



## CURRICULUM VITAE

**Dr. Nadia Rucci,**

[REDACTED] [REDACTED],  
Italian citizenship

### ADDRESS

Department of Biotechnological and Applied Clinical Sciences (DISCAB), University of L'Aquila,  
via Vetoio – Coppito 2, 67100 L'Aquila, Italy.

Tel. +39 0862433525; Fax +39 0862433523; e-mail: [rucci@univaq.it](mailto:rucci@univaq.it)

### PRESENT POSITION

2016- Associate Professor of Histology and Head of the Skeletal Diseases Laboratory,  
Department of Biotechnological and Applied Clinical Sciences, University of  
L'Aquila, Italy.

### DEGREES

2003 School of Specialization in Clinical Pathology, University of L'Aquila, Italy  
1999 PhD in Endocrinology and Metabolic Diseases, University of L'Aquila, Italy  
1997 Qualified as Biologist, University of L'Aquila, Italy  
1994 Bachelor in Biology, University "La Sapienza", Rome, Italy

### PAST POSITIONS

2014-2011 Assistant Professor of Histology and Head of the Skeletal Diseases Laboratory,  
Department of Biotechnological and Applied Clinical Sciences, University of  
L'Aquila, Italy.  
2011-2007 Research agreement for the project "OSMA" (OSteoporosis and Muscular Atrophy),  
BBL, Department of Experimental Medicine, University of L'Aquila, Italy.  
2007-2005 Research agreement for the European project METABRE (Molecular mechanisms  
involved in organ-specific metastatic growth processes in breast cancer), BBL,  
Department of Experimental Medicine, University of L'Aquila, Italy.  
2005-2001 Research agreement for the project "Molecular and cellular mechanisms of bone  
metastases: role of estrogen receptor in breast cancer", BBL, Department of  
Experimental Medicine, University of L'Aquila, Italy.  
2001-2000 Fellowship, Adriano Buzzati Traverso Foundation (FABT), Bone Biopathology  
Laboratory (BBL), Supervisor Prof. Anna Teti, Department of Experimental  
Medicine, University of L'Aquila, Italy.  
2000-1999 Fellowship, Consiglio Nazionale delle Ricerche (CNR), Naples, Italy, working on  
the project: "Study of endemic goitre and alterations of iodine deficiency in  
Southern Italy".  
1999-1995 PhD student, Endocrinology laboratory, Department of Experimental Medicine,  
University of L'Aquila, Italy.  
1994-1992 Student Training at the "V^ Clinica Medica", Policlinico Umberto I, University of  
Rome "Sapienza", Italy.

## **TEACHING**

- 2011-present Course of Biotechnological Experimental Models, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2012-2011 Course of Stem cells and tissue regeneration, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2011-2010 Course of Molecular Diagnostic, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2011-2005 Collaboration Course of Stem cells and tissue regeneration, Molecular imaging, Animal models of diseases, and Bone biotechnology, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2009-2008 Course of Integrated Laboratory 3, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2005-present Collaboration courses of Cytology, Histology and Human Embryology, and Human Anatomy, University of L'Aquila School of Biotechnology, L'Aquila, Italy.
- 2005-2001 Collaboration course of Histology and Embryology, University of L'Aquila Dental School and Specialization Schools.

## **ACADEMIC BOARDS**

Member of the Board of the PhD In Experimental Medicine, University of L'Aquila, L'Aquila, Italy.  
Head of the Welfare Animal Committee, University of L'Aquila, Italy.

## **STAGES**

- 2003 (August-October) Exchange Scholarship Grant, Leiden University Medical Centre, The Netherlands.
- 2001 (January) Department of Medicine, Division of Endocrinology, University of Texas Health Science Centre at San Antonio, TX, USA.

