salerno, Verona, Pisa)

12.15-12.30 Wild mediterranean dietary plants as anti-obesity agents

Conforti F, Marrelli M, Menichini F (Cosenza)

12.30-12.45 New hypotheses on *Serenoa repens* (Bartram) Small extract mechanism of action through *in silico* methods

Governa P, De Vico L, Biagi M, Giachetti D, Manetti F (Siena, Copenaghen)

12.45 Premiazione e Chiusura del Convegno

Sessione poster sabato 21 giugno ore 10.00-11.00

Sessione 1 – Moderatore Delfino G. (Perugia)

P1. Neuroprotection by association of palmitoylethanolamide with luteolin in experimental Alzheimer's disease models: the control of neuroinflammation

Siracusa R, Paterniti I, Cordaro M, Campolo M, Cornelius C, Navarra M, Cuzzocrea S, Esposito E (Messina, Catania)

P2. *Astragalus membranaceus* extracts: a new natural resource for the management of chemotherapy-induced neurotoxicity

Corti F, Zanardelli M, Di Cesare Mannelli L, Maresca M, Micheli L, Bilia AR, Mugelli A, Ghelardini C (Firenze)

P3. Attenuation of morphine tolerance by an extract of *Astragalus membranaceus* root

Micheli L, Corti F, Di Cesare Mannelli L, Zanardelli M, Tenci B, Bartolucci G, Mugelli A, Ghelardini C (Firenze)

P4. Effect of cannabidivarin in an animal model of beta-amyloid induced toxicity

Guarino A, Negro L, Maione F, Cristiano C, Aveta T, Vaia M, De Caro C, Di Marzo V, Calignano A, Iuvone T (Napoli, Pozzuoli)

P5. Olea Europea-derived phenolic products attenuate antinociceptive morphine tolerance: an innovative strategic approach to treat cancer pain

Muscoli C, Lauro F, Dagostino C, Ilari S, Giancotti La, Gliozzi M, Costa N, Carresi C, Musolino V, Casale F, Ventrice D, Oliverio M, Palma E, Nisticò S, Procopio A, Mollace V (Catanzaro, Roma)

Sessione 2 - Moderatore: Cicala C. (Napoli)

P6. Natural isothiocyanates and inhibition of mast cells degranulation: is H₂S the real player?

Martelli A, Citi V, Marino A, Testai L, Breschi MC, Calderone V (Pisa)

P7. The anti-inflammatory and antioxidant effects of Bergamot juice (BJe) in an experimental model of inflammatory bowel disease

Bruschetta G, Impellizzeri D, Di Paola R, Ahmad A, Campolo M, Cuzzocrea S, Esposito E, Navarra M (Messina, Manchester)

P8. Antinociceptive effects of carnosol and carnosic acid, two *o*-diphenolic diterpenes from *Salvia officinalis* L.

Maione F, Bisio A, Romussi G, Mascolo N, Pieretti S (Napoli, Genova, Roma)

P9 Protective effects of Cyanidin-3-O-glucoside against LPS-induced damage in Caco-2 intestinal cells

Ferrari D, Speciale A, Fratantonio D, Cristani M, Saija A, Cimino F (Messina)

P10. *Armoracia rusticana* reduces inflammatory response and reactive oxygen species release in LPS-stimulated macrophages

Adesso S, Larocca M, Del Regno M, Calabrone L, Padula MC, Autore G, Martelli G, Rossano R, Marzocco S (Salerno, Potenza)

P11. Topical anti-inflammatory activity of the aerial parts of *Glechoma sardoa* Bég
Sosa S, Pelin M, Masullo M, Sanna C, Ballero M, Tubaro A, Della Loggia R, Piacente S (Trieste, Salerno, Cagliari)

Sessione 3 – Moderatore Autore G. (Salerno)

P12. Antiproliferative activity and radical scavenging properties of *Salvia ceratophylla* and *S. hydrangea* extracts
Tundis R, Bonesi M, Salehi P, Menichini F, Loizzo MR (Cosenza, Tehran)

P13. *Salvia verbenaca* L. as a potential source of anticancer agents for the melanoma treatment
Russo A, Cardile V, Graziano ACE, Formisano C, Rigano D, Canzoneri M, Bruno M, Senatore F (Catania, Napoli, Palermo)

P14. *Rubus ulmifolius* leaf extracts: testings on murine myeloma cells and chemical investigations
Bernardini S, Triggiani D, Ceccarelli D, Salvini L, Taddei AR, Pollini D, Ovidi E, Tiezzi A (Viterbo, Siena)

P15. Vinyl disulfides from asafoetida induce apoptosis of human melanoma cell lines
Armogida C, Panza E, De Cicco P, Tagliatalata-Scafati O, Cirino G, Ianaro A (Napoli)

P16. Natural sesquiterpenes inhibit the genotoxicity induced by cigarette butts in the bacterial reverse mutation assay
Di Giacomo S, Mazzanti G, Di Sotto A (Roma)

P17. Effects of polyphenol hydroxytyrosol, an oleuropein metabolite, on hepatic inflammation and oxidative stress in a rat model of NAFLD
Mattace Raso G, Pirozzi C, Simeoli R, Santoro A, Lama A, Di Guida F, Russo R, Berni Canani R¹, Calignano A, Meli R (Napoli)

Sessione 4 - Moderatore: Meli R. (Napoli)

P18. *Betula aetnensis* Rafin extract in streptozotocin-induced diabetes
Acquaviva R, Vanella L, Sorrenti V, Amodeo A, Mastrojeni S, Ragusa S, Di Giacomo C (Catania, Catanzaro)

