

**Program of 45th Annual Meeting of EHR
Florence, May 11-14th, 2016**

Wednesday May 11th

- 15:00-18:00** **Registration** - Rettorato - University of Florence,
Piazza San Marco 4
- 15:30-17:00** **EHR Council meeting** - Hall of Academic Council,
University of Florence
- 17:00-18:00** **Opening Ceremony**
Lecture Hall of Rettorato, University of Florence
L. Dei Dean of the University
M. Calamai General Director of Careggi University Hospital
P. Chazot EHR President
E. Masini Chairperson of the Congress
- Opening Lecture: **D. Lippi**
Professor of History of Medicine, University of Florence.
"Life and Death of the Medici Family"
- 18:30-20:30** **Welcome Cocktail**
Visit of the Botanic Garden of Florence, Giardino dei Semplici
Via G. La Pira n. 6

Thursday May 12th

- 08:00-13:00** **Registration**
Chiostrino del Maglio – Via Venezia 5, Firenze
- 08:30-09:30** **Opening Session**
- E. Masini** Chairperson of the Congress
P. Chazot EHR President
- Bursary Winners**
- Honorary Membership to A. Sydbom** (Sweden)
laudation by **M. Ennis** (U.K.) and **G. Sturman** (U.K.)
- 09:30-10:15** G.B. West Lecture by P. Blandina (Italy).
"The role of histamine in the memory of emotionally-salient experiences"
Introduction by P. Panula (Finland)

- 10:15-10:30** **Coffee break**
- 10:30-12:15** **Symposium 1**
Histamine in the Central Nervous System
- Chairpersons** **K. Yanai** (Japan)
J. De Carvalho Miskyw (Brazil)
- 10:30-10:45 (01)** **K. Yanai**, N. Okamura, M. Tashiro, T. Yoshikawa (Japan)
Histamine H₁ Receptor occupancy in human brain measured by Positron Emission Tomography
- 10:45-11:00 (02)** **B. Márquez-Valadez**, F. Díaz, J.A. Arias-Montaña, A. Molina-Hernández (Mexico)
Characterization of histamine H₁ receptor expression in rat embryo cortical and mesencephalic neuroepithelia: in the search for its functional role during fetal neurogenesis in vivo
- 11:00-11:15 (03)** **P. Panula**, YC Chen (Finland)
Dopaminergic regulation of histamine neurons in zebrafish
- 11:15-11:30 (04)** **A. Costa**, L. Di Cesare Mannelli, C. Ghelardini, P. Blandina, M.B. Passani, G. Provensi (Italy)
Lack of antidepressant-like effect of Oleoylethanolamide in histamine-deficient mice parallels reduced hippocampal and cortical CREB phosphorylation
- 11:30-11:45 (05)** **C.R.G Furini**, C. Krás B. da Silveira, F. Benetti, S. da C. Monteiro, I. Izquierdo (Brazil)
The role of histamine receptors in the consolidation of object recognition memory
- 11:45-12:00 (06)** C. Garrido Zinn, N. Clairis, L. Cavalcante, C.R.G Furini, I. Izquierdo
J. de Carvalho Miskyw (Brazil)
Modulation of the consolidation of social recognition memory in two distinct brain areas
- 12:00-12:15(07)** **P.L. Chazot**, N. Lethbridge (U.K.)
Histamine H₃R expression changes in amyloidopathy and non-amyloidopathy mouse models of dementia
- 12:15-13:00** **Invited Lecture**
H. Fukui (Japan)
"Histamine H₁ receptor gene as a sensitive gene of nasal hypersensitivity and clinical significance of antihistamines"
- Introduced by **M. Ennis** (U.K.)
- 13:00-13:45** **Lunch**

13:45-14:45

Poster Session 1
Histamine in the Central Nervous System

Chairpersons

P.L. Chazot (U.K.)
G. Provensi (Italy)

(P 1)

B. Sadek, JS Schwed, N. Khan, D. Subramanian, L. Weizel, M. Walter, H. Stark (UAE)
Multiple-targeting approach with novel Histamine H3 receptor antagonists of anticonvulsant effects in different rat seizure models

(P 2)