## **ORAL PRESENTATIONS**

- 2015 4<sup>th</sup> Joint Meeting European Calcified Tissue Society (ECTS) & the International Bone and Mineral Society (IBMS), Rotterdam, The Netherlands;  
International Society of Cancer Metabolism (ISCaM), Venice, Italy;  
Austrian Society for Bone and Mineral Research (AusBMR) meeting, Vienna, Austria.
- 2012 Austrian Society of Bone and Mineral Research (AusBMR) meeting, Vien, Austria  
SIOMMMS, XII National Congress, Bologna, Italy  
Cancer Induced Bone Diseases (CIBD) meeting, Lyon, France  
Italian Society for Space Biomedicine and Biotechnology (ISSBB) VI National Congress, Brindisi, Italy  
European Symposium on Calcified Tissues, Stockholm, Sweden  
2<sup>nd</sup> IOF-ESCEO pre-clinical symposium, Bordeaux, France

	XI Forum in Bone and Mineral Research, Gazzada Schianno, Varese, Italy
2011	American Society of Bone and Mineral Research (ASBMR) 33 <sup>rd</sup> Annual Meeting, San Diego, USA
	3 <sup>rd</sup> Joint Meeting European Calcified Tissue Society & the International Bone and Mineral Society, Athens, Greece
2010	9 <sup>th</sup> Forum in Bone and Mineral Research, Milan, Italy
2009	2 <sup>nd</sup> IBMS Davos Workshop: Bone Biology & Therapeutics, Davos, Switzerland
2008	IV Forum in Bone and Mineral Research, Naples, Italy
	European Symposium on Calcified Tissues, Barcelona, Spain.
2006	International Conference on Progress in Bone and Mineral Research, Vien, Austria.
	ASBMR 28 <sup>th</sup> Annual Meeting, Philadelphia, USA.
	European Symposium on Calcified Tissues, Prague, Czech Republic
2005	European Symposium on Calcified Tissues, Geneve, Switzerland
	I Forum in Bone and Mineral Research, Torino, Italy
2004	European Symposium on Calcified Tissues, Nice, France
	Frontiers of Skeletal Biology, Davos, Switzerland
2003	International Conference on Progress in Bone and Mineral Research, Vien, Austria
	European Symposium on Calcified Tissues, Rome, Italy

## INVITED LECTURES

2016	<i>RUBICON Webinar: Data Reproducibility and Good Laboratory Practice for Animal Studies.</i>
2015	<i>ECTS-IBMS Post Doc Training</i> , Rotterdam, Olanda
2014	- “L’osso al centro della CKD-MBD”, <i>Ca-P School</i> , University of Rome, Sapienza SYBIL satellite symposium meeting, Rotterdam, The Netherland
	INTERBONE Annual Symposium, Prague, Czech Republic
2012	ECTS training workshop “Cancer and bone, a guide for in vivo experiments”, L’Aquila, Italy
	Meeting “Tra cuore e rene c’è di mezzo l’osso?” Rome, Policlinico Umberto I
2011	SIOMMMS, XI National Congress, Rome, Italy
	Osteotropic cancers: new pathogenic and clinical aspects, Bari, Italy
2010	Istituto Tumori Giovanni Paolo II, Bari, Italy
2009	3 <sup>rd</sup> IBRA (International Bone Research Association) Scientific Seminar, Basel, Switzerland
2007	Bone and Heart Meeting, Florence, Italy
2006	Mediterranean School of Oncology, Rome, Italy
2005	Novartis Pharma, Basel, Switzerland
2002	University of Brescia, Faculty of Pharmacology, Brescia, Italy

## CO-CHAIR

2014	European Symposium on Calcified Tissue, Plenary Orals- Important pathways in bone biology and cancer. Prague, Czech Republic.
2011	3 <sup>rd</sup> Joint Meeting European Calcified Tissue Society & the International Bone and Mineral Society, Cancer and Bone workshop. Athens, Greece,
2006	European Symposium on Calcified Tissue, Loading workshop. Prague, Czech Republic.