P19. Effects of *Tithonia diversifolia* (Hemsl.) A. Gray extract on adipocyte differentiation of human mesenchymal stem cells
Acquaviva R, Vanella L, Sorrenti V, Barbagallo I, Genovese C, Amodeo A, Mastrojeni S, Ragusa S, Di Giacomo C (Catania, Catanzaro)

P20. The effect of bergamot-derived polyphenolic fraction on LDL small dense particles and non alcoholic fatty liver disease in patients with metabolic syndrome
Gliozzi M, Carresi C, Musolino V, Palma E, Muscoli C, Vitale C, Gratteri S, Muscianisi G, Janda E, Muscoli S, Romeo F, Ragusa S, Mollace R, Walker R, Ehrlich J, Mollace V (Catanzaro, Roma)

P21. Bone regeneration in critical-size defects of rat calvaria treated with Human Amniotic Fluid Stem Cells seeded into a collagen scaffold: effect of the oral administration of Ferutinin
Zavatti M, Bertoni L, Maraldi T, Resca E, Beretti F, Guida M, De Pol A (Modena, Bolzano)

P22. Reinstatement of cocaine conditioned place preference induced by social defeat stress is blocked by *Hypericum perforatum* L.

Fugazzotto F, García-Pardo MP, Miñarro J, Rodríguez-Arias M, Aguilar MA, Occhiuto F (Messina, Valenzia)

Sessione 5 - Moderatore Avato P. (Bari)

P23. Luteolin derived flavonoids as bio-markers of *Passiflora loefgrenii* extracts

Argentieri MP, Guzzo F, Levi M, Avato P (Bari, Verona)

P24. Clinical investigations on products of vegetal origin when used as food additives

Nunziata A (Pomezia)

P25. Production of galanthamine from *Narcissus poeticus* L.

Pace L, Fasciani P, Ferri D, Bacchetta L, Ubaldi C, Marcozzi G (L'Aquila, Roma)

P26. Polyphenolic content, antioxidant properties and amylase inhibition by *Capsicum annuum* L. var. "Cornetto di Pontecorvo DOP"

Di Sotto A, Toniolo C, Di Giacomo S, Vitalone A, Mazzanti G, Nicoletti M (Roma)

P27. Testings of *Myrtus communis* leaf extracts on bacteria and mammalian cells

Mastrogiovanni F, Bernardini S, Gallipoli L, Balestra GM, Pollini D, Gallorini V, Triggiani D, Ovidi E, Tiezzi A (Viterbo)

P28. Stealth PLGA nanoparticles for intracellular Curcumin release

Serri C, Argirò M, Biondi M, Crispi S, Diano N, Giarra S, Mayol L, Menale C, Mita DG, Mita L, Piccolo MT, Saija A (Messina, Napoli, Roma)

Sessione 6 – Moderatore Ialenti A. (Napoli)

P29. Caffeic Acid attenuates high glucose-induced oxidative stress and endothelial dysfunction in human endothelial cells via modulating NF-κB pathway

Fratantonio D, Speciale A, Ferrari D, Anwar S, Saija A, Cimino F (Messina)

P30. Antioxidant and heavy metals absence in tomatoes grown in toxic muddy soils

Marra N, Caporale A, Tommonaro G, Popolo A, De Prisco R, Nicolaus B, Essolito M, De Martino F, Sinicropi MS, Saturnino C, Autore G (Salerno, Pozzuoli, Cosenza)

P31. Capability of Trichotecene mycotoxins to induce oxidative stress in a model of intestinal epithelial cells

Del Regno M, Marzocco S, Adesso S, Popolo A, Chirollo C, Severino L, Autore G (Salerno, Napoli)

P32. Antioxidant and antifungal activities of the Cameroonian medicinal plant *Annona muricata*

Donati M, Kamdem Simo M, Bertin R, Chen Z, Froidi G (Padova, Yaoundé)

P33. Preliminary phytochemical analyses and *in vitro* evaluation of the antioxidant activity of a feed supplement containing Rose hip extract

Brovedani V, Sosa S, Pelin M, D'Orlando E, Pacher T, Zitterl-Eglseer K, Tubaro A (Trieste, Vien)

P34. Biological properties of Algerian *Thymelaea microphylla* Coss. & Dur. Extracts

Dehimi K, Dahamna S, Speciale A, Cimino F, Cristani M (Messina, Algeria)

Sessione 7 – Moderatore Occhiuto F. (Messina)

P35. Chemical composition, antioxidant activities and protective effects of *Sideritis italica* extract on C2C12 oxidative stress

Leporini L, Pintore G, Tirillini B, Menghini L (Chieti-Pescara)

P36. The leaves of the PGI “Nocciola di Giffoni” (*Corylus avellana* L.) as a rich source of antioxidant diarylheptanoids related to curcumin

Masullo M, Cerulli A, Olas B, Pizza C, Piacente S (Salerno, Lodz)

P37. Biovariability of caper species from Calabria: chemical and biological evaluation

Conforti F, Marrelli M, Menichini F (Cosenza)

P38. Red wine inhibits aggregation and increases ATP-diphosphohydrolase (CD39) activity of rat platelets

Caiazza E, Cinquegrana M, Tedesco I, Bilotto S, Spagnuolo C, Russo GL, Ialenti A, Cicala C (Napoli, Avellino)

P39. BERGAMet®: a phytotherapeutic approach to cardiovascular disease

Failla P, Salerno R, Casale F, Muscoli C, Gliozzi M, Palma E, Mollace V (Catanzaro, Roma)

P40. Effects of a single dose of a green tea extract supplement on the Peroxidation of Leukocytes Index Ratio (PLIR) of healthy subjects

Manafikhi H, Marocco I, Nardecchia F, Reggi R, Peluso I, Serafini M, Altieri F, Palmery M (Roma)