

## Dr. Caterina Maria Leone – *Short Curriculum Vitae*

### **Personal data**

Place and date of birth      Torino, Italy, 10<sup>th</sup>  
February 1983      Nationality      Italian  
Work Address      *Department of Human Neuroscience,  
Sapienza University, Viale dell'Università 30, 00185, Rome, Italy*  
Phone      [REDACTED]  
E-mail  
ORCID

### **Qualifications**

MD; PhD (Neuroscience)

### **Education**

1997-2001      High School ("liceo scientifico"), (91/100).  
Jan 2006-Jun 2006      Maternity Leave  
Sept 2009      MD (110/110 *cum laude*) "Sapienza" University  
"Neuropathic itch: pruriceptors distribution and  
physiopathology"  
2011-2016      PhD in Neuroscience cum laude, "Sapienza"  
University  
Tutor: Prof. Giorgio Cruccu  
Thesis: "What's behind neuropathic pain?  
Neurophysiological diagnostic tests investigating  
mechanisms underlying neuropathic pain"  
Jul 2011-Jan 2012      Maternity Leave  
Oct 2014-Mar 2015      Maternity Leave

### **Academic appointments** (in reverse chronological order)

Jan 2023-Mar 2023 **Collaboration Bursary**  
Università degli Studi di Roma "La Sapienza", Roma (Italy)  
Department of Human Neuroscience  
Research project: "'IMI- PainCare (BioPain subtopic)".  
Feb 2022-Feb 2023 **Collaboration Bursary**  
Università degli Studi di Roma "La Sapienza", Roma (Italy)  
Department of Human Neuroscience  
Research project: "'IMI- PainCare (BioPain subtopic)".  
Jan 2019-Dec 2021 **Post Doc**  
Università degli Studi di Roma "La Sapienza", Roma (Italy)  
Department of Human Neuroscience  
Research project: "'IMI- PainCare (BioPain subtopic)".

Oct 2017–Sept 2018 **Post Doc**

Università degli Studi di Roma "La Sapienza", Roma (Italy)  
Department of Human Neuroscience

Research project: "Neurophysiological tests to disentangle the pathophysiological mechanisms underlying neuropathic pain symptoms".

- Jun 2016–May 2017 **Post Doc**  
 Università degli Studi di Roma “La Sapienza”, Roma (Italy)  
 Department of Human Neuroscience  
 Research project: “Breaking dogmas: neurophysiological and neuroimaging study on non- nociceptive Aβ fibres mediating pain in healthy humans”.
- Jan 2015–Dec 2015 **Post Doc**  
 Università degli Studi di Roma “La Sapienza”, Roma (Italy)  
 Department of Human Neuroscience  
 Research project: "Nociceptive-motor integration in patients with central and peripheral pain"
- Jan 2011–Oct 2011 **Collaboration Bursary**  
 Fondazione Don Carlo Gnocchi ONLUS, roma (Italy)  
 Research activity focused on pathophysiological mechanisms behind neuropathic pain
- Jul 2010–Dec 2010 **Collaboration Bursary**  
 Fondazione Don Carlo Gnocchi ONLUS, roma (Italy)  
 Research activity focused on pathophysiological mechanisms behind neuropathic itch
- 2008–2021 **Pre degree trainee/post degree trainee**  
 Azienda ospedaliera Policlinico Umberto I- UOC patologie neuromuscolari, Roma (Italy) Fields of research:  
 -Assessment, diagnosis and therapy of neuropathic pain.  
 -Clinical and neurophysiological evaluation of peripheral neuropathies  
 -Craniofacial pain: trigeminal neuralgia, atypical facial pain, etc.  
 -Application of functional neuroimaging in patients with neuropathic pain  
 -Neurophysiology: ssep, lep, cheps, ceps, mep, baeps, eng, emg, trigeminal reflexes  
 -Threshold tracking  
 -Certificate for ICH E6 GCP Investigator site training  
 -ECCN Hands-on Teaching Course on Nerve and Muscle Excitability Studies, including MScan MUNE, Warsaw Poland