## AWARDS

2009	International Bone Research Association (IBRA) Robert Schenk Research Prize
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- 2004** Novartis Young Investigator Award, European Symposium on Calcified Tissues, Nice, France  
**2003** Novartis Young Investigator Award, European Symposium on Calcified Tissues, Rome, Italy  
**2001** Travel grant, International Bone and Mineral Society and European Calcified Tissue Society, Madrid, Spain

## INTERNATIONAL SCIENTIFIC SOCIETIES

1. American Society for Bone and Mineral Research (ASBMR)
2. International Bone and Mineral Society (IBMS)
3. European Calcified Tissues Society (ECTS)
4. European Association for Cancer Research (EACR)

## INTERNATIONAL JOURNALS

### *Guest Editor:*

“Inflammation & Allergy – Drug Targets” special issue: “Bone and Immune System cross-talk”.

### *Journal Reviewer:*

1. Acta Biomaterialia
2. Aging Clinical Experimental Research
3. Archives Biochemistry and Biophysics
4. American J Physiology Applied Physiology
5. Anticancer Therapy
6. Biochimica et Biophysica Acta-Biomembranes (BBA-BMB)
7. Biologia
8. Biotechnology and Applied Biochemistry
9. BioMedCentral Cancer
10. BioMedCentral Veterinary Research
11. Bone
12. British J Pharmacology
13. Calcified Tissue International
14. Clinical Cancer Research
15. Clinical and Development Immunology
16. Clinical Experimental Metastasis
17. Clinical Investigation
18. International Journal Molecular Science
19. Journal of Cellular Biochemistry
20. Journal of Cellular Physiology
21. Journal of Endocrinology Investigation
22. Journal of Experimental & Clinical Cancer Research
23. Journal of Bone and Mineral Research
24. Journal of Orthopaedic Research
25. Microgravity Science and Technology
26. Osteoporosis International
27. PLOS ONE
28. Recent Patent on Biomarkers

## GRANT REVIEWER

1. Canadian Space Agency Life Science program
2. NOW/SRON User Support Programme Space Research, The Netherlands
3. ECTS/AMGEN Bone Biology Fellowship.
4. The French National Research Agency (ANR)
5. BONE CANCER RESEARCH TRUST

## ABSTRACT REVIEWER

1. European Symposium on Calcifie Tissues, Valencia, Spain
2. European Symposium on Calcified Tissues, Salzburg, Austria
3. European Symposium on Calcified Tissues, Rome, Italy.
4. *4<sup>th</sup> Joint Meeting European Calcified Tissue Society & the International Bone and Mineral Society*, Rotterdam, The Netherlands
5. European Symposium on Calcified Tissue, Prague, Czech Republic.
6. European Symposium on Calcified Tissues, Lisbon, Portugal
7. European Symposium on Calcified Tissues, Glasgow, UK
8. European Symposium on Calcified Tissues, Vien, Austria

## ORGANIZATION OF MEETINGS

1. Member of the local committee for the organisation of the 43<sup>rd</sup> Annual European Calcified Tissue Society Congress, 14-16 May, 2016, Rome, Italy.
2. I<sup>o</sup> National Meeting of Paleopathology (GIPaleo), 22 of March 2014, L'Aquila, Italy;
3. ECTS Training Course: “Cancer and Bone: A guide for in vivo experiments”, 12-14 September 2012, L'Aquila, Italy.

