

Section b: Curriculum vitae

PERSONAL INFORMATION

Family name, Name: Settembre, Carmine
Nationality: Italian
Date of birth: 21st June 1978
URL for web site: <https://www.tigem.it/Staff/settembre>

EDUCATION

2008 Ph.D. in Molecular Medicine, University of Naples Federico II, Italy. Supervisor: Andrea Ballabio
2002 Pharmaceutical Chemistry Degree, University of Naples Federico II, Naples, Italy

CURRENT POSITION(S)

2023 Full professor of Histology, University of Naples Federico II, Italy
2013 Associate Investigator, Telethon Institute of Genetics and Medicine (TIGEM), Italy

PREVIOUS POSITIONS

2018- 2023 Associate Professor of Histology, University of Naples Federico II, Italy
2013 – 2018 Assistant Investigator, Telethon Institute of Genetics and Medicine, Naples, Italy
2012 – 2018 Assistant Professor of Medical Genetics, University of Naples Federico II, Italy
2011 – 2012 Assistant Professor, Inst. for Molecular Genetics, Baylor College of Medicine, Houston TX
2009 – 2011 Postdoc Fellow, Inst. for Molecular Genetics, Baylor College of Medicine, Houston TX
2007 – 2009 Visiting scientist, Columbia University in the city of New York, NY

FELLOWSHIPS AND AWARDS

2021 – 2026 Recipient of the ERC Consolidator Grant
2020 – 2022 Recipient of the ERC Proof of Concept Grant
2017 Ian Boyle Award, European Calcified Tissue Society
2017 – 2021 Member of the EMBO Young Investigator Program
2016 – 2021 Recipient of the ERC Starting Grant
2013 Annual Rotary/CNR young biologist Award
2013 – 2018 Dulbecco Telethon Institute Career Award
2008 – 2010 EMBO Long-term Fellowship Award
2006 Young Investigator Awards for Outstanding Science, European Human Genetics Conference

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS (if applicable)

2011 – to date Prof. Settembre has supervised 8 post-doctoral fellows, 6 PhD students, 3 graduate students. Among them, Alison Forrester is now applying for a faculty position, Rosa Bartolomeo and Marilina Piemontese are staff scientists at pharmaceutical companies. Two graduate students are now enrolled in PhD programs. Ten of them are currently employed in the Settembre laboratory.

TEACHING ACTIVITIES (if applicable)

2018 – to date Professor of Histology and embryology, University of Naples Federico II, Italy
2013 – 2018 Assistant Professor of Medical Genetics, University of Naples Federico II, Italy
2013 – to date Lecturer, European School of Molecular Medicine (SEMM), PhD in System Medicine, Italy

ORGANISATION OF SCIENTIFIC MEETINGS (if applicable)

- 2020 Organizer and Scientific Committee Member, Autophagy Early-Career Investigator's On-line Seminar series
- 2018 Organizer and Scientific Committee Member, EMBO Workshop 'Lysosomes and metabolism', Italy
- 2015 Organizer and Scientific Committee Member, Forum in Bone and Mineral Research, Torino, March 6-7, 2015, Torino, Italy

INSTITUTIONAL RESPONSIBILITIES (if applicable)

- 2019 – 2020 Member of the Admission Committee, European School of Molecular Medicine (SEMM), PhD in System Medicine, Italy
- 2014 – 2020 Internal Advisor, European School of Molecular Medicine (SEMM), PhD in System Medicine, Italy
- 2014 – 2015 Member Examiner Committee of 4 PhD defenses; Open University/c.o. Tigem, Italy
- 2013 – to date Faculty, Telethon Institute of Genetics and Medicine (TIGEM), Italy

REVIEWING ACTIVITIES (if applicable)

Ad hoc reviewer for several international peer-reviewed journals, including: Science, Nature Cell Biology, Nature communication, Developmental Cell, Molecular Cell, EMBO Molecular Medicine, EMBO Journal, eLife, Journal of Clinical Investigation, Plos Biology, Human Molecular Genetics, Journal of Cell Biology.

Member of the editorial boards of Life Science Alliance, Traffic and Cells Journals.

Ad hoc Reviewer of ERC starting and Consolidator grants

MEMBERSHIPS OF SCIENTIFIC SOCIETIES (if applicable)

- 2017 – to date Directory Board, Forum of Bone and Mineral Research, Italy
- 2017 – 2021 EMBO Young Investigator Programme
- 2014 – to date European Calcified Tissue Society
- 2013 – to date Italian Association of Cell Biology and Differentiation
- 2013 – to date Forum of Bone and Mineral Research, Italian Society of the Histology and Embryology

TOP 10 PUBLICATIONS (out of >60 publications in peer reviewed journals, total impact factor 721.332, H-index 35, Total citations 13146 (self-citation excluded))

