3rd International Symposium on:

The Calcium-Sensing Receptor (CaSR)

Florence (Italy), May 11th – 13th, 2017

Organized by

UNIVERSITY OF FLORENCE, FLORENCE, ITALY

MEDICAL UNIVERSITY OF VIENNA, VIENNA, AUSTRIA

UNIVERSITY OF OXFORD, OXFORD, UK

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Promoted by

FONDAZIONE INTERNAZIONALE MENARINI

FINAL PROGRAM

Palazzo Ximènes Panciatichi
The symposium will bring together basic, translational, and clinical scientists from different disciplines who study the molecular biology, physiology, and pathophysiology of the CaSR and clinical disorders of CaSR function.

The program will feature recent research on the role of the CaSR in e.g. skeletal physiology, vascular calcification, pulmonary function, neuronal injury, parathyroid physiology, mineral metabolism, exocrine and transport functions in the gut and kidney, skin biology, and cancer cell signalling. Clinical uses of CaSR modulators to treat human disorders, structural and signaling aspects of the CaSR, and interactions between the CaSR and other GPCRs will be highlights.

The program will include lectures from keynote speakers, oral presentations, poster discussion sessions, and forums for young investigators to meet senior experts.

Maria Luisa Brandi, Enikő Kállay, Rajesh Thakker and Wenhan Chang

Co-Presidents of the Symposium
Requested patronages

Presidenza del Consiglio dei Ministri – Ministero della Salute
Regione Toscana
Comune di Firenze
Università degli studi di Firenze
Azienda Ospedaliero Universitaria di Careggi

Presidents of the Meeting

**Maria Luisa BRANDI**
Università degli Studi di Firenze
CTO - SOD Malattie del Metabolismo
Minerale e Osseo
Florence (Italy)

**Wenhan CHANG**
UCSF Endocrinology & Metabolism
Department of Medicine
University of California
San Francisco (USA)

**Enikő KÁLLAY**
Department of Pathophysiology and Allergy Research
Medical University of Vienna (Austria)

**Rajesh V. THAKKER**
University of Oxford
Radcliffe Department of Clinical Medicine, OCDEM
University of Oxford
Oxford (OX - UK)
International Scientific Committee

Hans Bräuner-Osborne, Michael T. Collins, Arthur Conigrave, Rachel Gafni,
Ed Nemeth, Dolores Shoback, John Wysolmerski

Promoted by

Fondazione Internazionale Menarini

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Organizing Secretariat

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www.iec-srl.it
Thursday, May 11th - Afternoon

OPENING CEREMONY

01.30 p.m. – 02.00 p.m.  Welcome addresses

Maria Luisa Brandi (Florence, I)
Wenhan Chang (San Francisco, USA)
Enikő Kállay (Wien, A)
Rajesh Thakker (Oxford, UK)

02.00 p.m. - 04.30 p.m.  Session I – Calcium CaSR Signalling

Chairpersons:  Frank Bruggeman (Amsterdam, NL)
               Ernesto Carafoli (Padova, I)

02.00 p.m. - 02.30 p.m.  Dolores Shoback (San Francisco, USA)
                         The CaSR Discovery Opens Way to the Future

02.30 p.m. - 03.00 p.m.  Arthur Conigrave (Sidney, AUS)
                         Biased Signalling from CaSR

03.00 p.m. - 03.30 p.m.  Hans Bräuner-Osborne (Copenhagen, DK)
                         CaSR Biosignalling
03.30 p.m.- 04.00 p.m.  Donald Ward (Manchester, UK)
Cell Specific CaSR Signalling

04.00 p.m. – 04.30 p.m.  Leonidas Tsiokas (Oklahoma, USA)
Regulation of CaSR by TRPC1 Channels

04.30 p.m. – 05.00 p.m.  COFFEE BREAK

05.00 p.m. – 07.15 p.m.  Session II –Pharmacology of the CaSR
Chairpersons:  Maria Luisa Brandi (Florence, I)
TBD

05.00 p.m. – 05.30 p.m.  Gerda E. Breitwieser (Danville, USA)
Pharmacoferones

05.30 p.m.- 06.00 p.m.  Edward F. Nemeth (Toronto, CDN)
Drug Targeting for CaSR

06.00 p.m.- 06.30 p.m.  Letizia Vannucci (Florence, I)
Parathyroid Cell Lines: A Model for in vitro Drug Testing
06.30 p.m. – 07.15 p.m.  **Plenary Lecture**