## RESEARCH SUPPORT

1. *Bone phenotype in Duchenne muscular dystrophy: unveiling the role of LCN2 and implications for therapy*” (AFM-Téléthon) € **72,000**.
2. Extracellular vesicles as new therapeutic approach to target bone tumour cells (Italian Association of Cancer Research) 2015-2018 € 188.000
3. Photodynamic therapy and proton pump inhibitors for the treatment of pain in patients with bone metastases [My First AIRC Grant (MFAG) in collaboration with the Rizzoli Orthopaedic Institute, Bologna, Italy] 2014 € 20,000.
4. Role of Hemoglobin B (HBB) in breast cancer: regulation of the response to the oxidative stress and of the metastatic organotropism (CARISPAQ) 2012 € 9,000
5. Role of lipocalin 2 in bone metabolism and potential therapeutic applications (5<sup>th</sup> Research award STRODER/SIOMMMS) 2011-2012 € **25,000**
6. Role of Hemoglobin B in breast cancer: regulation of oxidative stress response and metastasis organotropism (Italian Association of Cancer Research) 2011-2013 € **177.000**
7. Efficacy Study of a Cathepsin K inhibitor alone and in combination with the c-Src inhibitor CGP76030 in a rodent model (MDA-MB-231) of tumor-induced osteolysis (Novartis Pharma, Basel, Research Contract) 2006 €**55.776,1**
8. Young Researcher Grant (FI-GI-RI), Department of Experimental Medicine, University of L'Aquila, Italy,2003 € **6.000**

## PATENTS

“Small interfering RNA (siRNA) for the therapy of the autosomal dominant osteopetrosis type 2 (ADO2) caused by mutation of the CLCN7 gene (ADO2 CLCN7- dependent)” (#: RM2014A000272; 23/05/2014).

## PEER REVIEWED PUBLICATIONS (INCLUDING ORIGINAL ARTICLES, INVITED REVIEWS AND CHAPTERS)

1. Maurizi A, **Rucci N**. The osteoclast in bone metastasis: player and target. **Cancers (Basel)** 2018 Jun 27.
2. Marino S, Bishop RT, Capulli M, Sophocleous A, Logaan JG, Mollat P, Mognetti B, Ventura L, Sims AH, **Rucci N**, Ralston SH, Idris AI. Regulation of breast cancer induced bone disease by cancer-specific IKK $\beta$ . **Oncotarget** 9:16134-16148;2018.
3. Maurizi A, Capulli M, Patel R, Curle A, **Rucci N**, Teti A. RNA interference therapy for autosomal dominant osteopetrosis type 2. Towards the preclinical development. **Bone** 10:343-354;2018.
4. Capulli M, Ponzetti M, Maurizi A, Gemini-Piperni S, Berger T, Mak TW, Teti A, **Rucci N**. A complex role for lipocalin 2 in bone metabolism: global ablation in mice induces osteopenia caused by an altered energy metabolism. **J Bone Miner Res** 33: 1141-1153; 2018.