1. Di Lorenzo G, Iavarone F, Maddaluno M, Plata-Gómez AB, Aureli S, Quezada Meza CP, Cinque L, Palma A, Reggio A, Cirillo C, Sacco F, Stolz A, Napolitano G, Marin O, Pinna LA, Ruzzene M, Limongelli V, Efeyan A, Grumati P, **Settembre C**. Phosphorylation of FAM134C by CK2 controls starvation-induced ER-phagy. *Sci Adv.* 2022 Sep 2;8(35):eabo1215. [IF 14.136](#)
2. Cinque L, De Leonibus C, Iavazzo M, Krahmer N, Intartaglia D, Salierno FG, De Cegli R, Di Malta C, Svelto M, Lanzara C, Maddaluno M, Wanderlingh LG, Huebner AK, Cesana M, Bonn F, Polishchuk E, Hübner CA, Conte I, Dikic I, Mann M, Ballabio A, Sacco F, Grumati P, **Settembre C**. MiT/TFE factors control ER-phagy via transcriptional regulation of FAM134B. *EMBO J.* 2020 Sep 1;39(17):e105696. [IF 9.889](#)
3. Forrester A, De Leonibus C, Grumati P, Fasana E, Piemontese M, Staiano L, Fregno I, Raimondi A, Marazza A, Bruno G, Iavazzo M, Intartaglia D, Seczynska M, van Anken E, Conte I, De Matteis MA, Dikic I, Molinari M, **Settembre C**. A selective ER-phagy exerts procollagen quality control via a Calnexin-FAM134B complex. *EMBO J.* 2019 Jan 15;38(2) [IF 9.889](#)

4. Bartolomeo R, Cinque L, De Leonibus C, Forrester A, Salzano AC, Monfregola J, De Gennaro E, Nusco E, Azario I, Lanzara C, Serafini M, Levine B, Ballabio A, **Settembre C**. mTORC1 hyperactivation arrests bone growth in lysosomal storage disorders by suppressing autophagy. *J Clin Invest*. 2017 Oct 2;127(10):3717-29. [IF 13.251](#)
5. Cinque L, Forrester A, Bartolomeo R, Svelto M, Venditti R, Montefusco S, Polishchuk E, Nusco E, Rossi A, Medina DL, Polishchuk R, De Matteis MA, **Settembre C**. FGF signalling regulates bone growth through autophagy. *Nature*. 2015 Dec 10;528(7581):272-75. [IF 38.138](#)
6. **Settembre C**, Fraldi A, Medina DL, Ballabio A. Signals from the lysosome: a control centre for cellular clearance and energy metabolism. *Nat Rev Mol Cell Biol*. 2013 May;14(5):283-96. [IF 36.458 – Cit.826](#)
7. **Settembre C** *, De Cegli R, Mansueto G, Saha PK, Vetrini F, Visvikis O, Huynh T, Carissimo A, Palmer D, Klisch TJ, Wollenberg AC, Di Bernardo D, Chan L, Irazoqui JE, Ballabio A*. TFEB controls cellular lipid metabolism through a starvation-induced autoregulatory loop. *Nat Cell Biol*. 2013 Jun;15(6):647-58. (*co-corresponding authors) [IF 20.058 – Cit.451](#)
8. Di Malta C, Fryer JD, **Settembre C***, Ballabio A*. Astrocyte dysfunction triggers neurodegeneration in a lysosomal storage disorder. *Proc Natl Acad Sci U S A*. 2012 Aug 28 (*co-last authors) [IF 9.737 – Cit.63](#)
9. **Settembre C**, Zoncu R, Medina DL, Vetrini F, Erdin S, Erdin S, Huynh T, Ferron M, Karsenty G, Vellard MC, Facchinetti V, Sabatini DM, Ballabio A. A lysosome-to-nucleus signalling mechanism senses and regulates the lysosome via mTOR and TFEB. *EMBO J*. 2012 Mar 7;31(5):1095-108. [IF 9.822 – Cit.919](#)
10. **Settembre C**, Di Malta C, Polito VA, Garcia Arencibia M, Vetrini F, Erdin S, Erdin SU, Huynh T, Medina D, Colella P, Sardiello M, Rubinsztein DC, Ballabio A. TFEB links autophagy to lysosomal biogenesis. *Science*. 2011 Jun 17;332(6036):1429-33. [IF 31.201 – Cit.1491](#)

BOOK CHAPTERS

1. **Settembre C**, Ballabio A. Lysosomal adaptation: how the lysosome responds to external cues. Cold Spring Harb Perspect Biol.
2. Ballabio A, Medina D, **Settembre C**. TFEB/ CLEAR Network. In: Lysosomes and lysosomal Diseases. Series: Methods in Cell Biology. Eds Platt F, Platt N. Series Eds Wilson L, Tran P. Elsevier B.V, Chapt 10.

GRANTED PATENTS

1. Co-inventor WO2012120044, Title: “TFEB variants and uses thereof”.
2. Co-inventor WO2012120048, Title: “TFEB phosphorylation inhibitors and uses thereof”.
3. Co-inventor WO2013186398, Title: “TFEB for use in treating obesity or metabolic syndrome”
4. Co-inventor US 62/233687, Title: “treatments of bone growth disorders”- Priority date: 28/09/2015

INVITED PRESENTATIONS

I have been invited to more than 40 national and international meetings and international institutes as seminar speaker. Below I list only the ones in which I was invited as keynote speaker.

1. **Keynote speaker**, The AIM Center's 2020 International eSymposium November 9, 2020
2. **Keynote speaker**, 3rd Nordic Autophagy Society Conference, Utrecht, NL, May 22-24, 2019
3. **Keynote speaker**, Interuniversity Institute of Myology (IMM) meeting, Assisi, Italy, October 11-14, 2018
4. **Keynote speaker**, 14th International Symposium of the Portuguese Society of Metabolic Disorders, Porto, Portugal, March 15-17, 2018
5. **Keynote Speaker**, European Symposium on Lysosomal Storage Disorders (ESLSD), Vienna, Austria October 12-14, 2017
6. **Keynote speaker**, 5th Belgian Symposium on Tissue Engineering (BSTE), Leuven, Belgium, May 4-5, 2017

7. **Keynote speaker**, San Raffaele Departmental Retreat, Milan, Italy, September 24, 2015