A.M. García-Gálvez, C. Flores-Clemente, R. González-Pantoja, J Escamilla-Sánchez, J.A. Arias-Montaño (Mexico)
Differential homologous desensitization of the human histamine H3 receptors of 445 and 365 amino acids

(P 3)

D. Łażewska, A. Fatel, K. Kamińska, J. S. Schwed, H. Stark, K. Kieć-Kononowicz (Poland)
Alkyl/cycloalkyl derivatives of 1,3,5-triazine as human histamine h4 receptor ligands

(P 4)

C. Acosta Andrade, J.L. Urdiales, I. Fajardo, F. Sánchez-Jiménez (Spain)
Evaluation of Histidine decarboxylase activity and Human Histamine Receptor 3 (H3R) and Histidine Decarboxylase (HDC) mRNA levels

(P 5)

C.R.G. Furini, L.D. Pereira, J.A.K. Behling, C.Garrido Zinn, M.L. Zanini, I. Izquierdo, J. de Carvalho Myskiw (Brazil)
Methylphenidate facilitates extinction learning through β -noradrenergic and D₁/D₅-dopaminergic receptors

(P 6)

C.R.G. Furini, J. de Carvalho Myskiw, B.E. Schmidt, C.Garrido Zinn, P.B. Peixoto, L.D. Pereira, I. Izquierdo (Brazil)
The relationship between protein synthesis and protein degradation in object recognition memory

(P 7)

F. Benetti, C. Kras da Silveira, J. Rosa, I. Izquierdo (Brazil)
Histamine acting on the basolateral amygdala reverts the impairment of aversive memory of rats submitted to neonatal maternal deprivation

14:45-15:45

Symposium 2
Histamine and inflammation responses

Chairpersons

E. Tiligada (Greece)
E. Masini (Italy)

14:45-15:00 **(08)**

L. Kay, P. Peachell (U.K.)
The histamine H₄ receptor mediates chemotaxis of human lung mast cells

15:00-15:15 (09) A. Aldinucci, E. Bonechi, C. Manuelli, D. Nosi, E. Masini, **M.B. Passani**, C. Ballerini (Italy)
Histamine regulates actin cytoskeleton in human TLR4 activated mDCs tuning CD4+ T lymphocyte response

15:15-15:30 (010) **S. Mommert**, K. Gregor, H. Stark, R. Gutzmer, T. Werfel (Germany)
Histamine H₂ receptor stimulation up-regulates Th2 chemokine CCL17 production in human M2 macrophages

15:30-15:45 (011) **J. Neumann**, F. Bergmann, U. Gergs (Germany)
Cardiac H₂ receptor overexpression: protective against PP2A mediated heart failure

15:45-16:30 **Invited Lecture**
H. Stark (Germany)
"Histamine H₃ receptor antagonists- from the bench to the bedside and back to bench"

Introduced by **A. Sasse** (Ireland)

16:30-17:30 **Poster session 2**
Histamine in the Central Nervous System

Chairpersons **V. Medina** (Argentina)
F. Sánchez-Jiménez (Spain)

(P 8) **A. Santangelo**, G. Provensi, A. Costa, M. Casarrubea, F. Faulisi, G. Crescimanno, V. Ricca, P. Blandina, M.B. Passani (Italy)
Brain histamine depletion increases the temporal pattern complexity of mice behaviour tested in the open field

(P 9) **S. Abdurakhmanova**, S. Rozov, P. Panula (Finland)
Histaminergic modulation of novelty-induced exploratory activity

(P 10) **J. de Carvalho Myskiw**, C.R.G. Furini, B. Schmidt, F. Ferreira, I. Izquierdo (Brazil)
Extinction learning, which consists of the inhibition of retrieval, can be learned without retrieval

(P 11) S. Schmidt, C. Garrido Zinn, J.A.K. Behling, C.R.G.Furini, I. Izquierdo,
J. de Carvalho Myskiw (Brazil)
PACAP modulates the consolidation of social recognition memory

(P 12) **A. Olejarz**, M. Staszewski, T. Karcz, K. Walczynski, K. Kiec-Kononowicz (Poland)
Characterization of N-substituted- N-[4-(4-(7-phenoxyheptyl)piperazin-1-yl)butyl] guanidines as histamine H₃ receptor antagonists