5. Peramuhendige P, Marino S, Bishop RT, de Ridder D, Khogeer A, Baldini I, Capulli M, **Rucci N**, Idris AI. TRAF2 in osteotropic breast cancer cells enhances skeletal tumour growth and promotes osteolysis. **Sci Rep.** 8:39.
6. **Rucci N**, Teti A. Osteomimicry: How the Seed Grows in the Soil. **Calcif Tissue Int.** 102:131-149;2018.
7. Cappariello A, Loftus A, Muraca M, Maurizi A, **Rucci N**, Teti A. Osteoblast-derived extracellular vesicles are biological tools for the delivery of active molecules to bone. **J Bone Miner Res.** 2017 Nov 1. [Epub ahead of print].
8. Di Pompeo G, Lemma S, Canti L, **Rucci N**, Ponzetti M, Errani C, Donati DM, Russell S, Gillies R, Chano T, Baldini N, Avnet S. Intratumoral acidosis fosters cancer-induced bone pain through the activation of the mesenchymal tumor-associated stroma in bone metastasis from breast carcinoma. **Oncotarget.** 8: 54478-54496.
9. Ponzetti M, Capulli M, Angelucci A, Ventura L, Delle Monache S, Mercurio C, Calgani A, Sanità P, Teti A, **Rucci N**. Non-conventional role of haemoglobin beta in breast malignancy. **Br J Cancer** 117:994-1006;2017.
10. Wright LE, Ottewell PD, **Rucci N**, Peyruchaud O, Pagnotti GM, Chiechi A, Buijs JT, Sterling JA. Murine models of breast cancer bone metastasis. **Bonekey Rep.** 2016;5:804.
11. **Rucci N**, Teti A. The “love-hate” relationship between osteoclasts and the bone matrix. **Matrix Biol** 52-54:176-190;2016.
12. Cappariello A, Ponzetti M, **Rucci N**. The “soft” side of the bone: unveiling its endocrine functions. **Horm Mol Biol Investig** 2016 Apr 23.
13. Cappariello A, Paone R, Maurizi A, Capulli M, **Rucci N**, Muraca M, Teti A. Biotechnological approach for systemic delivery of membrane receptor activator of NF- $\kappa$ B ligand (RANKL) active domain into the circulation. **Biomaterials** 46:58-69; 2015.
14. **Rucci N**, Capulli M, Olstad OK, Önnerfjord P, Tillgren V, Gautvik KM, Heinegård D, Teti A. The  $\alpha_2\beta_1$  binding domain of chondroadherin inhibits breast cancer-induced bone metastases and impairs primary tumour growth: a preclinical study. **Cancer Letters** 358:67-75; 2015.
15. **Rucci N**, Capulli M, Piperni SG, Cappariello A, Lau P, Frings-Meuthen P, Heer M, Teti A. Lipocalin 2: A new mechanoresponding gene regulating bone homeostasis. **J Bone Miner Res** 30:357-368;2015.