Chairperson:  **Rajesh V. Thakker** (Oxford, UK)

**Allen M. Spiegel** (New York, USA)

Calcium Actions and its Regulators: from Basic Research to Clinical Applications

07.15 p.m.  **WELCOME COCKTAIL**
Friday, May 12th – Morning

08.30 a.m. – 10.30 a.m. Session III – The Role of CaSR in the Pathogenesis of Calcitropic Disorders

Chairpersons: Laura Masi (Florence, I)  
Dolores Shoback (San Francisco, USA)

08.30 a.m. – 09.00 a.m. Rajesh V. Thakker (Oxford, UK)  
CaSR Signalling Pathways and Hypercalcemia in Humans

09.00 a.m. – 09.30 a.m. Michael Mannstadt (Boston, USA)  
CaSR and \( G_{11} \) in Hypoparathyroidism in Humans

09.30 a.m. – 10.00 a.m. Giuseppe Vezzoli (Milan, I)  
Kidney Disorders

10.00 a.m. – 10.30 a.m. David Goltzman (Toronto, CDN)  
Bone Diseases

10.30 a.m. – 11.00 a.m. COFFEE BREAK
11.00 a.m.-12.30 p.m.  

**Session IV - Young Investigators and Hot Topics**

Chairpersons:  
Luisella Cianferotti (Florence, I)  
Geoffrey N. Hendy (Montreal, CDN)

- 11.00 a.m. - 11.15 a.m.  TBD
- 11.15 a.m. - 11.30 a.m.  TBD
- 11.30 a.m. - 11.45 a.m.  TBD
- 11.45 a.m. - 12.00 p.m.  TBD
- 12.00 p.m. - 12.15 p.m.  TBD
- 12.15 p.m. - 12.30 p.m.  TBD

12.30 p.m. – 02.00 p.m.  
**LUNCH AND POSTER DISCUSSION**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session V - Preclinical Models</th>
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<tr>
<td>02.00 p.m.</td>
<td><strong>Chairpersons:</strong></td>
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<td></td>
<td>Arthur Conigrave  (Sidney, AUS)</td>
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<td>Donald Ward (Manchester, UK)</td>
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<td>02.00 p.m.</td>
<td><strong>Qing R. Fan</strong> (New York, USA)</td>
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<td>Crystal Structure of CaSR</td>
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<td>02.30 p.m.</td>
<td><strong>Wenhan Chang</strong> (San Francisco, USA)</td>
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<td>CaSR/GABAβR1 Heteromers Mediate PTH Hypersecretion in Hyperparathyroidism</td>
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<td>03.00 p.m.</td>
<td><strong>Fadil Hannan</strong> (Liverpool, UK)</td>
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<td>Mouse Models for ADH1 and ADH2</td>
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<td>03.30 p.m.</td>
<td><strong>Caroline Gorvin</strong> (Oxford, UK)</td>
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<td>Stable Cell Lines Expressing Adaptor Protein 2 Mutations to Investigate Signalling Pathways</td>
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<td>04.00 p.m.</td>
<td><strong>COFFEE BREAK</strong></td>
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04.30 p.m.-06.30 p.m.  
Session VI - Calcitropic Disorders: News in Medical Treatment

Chairpersons:  
Rachel Gafni (Bethesda, USA)  
Andrea Lenzi (Rome, I)

04.30 p.m.-05.00 p.m.  
John B. Bilezikian (New York, USA)
Primary Hyperparathyroidism

05.00 p.m.-05.30 p.m.  
Masafumi Fukagawa (Tokyo, J)
Secondary Hyperparathyroidism

05.30 p.m.-06.00 p.m.  
Maria Luisa Brandi (Florence, I)
Hypoparathyroidism

06.00 p.m.-06.30 p.m.  
Michael Collins (Bethesda, USA)
Treatment for ADH1 in Humans

06.30 p.m.-08.00 p.m.  
Session VII – Non Calcitropic Disorders: Digestive and Skin Function

Chairpersons:  
Eniko Kallay (Wien, A)  
Francesco Tonelli (Florence, I)

06.30 p.m. – 07.00  p.m.  
Chia-Ling Tu (San Francisco USA)
Role of CaSR in skin wound healing

07.00 p.m. – 07.30 p.m.  
James J. Pestka (East Lansing, USA)
Control of Gastroenteric Hormones by CaSR