- (P 13)** **T. Nakamura**, T. Yoshikawa, F. Naganuma, T. Iida, A. Karpati, T. Tamii, N. Okamura, K. Yanai (Japan)
Electroencephalogram of H1KO mice under isoflurane anesthesia
- (P 14)** **M.D. Sanna**, N. Galeotti, L. Lucarini, M.C. Durante, C. Ghelardini, R. Thurmond, E. Masini (Italy)
Characterization of behavioral phenotypes in histamine H₄-receptor knockout mice
- (P 15)** A. Stasiak, M. Staszewski, K. Walczyński, **W.A. Fogel** (Poland).
New N-(4-phenoxyalkylpiperazin-1-yl)alkylguanidines, potent and brain-penetrating non-imidazole histamine H₃- antagonists.
- (P 16)** H. Sterle, M. Nicoud, D.M. Lamas, J.C. Perazzo, G. Cremaschi, **V. Medina** (Argentina)
Histamine modulates tumor growth and antitumor immunity in 4T1 triple negative breast cancer developed in H₄R knock-out (H₄R KO) and wild-type (WT) BALB/c mice
- 18:00-19:30** Visit to the Cloister of S.S. Annunziata Basilica and his chapel of Painters
Presented by N. Salvioli -Professor of Art.

Friday May 13th

- 08:30-09:15** **Invited Lecture**
I. Izquierdo (Brasil)
"Histamine regulates memory consolidation"

Introduced by **M.B. Passani** (Italy)
- 09:15-10:30** **Symposium 3**
Histamine receptors
- Chairpersons** **N. Carruthers** (USA)
J. Neumann (Germany)
- 09:15-09:30 (O12)** **T.A.M. Mocking**, H.F. Vischer, R. Leurs (The Netherlands)
A BRET-based kinetic ligand-receptor binding assay for the histamine H₃ receptor
- 09:30-09:45 (O13)** R. Rodríguez-López, M. Morales, A. Reyes-Palomares, **F. Sánchez-Jiménez** (Spain)
Histamine and its receptors as a module of the biogenic amine diseasome
- 09:45-10:00 (O14)** **E.W.E. Verweij**, R. Leurs, H.F. Vischer (The Netherlands)
Human H₄R signalling and desensitization
- 10:00-10:15 (O15)** **A. Laurino**, L.Raimondi (Italy)

A novel signaling pathway connecting thyroid hormone derivatives with the histaminergic system

10:15-10:30 (016) S. Guccione, M. Pappalardo, **A. Rayan** (Israel)
Tips for modelling histamine receptors

10:30-10:45 Coffee break

10:45-12:15 **Symposium 4**
Histamine and cells of inflammation

Chairpersons **E. Tiligada** (Greece)
C. Riccardi (Italy)

10:45-11:30 **Invited Lecture**
F. Levi Schaffer (Israel)
"Mast cells the masterminds of allergic inflammation: What is new out there to inhibit their function?"

Introduced by **C. Riccardi** (Italy)

11:30-11:50 (017) **B.F. Gibbs** (U.K.)
New insights into the intracellular control of IgE-dependent Histamine release from human basophils

11:50-12:10 (018) **S. Cuzzocrea** (Italy)
Neuroinflammatory pathway, role of neuronal and non-neuronal cells in Central and Peripheral Nervous System

12:10-13:30 **Poster session 3**
Histamine ligands in metabolism and adverse effects

Chairpersons **A. Rayan** (Israel)
A.C. Rosa (Italy)

(P 17) **A. Misto**, G. Provensi, M.B Passani, D. Piomelli (Italy)
Fasting stimulates liver OEA mobilization through a Histamine-dependent mechanism

(P 18) **G. Provensi**, E. Conti, L. Pavarini, A. Costa, C. De Filippo, M.B. Passani (Italy)
Effects of Oleoylethanolamide sub-chronic treatment on food intake, body weight and gut microbiota composition in normal and histamine deficient mice: a preliminary study