**Total post graduate research experience: 13 years**

**International experience**

- December 2022 Chair of the Special Interest Group on Pain of the International Federation on Clinical Neurophysiology IFCN
- October 2021 Visiting researcher at the Mannheim Faculty of Medicine c/o Prof. Rolf-Detlef Treede Heidelberg University
- Sept 2018-Dec 2021 Research Member (Investigator) of the European project IMI-Paincare Biopain Subtopic (project RCT 1,2 and 3)
- Feb 2019-Jul 2019 UCL-Rome project on minimal thermo-nociceptive interactions (MTNIs): 6 months collaboration with Prof. P. Haggard Lab in ICN, London UK
- 04/06/2017-11/06/2017 European Pain School, Pontignano, Italy

**Summary of Publications (2011-2022)**

**Indeces compatible with associate  
professor qualification**

*Articles in peer-reviewed journals:* **35**  
*As first or senior author:* **11**

Number of citations (Scopus, 470  
Researchgate): 618

H-index (Scopus, 13  
Researchgate): 13

### **Funding**

1. University Project 2021 as PI: 3.000 EUR
2. University Project 2020 as participant: 10.500 EUR
3. IMI PainCare Biopain subtopic as participant: 570.000 EUR
4. University Project 2016 as co-PI: 4.000 EUR
5. University Project 2015 as participant: 14.000 EUR
6. University Project 2014 as participant: 10.000 EUR
7. University Project 2013 as participant: 8.500 EUR

### **Main scientific awards**

1. Young investigator best scientific contribution, SINC conference, Milano (2014)
2. IFCN Young Investigator Fellowship (2014)
3. Young investigator best scientific contribution, SINC conference, Verona (2015)
4. SIN Young Investigator Fellowship (2015)
5. YAP project, Young Against Pain (2016)
6. IASP Young Investigator Fellowship (2018)
7. IASP/NeuPSIG Young Investigator Fellowship (2019)
8. Best Ph.D thesis 2015/2016 award "Sapienza" (2019)

### **Roles in scientific journals**

Editorial board member of Pain Reports, EC Neurology (ECNE) and Journal of Psychiatry and Psychiatric Disorders; Topic Editor for the section Neuroscience of Pain for Brain Sciences journal  
Reviewer for many impacted journals in the pain field (Frontiers; European Journal of pain; Neuroscience Letters, Neurological Sciences; Clinical Neurophysiology)

### **Presentation at International Congresses**

- New insights on human models and neurophysiological biomarkers of central sensitization (oral)  
ICCN, Geneva, Switzerland 27-30 Apr 2022
- Functional biomarkers of nociceptive signal processing – back-translation of human studies to preclinical models (oral)  
EFIC, Dublin, Ireland 27-30 Apr 2022
- Cooling the skin for assessing small-fibres function (poster)  
ECCN, Warsaw, Poland, 04-07 Jun 2019
- Cooling the skin for assessing small-fibres function (oral)  
Laser and Pain Talks in Europe, Lyon, France, 23-25 May, 2019
- Nociceptive system evaluation in patients with Non Suicidal Self Injury Syndrome. Does the vertex N2 component of the laser evoked potentials may serve as a biomarker of suicidal risk? (poster)  
NeuPSIG, London, UK, 9-11 May, 2019
- Trigeminal small-fibers function assessed with cold evoked potentials in humans (poster)  
IASP Congress, Boston, USA, 13-16 Sept 2018
- Nociceptive system evaluation in patients with Non Suicidal Self Injury Syndrome (oral)  
Laser and Pain Talks, Bruxelles, Belgium, 04-06 May, 2017  
Dronabinol inhibits nociceptive transmission in humans. A double-blind randomized control study (poster) ECCN, Brno, Czech Republic, 30sept-3 oct, 2015