07.30 p.m. – 08.00 p.m.  
Sam Cheng (Gainesville, USA)
The Role of the CaSR in Gastrointestinal Inflammation
Saturday May 13th - Morning

08.00 a.m. – 09.00 a.m.  
**Session VIII – Non Calcitropic Disorders: Blood Vessels and Lung**

Chairpersons: 
**Dolores Shoback** (San Francisco, USA)  
**Elisabetta Cerbai** (Florence, I)

08.00 a.m. – 08.30 a.m.  
**Harry Z.E. Greenberg** (London, UK)  
Vasoldiation NO/CaSR

08.30 a.m. – 09.00 a.m.  
**YS Prakash** (Rochester, USA)  
Calcium Sensing Receptor in Perinatal Airway Disease

09.00 a.m. – 11.00 a.m.  
**Session IX – Non Calcitropic Disorders: Cancer**

Chairpersons:  
**Wenhan Chang** (San Francisco, USA)  
**Romuald Mentaverri** (Amiens, F)

09.00 a.m. – 09.30 a.m.  
**John Wysolmerski** (New Haven, USA)  
CaSR actions on PTHrP in Breast Cancer

09.30 a.m. – 10.00 a.m.  
**Eniko Kallay** (Vien, A)  
The Role of the CaSR in Colon Cancer

10.00 a.m. – 10.30 a.m.  
**Carmen de Torres** (Barcelona, E)  
The Role of the CaSR in Neuroblastoma

10.30 a.m. – 11.00 a.m.  
**COFFEE BREAK**
11.00 a.m. – 1.00 p.m. **Session X – Future Developments for CaSR Targeted Therapies**

Chairpersons:

Elisabetta Cerbai (Florence, I)

Fadil Hannan (Liverpool, UK)

11.00 a.m. – 11.30 p.m. **Daniela Riccardi** (Cardiff, UK)

Asthma

11.30 p.m. – 12.00 p.m. **Seiji Fukumoto** (Tokushima, J)

Glucose Metabolism

12.00 p.m. – 12.30 p.m. **Katie Leach** (Clayton -Melbourne, Australia)

Rational design of CaSR therapeutics for diverse disorders

12.30 p.m. – 03.00 p.m. *LUNCH AND POSTER DISCUSSION*

03.00 p.m. – 03.15 p.m. **Concluding Remarks**

Maria Luisa Brandi (Florence, I)

Wenhan Chang (San Francisco, USA)

Enikő Kállay (Wien, A)

Rajesh Thakker (Oxford, UK)
GENERAL INFORMATION

Meeting venue
The venue for the Meeting will be Palazzo Ximènes Panciatichi, Via Borgo Pinti, 68 - 50121 Florence (Italy)

Accommodation
It is possible to book a room at a special rate using the Florence Convention Bureau website (http://www.florencecongressbooking.com/index/en.shtml) indicating the code CASR2017.

Secretariat during the Meeting
The Secretariat will be open at the following times:
Thursday, May 11th, from 01.30 p.m. to 07.45 p.m.
Friday, May 12th, from 08.00 a.m. to 08.00 p.m.
Saturday, May 13th, from 08.00 a.m. to 01.30 p.m.

Official language
The official language of the Meeting will be English.

Registration
The Meeting is free to attend. Please confirm the participation to the Organizing Secretariat (Fondazione Internazionale Menarini – Phone: +39 02 55308110 – Fax: +39 02 55305739.
E-mail: milan@fondazione-menarini.it) within April 28, 2017.

Technical facilities
Facilities will be available for computer presentations and overhead projections.
A business center with PC (Powerpoint for Windows) will be available for check and preview of presentations. It is essential that speakers take their presentation to the business center at least one hour before the session starts.

The center will be open at the following times:
Thursday, May 11th, from 01.30 p.m. to 07.45 p.m.
Friday, May 12th, from 08.00 a.m. to 08.00 p.m.
Saturday, May 13th, from 08.00 a.m. to 01.30 p.m.

Lunches and coffee breaks

Lunches and coffee breaks will be served in the Meeting area.

Abstracts book

Participants will receive the Abstract book at the Meeting.

European CME Credits

EACCME credits have been requested for May 11th-12th-13th for the following disciplines: Internal Medicine, Metabolic and Diabetes Diseases, Rheumatology, Clinical Biochemistry, Endocrinology, Andrology and Reproduction Medicine.