(P 19) **S.N. Rahman**, F. Imhaouran, R. Leurs, H.F. Vischer (The Netherlands)
Differences in β -arrestin 2 recruitment by human H₃R isoforms as determined by Enzyme Fragment Complementation

(P 20) **Rado Nosál**, K. Drábiková, V. Jančinová, T. Perečko (Slovakia)

Antioxidative properties of antihistamines: benefits yet warning

- (P 21)** N.A. Mahmudovna, O.V. Nikolaevna, K.D. Alekseevich, B.I. Nikolaevich, **K.K. Nikolaevna** (Russia)
Components of genus Bidens with antihistamine activity
- (P 22)** K. Chojnacka, A. Mertas, W. Król, **J. Jochem** (Poland)
Histamine in probiotic yogurts
- (P 23)** **R. Khanferyan**, C. Gigante Pérez, V. Randriantsalama, F. Diel (Russia)
Histamine H3-receptors may be involved in the production of cytokines and chemokines during music therapy and other non-drug influences
- (P 24)** **M. Cirronis**, M. Conte, C. Lanzi, M. Moschini, A. Vannacci, E. Masini (Italy)
Are phenothiazine-related adverse drug reactions (ADRs) comparable with antihistamin-related ADRs?
- (P 25)** **M. Conte**, M. Cirronis, C. Lanzi, M. Moschini, A. Vannacci, E. Masini (Italy)
Are first and second-third generation anti-H₁ adverse drug reactions (ADRs) comparable?
- (P 26)** N.N. Mahmudovna, O.V. Nikolaevna, K.D. Alekseevich, **B.I. Nikolaevich**, K. K. Nikolaevna (Russia)
Sesquiterpene lactones as anti-allergic agents
- 13:30-19:00** Excursion to Lucca with Lunch Box
- 19:00-22:00** Dinner in Lucca with music: *Les Moquettes and the Dirtyboots*

Saturday May 14th

- 08:30-10:45** **Symposium 5**
Young Investigator Award
- Chairpersons** **R. Thurmond** (USA)
H. Stark (Germany)
H. Timmerman (The Netherlands)
- 08:30-08:45 (019)** **R. Fabbri**, C.R.G. Furini, M.B. Passani, G. Provensi, E. Baldi, C. Bucherelli, I. Izquierdo, J. de Carvalho Myskiw, P. Blandina (Italy)
Brain histamine modulates inhibitory-avoidance memory recall by activating H₁ receptors in hippocampal CA1
- 08:45-09:00 (020)** **D.A. McNaught-Flores**, H. Puttonen, Y. Chen, Henry F. Vischer, P. Panula, R. Leurs (The Netherlands)
Molecular pharmacology of three zebrafish H₃-like receptors

- 09:00-09:15 (021) R. Bosma**, S. Kuhne, I. Josimovic, R.M. Moritani, C. de Graaf, I.J.P. de Esch, H.F. Vischer, R. Leurs (The Netherlands)
Residence time of antihistamines and its effect on signaling of the histamine H1 receptor
- 09:15-09:30 (022) K. Okamoto**, H. Mizuguchi, T. Fujii, T. Yamada, Y. Kitamura, N. Takeda, H. Fukui (Japan)
Effect of narrow-band UVB on up-regulation of Histamine H1 receptor gene expression
- 09:30-09:45 (023) T.Wakugama**, H. Mizuguchi, T. Kadota, A. Sawada, T. Kominami, Y. Kitamura, N. Takeda, H. Fukui (Japan)
Treatment with antihistamines in combination with suplatast tosilate markedly alleviated nasal symptoms in toluene-2,4-diisocyanate-sensitized rats
- 09:45-10:00 (024) R. Marquez-Gomez**, C. Gutierrez-Rodelo, M.T. Robins, J. Escamilla-Sanchez, J.A. Olivares-Reyes, R. van Rijn, J.A. Arias-Montaña (Mexico)
On the existence of a histamine H3-adenosine A2A receptor heteromer
- 10:00-10:15 (025) P. Rzodkiewicz**, E. Gąsińska, D. Łażewska, K. Kieć-Kononowicz, M. Bujalska-Zadrożny, S. Maśliński. (Poland)
Mediators of inflammation in antinociceptive action of JNJ7777120 in rat
- 10:15-10:30 (026) M. Grosicki**, S. Chłopicki, K. Kieć-Kononowicz (Poland)
Histamine in inflammation – the involvement of histamine H4 receptor in human eosinophils adhesion to endothelium
- 10:30-10:45 (027) B.P. Ganesh**, A. Hall, M. Whary, J.G. Fox, J. Versalovic (USA)
Histamine-generating hdcA+ L. reuteri suppresses inflammation and regulates myelopoiesis in mouse models
- 10:45-11:00** **Coffee Break**
- 11:00-12:30** **Poster Session 4**
Inflammation and new therapeutic options
- Chairpersons** **J. Jochem** (Poland)
 L. Kay (USA)
- (P 27)** **S. de la Torre**, G. de Erausquin (Argentina)
Effectiveness of pharmacologically induced histamine release in the treatment of feline rhinotracheitis (feline herpes virus)
- (P 28)** T. Galarza, M. Táquez Delgado, N. Mohamad, G. Vedoya, **V. Medina**, G. Martín, G. Cricco (Argentina)
Phospho-Src protein mediates radio-induced mesenchymal changes in MCF-7 cells. Modulation by histamine.
- (P 29)** **R.L Thurmond** (USA)