- Small fibre neuropathy related to bulbar and spinal onset in patients with SLA (poster)  
*ECCN, Brno, Czech Republic, 30sept-3 oct, 2015*
- Paroxysmal Pain is mediated by non-nociceptive large-myelinated fibres. A neurophysiological study in normal humans. (poster)  
*ICCN-IFCN, Berlin, Germany, 21-23 March, 2014*
- Painful neuropathy related to gastric bypass surgery for obesity (poster)  
*ECCN, Rome, Italy, 21-25 Jun, 2011*

## **Invited Presentations**

Invited Lecture on “Spinal Neurophysiological biomarkers of central sensitization”, Teva meeting, Netanya, Israel 2022

Symposium on “New insights on human models and neurophysiological biomarkers of central sensitization” ICCN 2022

Workshop on “Neurophysiological biomarkers for central sensitization in humans” EFIC 2022

Invited Lecture on “Novel neurophysiological biomarkers in pain research” Nocions, UC Louvain 2021

Invited Lecture on Neurophysiological Diagnosis of Pain at the IV Course on EEG and Evoked Potentials (SINC 2021)

Invited Lecture on Neurophysiological Diagnosis of Pain at the Course on EEG and Evoked Potentials (SINC 2020)

Workshop on the Quantitative sensory testing among the CASCADE project: Clinical-diagnostic framework of the peripheral nervous system disease and new therapeutic evidences. (2018)

Invited Lecture on Trigeminal reflexes at the XVII Course on EMG and Evoked Potentials (SINC 2018)

Invited Lecture on Trigeminal reflexes at the XVIII Course on EMG and Evoked Potentials (SINC 2019)

Speaker. Pain and Neuroinflammation. *36 National Congress on General Medicine* (2019)

## **Academic supervision**

### Undergraduate students

Supervision of 9 bachelor theses at the faculty of Medicine and Surgery, Sapienza University

### Graduate students

Supervision of 1 master thesis in Neurology, Department of Human Neuroscience, Sapienza University

### Phd student

Supervision of 1 Phd thesis at the Ph.d course on innovative technologies in Diseases of skeleton, skin and oro-cranio-facial district, Sapienza University

### Member of Ph.d committee

Lyon University 1

## **Teaching Activity**

Mar 2013-Mar 2022	Master in Neuropathic pain management at Azienda Ospedaliera S.Andrea Lecture: Diagnosis of neuropathic pain: focus on clinical usefulness of trigeminal reflexes and laser evoked potentials
Oct 2018-Present	Bachelor's degree course in Medicine and Surgery, Nervous system's disease, Sapienza University Lecture: Neurophysiological diagnosis

### **Memberships of scientific societies**

Chair of the Special Interest Group on Pain of the IFCN (2023)

International Association for the study of pain (IASP), since January 2017

Neuropathic Pain Special Interest Group (NeuPSIG), since January 2017

Italian Society of Clinical Neurophysiology (SINC), since 2013

Italian Society of Neurology (SIN), since 2013



### **Major collaborations**

Prof. Rolf-Detlef Treede, Department of Neurophysiology, Mannheim Center for Translational Neurosciences (MCTN), Medical Faculty Mannheim, University of Heidelberg, Mannheim, Germany.  
Prof. André Mouraux, Institute of Neuroscience (IoNS), UCLouvain, Brussels, Belgium.  
Prof. Luis Garcia-Larrea, Lyon Neurosciences Center Research Unit Inserm U 1028, Pierre Wertheimer Hospital, Hospices Civils de Lyon, Lyon 1 University, Lyon, France  
Prof. Valery Legrain, Institute of Neuroscience (IoNS), UCLouvain, Brussels, Belgium  
Prof. Giandomenico Iannetti, Italian Institute of technology (IIT), Rome, Italy  
Prof. Massimiliano Valeriani, Ospedale pediatrico Bambin Gesù (OPBG), Rome Italy  
Prof. Massimo Leandri, Dipartimento di scienze chirurgiche e diagnostiche integrate, Genova  
Prof. André Dufour, Laboratoire d'Imagerie et de Neurosciences Cognitives (LINC), University of Strasbourg (UNISTRA), Strasbourg

Rome, 01/12/2022  
Sign

