Date prepared: November 21st 2018

### **Personal information**

Name: Luisella Cianferotti

E-mail: luisella.cianferotti@unifi.it

Nationality: Italian
Date of birth: 18/02/1971

Gender: Female Mother tongue: Italian

Other languages: English (proficient user in understanding, speaking, and writing); French and

Spanish (beginner user)

# Work experience

2012-ongoing

Position held: Assistant Professor of Endocrinology, tenure track

Department of Surgery and Translational Medicine, University of Florence, Florence, Italy

2008-2012

Position held: Research and Clinical Assistant

Main activities and responsibilities: Design and developing of clinical trials and basic science projects, clinical activities expecially in the field of bone and mineral metabolism, with particular regard to vitamin D deficiency assessment and treatment

Name: Department of Endocrinology and Metabolism, University of Pisa, Pisa, Italy

2002-2003

Position held: Clinical Collaborator

Main activities and responsibilities: Clinical research, clinical activities (management of

endocrinopathies, bone densitometry, thyroid ultrasound)

Name: Department of Endocrinology and Metabolism, University of Pisa, Pisa, Italy

Type of business or sector: Medicine (Endocrinology) and Research

## **Education and titles of education**

2003-2008

PhD in Endocrinological and Metabolic Sciences

Department of Endocrinology and Metabolism, University of Pisa, Pisa, Italy

2004-2007

Postdoctoral Fellowship in Medicine

Harvard Medical School, Masschusetts General Hospital, Boston, MA, USA

1997-2002

Specialty Degree in Endocrinology and Metabolism

University of Pisa, Pisa, Italy

1999

Research Fellowship

Molecular Endocrinology Group, MRC Clinical Sciences Centre, Imperial College School of Medicine, Hammersmith Hospital, London, UK

1997

**National Board** 

Italian National Board of Medicine and Surgery

1990-1996

MD Degree (Magna cum Laude), University of Pisa, Pisa, Italy

### **Honors and Awards**

### 2012

Young Researcher Award by Società Italiana dell'Osteoporosi, del Metabolismo Minerale e delle Malattie dello Scheletro (SIOMMMS)

#### 2012

Outstanding Abstract Award by Endocrine Society, Endocrine Society's Annual Meeting, Houston, TEXAS, USA

#### 2009

Best Scientific Production Award (for the year 2007) by Società Italiana dell'Osteoporosi, del Metabolismo Minerale e delle Malattie dello Scheletro

#### 2006

Best Oral Communication Award by Società Italiana dell'Osteoporosi, del Metabolismo Minerale e delle Malattie dello Scheletro (SIOMMMS), VI Congresso Nazionale SIOMMMS

#### 2006

Fo.Ri.SIE Award for the Development of Scientific Research by the Società Italiana di Endocrinologia (SIE)

#### 2001

Best Poster Award by Società Italiana dell'Osteoporosi, del Metabolismo Minerale e delle Malattie dello Scheletro, Congresso Nazionale SIOMMMS

### 1999

Leonardo da Vinci Fellowship by the EU – Education and Culture, Lifelong Learning Programme Leonardo da Vinci

## **Teaching experiences**

### 2014-present:

Course "Endocrinology of Mineralized Tissues" in the Integrated Course of Implantology, within the single cycle degree of Dentistry and Dental Prostesis, University of Florence

## 2015-present:

Course Endocrine Physiopathology in the Integrated Course of Pathology within the Bachelor's Degree Biomedical Laboratory Techniques, University of Florence

## 2015-present:

Teaching of Diseases of bone and mineral metabolism in the Postgraduate Schoold of Endocrinology, University of Florence

## 2017-present:

Teaching of Endocrinology in the single cycle degree of Medicine and Surgery

### 2016-present:

Member of the Commission of the PhD in Clinical Sciences, University of Florence, Florence, Italy

CME Lectures in several national and international conferences

### **Scientific Secretariat Activity**

2009

National Conference "Vitamin D: new reoles for an old hormone", Pisa, Italy

2010

International Symposium "Parathyroids 2010: from pathophysiology to the clinical use of PTH", Pisa, Italy.

### **Scientific Publications**

Author of more than 90 peer-reviewed scientific papers, more than 160 abstracts presented at national and international meetings, more than 20 reviews published in books or non-peer reviewed journals.

According to the Scopus database (excluding meeting abstracts): h-index 19.

## **Technical skills and competences**

<u>Clinical Practice</u>: management of endocrine diseases, with a particular expertise in mineral metabolism, experience in bone densitometry, thyroid ultrasound examination, fine needle aspiration biopsy of the thyroid.

<u>Clinical Science</u>: experience with clinical trials design, execution, critical analysis of results, statistical analysis; specimen handling; hormonal immunoassays.