Clinical Development of JNJ 39758979 in Atopic Dermatitis and Asthma

- (P 30)** **M. Adami**, C. Micheloni, D. Grandi, H. Stark (Italy)
Effects of selective histamine H4 receptor ligands on croton oil-induced skin inflammation and pruritus in mice
- (P 31)** **B. Baothman**, J. Smith, L. Kay, P. Peachell (UK)
Characterization of the isoform of cyclooxygenase that mediates the generation of prostaglandin D2 from human lung mast cells
- (P 32)** **A. Pini**, P.L. Chazot, A.C. Rosa (Italy)
Parallel hierarchical intra-strain difference between the susceptibility to diabetic nephropathy and renal histamine receptor expression
- (P 33)** **U. Gergs**, J.M. Grobe, J. Neumann (Germany)
Diamine oxidase and monoamine oxidase can degrade histamine in the mammalian heart to an inotropically relevant extent
- (P 34)** **M. Mio**, A. Nogami-Hara, K. Yabuki, K. Suwaki, A. Handa, A. Shimada (Japan)
Asparaginase-induced allergy in mice: effects of concomitant drugs and anti-IgE antibody
- (P 35)** **K. Rossbach**, H. Köchling, W. Bäumer, M. Kietzmann (Germany)
Anti-inflammatory effect of a combined treatment with an H1R antagonist and an H4R antagonist in a mouse model of atopic dermatitis
- (P 36)** **C.L. Rehfeld**, B. Schirmer, D. Neumann (Germany)
Analysis of the function of histamine H4-receptors on murine type 2 innate lymphoid cells (ILC2) activity
- 12:30-13:30** **Symposium 6**
Histamine and future clinical developments
- Chairpersons** **S. Mommert** (Germany)
R. Leurs (The Netherlands)
- 12:30-12:45 (O28)** **R. Thurmond (USA)**
The Pharmacology and Clinical Development of Toreforant a Histamine H4 Receptor
- 12:45-13:00 (O29)** A. Pini, E. Veglia, C. Grange, M. Argenziano, R. Cavalli, R. Fantozzi, R.L. Thurmond, P.L. Chazot, **A.C. Rosa** (Italy)
JNJ 39758979 prevents the progression of diabetic nephropathy
- 13:00-13.15 (O30)** **R. Zuiker**, O. Spiegelstein, A.C. Baakman, N. Gross, R. Yang, M. Fetell, A. Gershon, E. Hellriegel, J. van Gerven (The Netherlands)
Pharmacodynamics (PD) and pharmacokinetics (PK) of single doses of the novel H3-receptor antagonist irdabisant (CEP-26401) in comparison with modafinil and donepezil in healthy volunteers (HVs)