16. Rucci N, Sanità P, Delle Monache S, Alesse E, Angelucci A. Molecular pathogenesis of bone metastases in breast cancer: Proven and emerging therapeutic targets. *World J Clin Oncol* 5:335-347;2014.
17. Rucci N, Angelucci A. Prostate cancer and bone: the elective affinities. *Biomed Res Int* . Epub 2014 May 28.
18. Capulli M, Paone R, Rucci N. Osteoblast and osteocyte: Games without frontiers. *Arch Biochem Biophys* 561C:3-12;2014.
19. Capulli M, Olstad OK, Onnerfjord P, Tillgren V, Muraca M, Gautvik KM, Heinegård D, Rucci N, Teti A. The c-terminal domain of chondroadherin: a new regulator of osteoclast motility counteracting bone loss. *J Bone Miner Res* 29:1833-1846;2014
20. Del Fattore A, Cappariello A, Capulli M, Rucci N, Muraca M, De Benedetti F, Teti A. An experimental therapy to improve skeletal growth and prevent bone loss in a mouse model overexpressing IL-6. *Osteoporosis Int* 25:681-692;2014.
21. Rucci N, Capulli M, Ventura L, Angelucci A, Peruzzi B, Tillgren V, Muraca M, Heinegård D, Teti A. Proline/aRginine-rich End Leucine-rich repeat protein N-terminus is a novel osteoclast antagonist that counteracts bone loss. *J Bone Miner Res* 28:1912-1924;2013.
22. Peruzzi B, Rucci N, Teti A. The crucial role of c-Src tyrosine kinase in bone metabolism. In “Biochemistry, Genetics and Molecular Biology, Protein Kinases”. Ed. Gabriela da Silva Xavier; 2012.
23. Capulli M, Angelucci A, Driouch K, Garcia T, Clement-Lacroix P, Martella F, Ventura L, Bologna M, Flamini S, Moreschini O, Lidereau R, Ricevuto E, Muraca M, Teti A, Rucci N. Increased expression of a set of genes enriched in oxygen binding function discloses a predisposition of breast cancer bone metastases to generate metastasis spread in multiple organs. *J Bone and Miner Res* 27:2387-2398;2012.
24. Cardone RA, Greco MR, Capulli M, Weinman EJ, Busco G, Bellizzi A, Casavola V, Antelmi E, Ambruosi B, Dell'aquila ME, Paradiso A, Teti A, Rucci N, Reshkin SJ. NHERF1 acts as a molecular switch to program metastatic behavior and organotropism via its PDZ domains. *Mol Biol Cell* 23:2028-2040;2012.
25. Rucci N, Ventura L, Teti A. Breast Cancer. In “Biotargets of cancer in current clinical practice”. Humana Press;2012.
26. Peruzzi B, Cappariello A, Del Fattore A, Rucci N, De Benedetti F, Teti A. c-Src and IL-6 inhibit osteoblast differentiation and integrate IGFBP5 signalling. *Nat Commun* 3:630; 2012.
27. Del Fattore A, Teti A, Rucci N. Bone cells and the mechanisms of bone remodelling. *Front Biosci (Elite Ed)* 4:2302-2321; 2012.
28. Rucci N, Sanità P, Angelucci A. Roles of metalloproteases in metastatic niche. *Curr Mol Med*. 11:609-622; 2011.
29. Rufo A, Del Fattore A, Capulli M, Carvello F, De Pasquale L, Ferrari S, Pierroz D, Morandi L, De Simone M, Rucci N, Bertini E, Bianchi ML, De Benedetti F, Teti A. Mechanisms inducing low bone density in Duchenne muscular dystrophy in mice and humans. *J Bone Miner Res* 26:1891-1903;2011.
30. Del Fattore A, Capannolo M, Rucci N. Bone and bone marrow: the same organ. *Arch Biochem Biophys* 503:28-34; 2010.
31. Salerno M, Cenni E, Fotia C, Avnet S, Granchi D, Castelli F, Micieli D, Pignatello R, Capulli M, Rucci N, Angelucci A, Del Fattore A, Teti A, Zini N, Giunti A, Baldini N. Bone-targeted doxorubicin-loaded nanoparticles as a tool for the treatment of skeletal metastases. *Curr Cancer Drug Targets* 10:649-659;2010.
32. Rucci N, Millimaggi D, Mari M, Del Fattore A, Bologna M, Teti A, Angelucci A, Dolo V. Receptor activator of NF-κB ligand enhances breast cancer-induced osteolytic lesions through upregulation of extracellular matrix metalloproteinase inducer/CD147. *Cancer Research* 70:6150-6160; 2010.