<u>Basic Science</u>: experience with: mice handling and dissection, bone isolation and preparation, (from embryos and newborns/adults); molecular biology, cellular biology and biochemistry: genotyping; tissue culture studies (primary bone marrow stromal cell, primary calvarial osteoblast and cell line cultures); DNA, RNA and protein extraction both from cells and tissues; PCR and RT-PCR; protein analysis, protein-protein and protein DNA interaction (western blotting, immunoprecipitations, GST-pull down assays, mobility shift assays); gene transactivation assays both in primary cultures and in cell lines;

studies of proliferation (following BrdU incorporation) and apoptosis (TUNEL labeling); histological techniques, immunohistochemistry, immunofluorescence and microscopic analysis of the specimens; statistical analysis, linkage analysis, computerized sequence analysis.

Computer Experience: Proficient in Microsoft Office (including Word, Excel, Power Point), statistical programs (Stat View, SPSS), picture editing (Photoshop), reference managing programs (End Note), databases (Access, File Maker), scientific internet search (PubMed and other scientific websites).

### **Affiliations**

2000-present: Member of the Italian Society of Osteoporosis, Mineral Metabolism and Skeletal Diseases (SIOMMMS).

2001-present: Member of the Italian Society of Endocrinology (SIE).

2000-2016: Member of the American Society of Bone and Mineral Research (ASBMR)

2006-2014: Member of the Endocrine Society.

## **Reviewing Activity**

Journal of Endocrinological Investigations Maturitas Calcified Tissue International Nature Scientific Reports Endocrine BMC Medical Genetics

### **Research Interests**

### Past research

- -Clinical, biochemical and densitometric studies in primary hyperparathyroidism
- -Randomized controlled study on the outcome of parathyroidectomy in mild primary hyperparathyroidism
- -Intervention trials with vitamin D (cholecalciferol and calcifediol) in several bone and mineral disorders such as primary hyperparathyroidism and in chronic diseases not directly related to alterations in mineral homeostasis such as cancer and autoimmune disorders.
- -Clinical trial on the use of cinacalcet in primary hyperparathyroidism.

- -Clinical and molecular biology studies in hereditary hypophosphatemic rickets, tumoral calcinosis and familial primary hyperparathyroidism.
- -Genetic analysis of sporadic primary hyperparathyroidism, familial benign hypercalcemia and MEN1 syndrome
- -Effects of the vitamin D receptor on osteoblast and adipogenic differentiation in primary cultures of murine bone marrow stromal cells
- -Study on the ligand-independent effects of the vitamin D receptor on hair cycling; nuclear protein-protein and protein-DNA interactions.

### Present research

- -Clinical and translational studies in the field of osteoporosis, metabolic bone diseases, thyroid and parathyroid diseases/tumorigenesis (primary hyperparathyroidism and hypoparathyroidism), multiple endocrine neoplasias
- -Clinical intervention trials in hypoparathyroidism
- -Basic/translational studies in parathyroid tumorigenesis, skeletal muscle physiology and pathology
- -Epidemiological studies on osteoporotic fractures, rare diseases of bone and mineral metabolism through the analysis of Regional Healthcare Databases
- -Observational studies on bone quality and early osteoarthritis under aromatase inhibitors in women with mammary cancer

## Participation to international research projects

- -2013-2016: Credits4Health (C4H): a credit-based, people-centric approach for the adoption of healthylife-styles and balanced Mediterranean diet in the frame of social participation and innovation forhealth promotion –FP7 Project funded by the EU (#602386).
- -2013-2015: European Innovation Partnership of Active and Healthy Ageing (EIP-AHA), promoted by the EU with the projects: MONitoring of prescription and improving ADherence to anti-OSteoporotic treatments(MONADOS project), Fall prevention in OsteopoRotic patients after hip FracturE and impact on Neurocognitive symptoms (FORFENd projeject), Optimizing nutrition and physical activity in healthy ageing: intervention on subclinical frailty

## Participation to national research projects

- -2017-present: PRIN "Complex signatures of circulating microRNAs as novel biomarkers for osteoporosis and fracture risk", by MIUR (#201528E7CM)
- -2014-2016: PRIN "MUsclecrinology: characterization of SKeletal muscle as a target organ and a key playerin the ENDOcrine-metabolic system (MUSKENDO)", by MIUR (#2012227FLF).
- -2017-present: "Hypophosphatasia in the adults: a population study of atypical fragility femoral fractures collected from major traumatology centers in Italy".
- -2017-present: "BehavlOur of Mineral metabOlism in patients with longstanding, chRonic hypoparathyroidism when adiministered recombinant Parathyroid Hormone 1-84: an in vivo study in humans (BIOMoRPH)" by Shire.
- -2016-present: "Observational study of patients with chronic hypoparathyroidism in the Tuscany region".
- -2013-2016: "RIFF: risk and incidence of fragility fractures in Italy for the updating and validation of the Italian version FRAX and supporting the nation registry of fragility fractures", by Istituto Auxologico Italiano.
- -2013-2015: "Recombinant human parathyroid hormone (rhPTH1-84) as therapy for adults with hypoparathyroidism" by AIFA

### Participation to regional research projects

-2013-present: TARGET Project: Trattamento Appropriato delle Rifratture Geriatriche in Toscana, by Region of Tuscany.

I consent to the treatment of the personal data contained into my Curriculum Vitae according to the Legislative Decree No. 196 of June 30, 2003 "Italian Personal Data Protection Code".