13:15-13.30 (031) J. Heuberger, R. Zuiker, O. Labeeuw, L. Landais, C. Denis, T. Duvauchelle, J. van Gerven, J.C. Schwartz (The Netherlands)
The histamine H3-receptor partial agonist Oxathridine shows sedative effects but also pseudo-hallucinations: first-in-human randomized, placebo controlled, SAD study in healthy volunteers

13:30-13.45 (032) C. Lanzi, L. Lucarini, M. Durante, A. Pini, H. Stark, E. Masini (Italy)
Histamine H3 receptor antagonism effect is enhanced by pharmacological association with NO donors in New Zealand white rabbit model of glaucoma

13.45-14.30 LUNCH

**14.30-15:30 Poster Session 5
Inflammation and new therapeutic options (2)**

Chairpersons
C. Lanzi (Italy)
J. Heuberger (The Netherlands)

(P 37) P. Rzodkiewicz, E. Jednacz, A. Kutkowska-Kaźmierczak, B. Nowakowska, E. Obersztyn, L. Rutkowska-Sak (Poland)
Interstitial deletion of HRH1, SLCA1 and ATG7 genes in a disabled patient with observation of juvenile idiopathic arthritis.

(P 38) K. Schaper, B. Köther, H. Stark, T. Werfel, R. Gutzmer (Germany)
Impact of histamine on type 2 immune response

(P 39) J. Jochem, A. Mitera, K. Jasikowska (Poland)
Influence of histamine H3 receptors on cardiovascular regulation in haemorrhagic shock in rats

(P 40) M. Wohler, K. Schaper, S. Mommert, H. Stark, T. Werfel, R. Gutzmer (Germany)
Modulation of antigen specific t cell proliferation by histamine

(P 41) D.M. Lamas, M. Nicoud, J.C. Perazzo, E. Rivera, V. Medina (Argentina)
Histamine Potentiates Ionizing Radiation-induced DNA damage In Vitro and In Vivo in Human Triple Negative Breast Cancer

(P 42) H. Sterle, M. Nicoud, D.M. Lamas, J.C. Perazzo, G. Cremaschi, V. Medina (Argentina)
Histamine modulates tumor growth and antitumor immunity in 4T1 triple negative breast cancer developed in H4R knock-out (H4R KO) and wild-type (WT) BALB/c mice

(P 43) A.M. Hughes, E.C.C. Pozzi, S. Thorp, P. Curotto, V. Medina, D.M. Lamas, E. S. Rivera, M.A. Garabalino, R.O. Farías, S.J. González, E.M. Heber, M.E. Itoiz, R.F. Aromando, D.W. Nigg, V.A. Trivillin, A.E. Schwint (Argentina)

Histamine reduces the incidence of severe mucositis induced by boron neutron capture therapy (BNCT) in field cancerized tissue in the hamster cheek pouch oral precancer model without compromising therapeutic efficacy

- (P 44)** **L. Lucarini**, C. Lanzi, M. Durante, E. Bigagli, F. Carta, C.T. Supuran, E. Masini (Italy)
Carbonic anhydrase IX and cyclooxygenase-2 inhibitors as a new class of anti-inflammatory drugs
- (P 45)** **M. Durante**, C. Lanzi, L. Lucarini, A. Pini, E. Masini (Italy)
Histamine receptors localization in ciliary bodies, retinae and optic nerve in new zealand white rabbits
- (P 46)** M. Makris, N. Gkavogiannakis, M. Grosicki, **E. Tiligada** (Greece)
Serum histamine and cytokine levels in cancer patients undergoing desensitization to carboplatin: A pilot study
- (P 47)** A. Stasiak, J. Gola, K. Kraszewska, M. Mussur, U. Mazurek, H. Stark, **W. A. Fogel** (Poland)
Experimental autoimmune myocarditis (EAM) in rats and therapeutic H₁-H₄ receptor inhibition
- 15:30-16:30** Final poster viewing and poster evaluation committee meeting, with coffee and soft drinks
- 16:30-18:00** Conclusive remarks by E. Masini (Italy) and P. Chazot (UK)
General Assembly of EHRs Members
- 20:00-23:00** Farewell dinner and live concert with **Les Moquettes and the Dirtyboots**
Palazzo Budini Gattai - Piazza della Santissima Annunziata