33. **Rucci N**, Teti A. Osteomimicry: how tumor cells try to deceive the bone. *Front Biosci* 2:907-915; 2010.
34. **Rucci N**, Rufo A, Alamanou M, Capulli M, Del Fattore A, Ahrman E, Capece D, Iansante V, Zazzeroni F, Alesse E, Heinegård D, Teti A. The glycosaminoglycan-binding domain of PRELP acts as a cell type-specific NF-kappaB inhibitor that impairs osteoclastogenesis. *J Cell Biol* 187:669-683; 2009.
35. **Rucci N**, Capulli M, Rufo A, Teti A. The effect of microgravity on osteoblast metabolism. *Basic Applied Myology* 19:139-149; 2009.
36. Capulli M, Rufo A, Teti A, **Rucci N**. Global transcriptome analysis in mouse calvarial osteoblasts highlights sets of genes regulated by modeled microgravity and identifies a “mechanoresponsive ostoblast gene signature”. *J Cell Biochem* 107:240-252; 2009.
37. Taddei ML, Parri M, Angelucci A, Onnis B, Bianchini F, Giannoni E, Raugei G, Calorini L, **Rucci N**, Teti A, Bologna M, Chiarugi P. Kinase-dependent and independent role of EphA2 in the regulation of prostate cancer invasion and metastasis. *Am J Pathology* 174:1492-1503; 2009.
38. Pierroz DD, Rufo A, Bianchi EN, Glatt V, Capulli M, **Rucci N**, Cavat F, Rizzoli R, Teti A, Bouxsein ML, Ferrari SL. Beta-Arrestin2 regulates RANKL and ephrins gene expression in response to bone remodeling in mice. *J Bone Miner Res* 24:775-784; 2009.
39. **Rucci N**. Molecular biology of bone remodelling. *Clinical Cases in Mineral and Bone Metabolism* V:49-56; 2008.
40. Landemaine T, Jackson A, Bellahcène A, **Rucci N**, Sin S, Abad BM, Sierra A, Boudinet A, Guinebretière JM, Ricevuto E, Noguès C, Briffod M, Bièche I, Cherel P, Garcia T, Castronovo V, Teti A, Lidereau R, Driouch K. A six-gene signature predicting breast cancer lung metastasis. *Cancer Res* 68:6092-6099; 2008.
41. **Rucci N**, Susa M, Teti A. Inhibition of protein kinase c-Src as a therapeutic approach for cancer and bone metastases. *Anticancer Agents Med Chem* 8:342-349; 2008.
42. Del Fattore A, Teti A, **Rucci N**. Osteoclast receptors and signaling. *Arch Biochem Biophys* 473:342-349; 2008.
43. Del Fattore A, Fornari R, Van Wesenbeeck L, De Freitas F, Timmermans JP, Peruzzi B, Cappariello A, **Rucci N**, Spera G, Helfrich MH, Van Hul W, Migliaccio S, Teti A. A new heterozygous mutation (R714C) of the osteopetrosis gene, pleckstrin homolog domain containing family M (with Run Domain) member 1 (PLEKHM1), impairs vesicular acidification and increases tartrate-resistant acid phosphatase secretion in osteoclasts. *J Bone Miner Res* 23:380-391; 2008.
44. Nissen-Meyer LS, Jemtland R, Gautvik VT, Pedersen ME, Paro R, Fortunati D, Pierroz DD, Stadelmann VA, Reppe S, Reinholt FP, Del Fattore A, **Rucci N**, Teti A, Ferrari S, Gautvik KM. Osteopenia, decreased bone formation and impaired osteoblast development in Sox4 heterozygous mice. *J Cell Sci* 120:2785-2795; 2007.
45. **Rucci N**, Rufo A, Alamanou M, Teti A. Modeled microgravity stimulates osteoclastogenesis and bone resorption by increasing osteoblast RANKL/OPG ratio. *J Cell Biochem* 100:464-473; 2007.
46. Tacconelli A, Farina AR, Cappabianca L, Cea G, Chioda A, Panella S, **Rucci N**, Gulino A, Mackay AR. Alternative TrkA splicing and cancer. *Alternative Splicing in Cancer* 67-87; 2006.
47. De Benedetti F, **Rucci N**, Spica E, Di Giacinto C, Del Fattore A, Peruzzi B, Paro R, Longo M, Vivarelli M, Muratori F, Berni S, Ballanti P, Teti A. Interleukin-6 causes uncoupling of osteoclast and osteoblast activities and delayed ossification. *Arthritis and Rheumatism* 54:3551-3563; 2006.
48. **Rucci N**, Recchia I, Angelucci A, Alamanou M, Del Fattore A, Fortunati D, Susa M, Fabbro D, Bologna M, Teti A. Inhibition of protein kinase c-Src reduces breast cancer metastases and increases survival in mice. *J Pharm and Experim Therapeutics* 318:161-172; 2006.

49. Angelucci A, Gravina GL, **Rucci N**, Millimaggi D, Festuccia C, Muzi P, Teti A, Vicentini C, Bologna M. Suppression of EGF-R signaling reduces the incidence of prostate cancer metastasis in nude mice. *Endocrine Rel Cancer* 13:197-210; 2006.
50. Millimaggi D, Festuccia C, Angelucci A, D'Ascenzo S, **Rucci N**, Flati S, Bologna M, Teti A, Pavan A, Dolo V. Osteoblast-conditioned media stimulate membrane shedding in prostate cancer cells. *Int J Oncol* 28:909-914; 2006.
51. Del Fattore A, Peruzzi B, **Rucci N**, Recchia I, Cappariello A, Longo M, Fortunati D, Ballanti P, Iacobini M, Lucani M, Devito R, Pinto R, Caniglia M, Lanino E, Messina C, Cesaro S, Letizia C, Bianchini G, Fryssira H, Grabowski P, Shaw N, Bishop N, Hughes D, Kapur R, Datta H, Taranta A, Fornari R, Migliaccio S, Teti A. Clinical, genetic and cellular analysis of forty-nine osteopetrotic patients: implications for diagnosis and treatment. *J Med Genet* 43:315-325;2006.
52. **Rucci N**, Di Giacinto C, Orrù L, Millimaggi D, Baron R, Teti A. A novel protein kinase C alpha-dependent signal to ERK1/2 activated by alphaVbeta3 integrin in osteoclasts and chinese hamster ovary (CHO) cells. *J Cell Science* 118:3263-3275; 2005.
53. Margheri F, D'Alessio S, Serrati S, Pucci M, Annunziato F, Cosmi L, Liotta F, Angeli R, Angelucci A, Gravina GL, **Rucci N**, Bologna M, Teti A, Monia B, Fibbi G, Del Rosso M. Effect of blocking urokinase receptor signaling by antisense oligonucleotides in a mouse model of experimental prostate cancer bone metastases. *Gene Therapy* 12:702-714; 2005.
54. Angelucci A, Gravina GL, **Rucci N**, Festuccia C, Muzi P, et al. Evaluation of metastatic potential in prostate carcinoma: an in vivo model. *Intern J Oncol* 25:1713-1720; 2004.
55. Tacconelli A, Farina AR, Cappabianca L, DeSantis G, Tessitore A, Vetuschi A, Sferra R, **Rucci N**, Argenti B, Scrpanti I, Gulino A, Mackay AR. TrkA alternative splicing: a regulated tumor-promoting switch in human neuroblastoma. *Cancer Cell* 6: 347-360; 2004.
56. D'Abrizio P, Baldini E, Russo PF, Biordi L, Graziano FM, **Rucci N**, et al. Ontogenesis and cell specific localization of Fas ligand expression in the rat testis. *Intern J Androl* 27:304-310; 2004.
57. Taranta A, Fortunati D, Longo M, **Rucci N**, Iacomino E, Alberti F, Facciuto E, Migliaccio S, Bardella MT, Dubini A, Saraifoger S, Teti A, Bianchi ML. Imbalance of osteoclastogenesis-regulating factors in celiac disease. *J Bone Miner Res* 19:1112-1121; 2004.
58. **Rucci N**, Ricevuto E, Ficarella C, Longo M, et al. In vivo bone metastases, osteoclastogenic ability and phenotypic characterization of human breast cancer cells. *Bone* 34:697-709; 2004.
59. Recchia I, **Rucci N**, Funari A, Migliaccio S, Taranta A, Longo M, Kneissel M, Susa M, Fabbro D, Teti A. Reduction of s-Src activity by substituted 5,7-diphenyl-pyrrolo[2,3-d]-pyrimidines induces osteoclast apoptosis in vivo and in vitro. Involvement of ERK1/2 pathway. *Bone* 34:65-79; 2004.
60. Crescenzi A, Graziano MF, Carosa E, Papini E, **Rucci N**, Nardi F, Trimboli P, Piccirilli F, Jannini EA, D'Armiento M. Localization and expression of thyroid hormone receptors in normal and neoplastic human thyroid. *J Endocrinol Invest* 26:1008-1012; 2003.
61. Recchia I, **Rucci N**, Festuccia C, et al. Pyrrolopyrimidine c-Src inhibitors reduce growth, adhesion, motility and invasion of prostate cancer cells in vitro. *Eur J of Cancer* 39:1927-1935; 2003.
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