

ALLEGATO B

Procedura valutativa per la copertura di n. 1 posto di Professore Universitario di seconda fascia per il Settore concorsuale 06/N1, Settore scientifico disciplinare MED/46 presso il Dipartimento di Scienze e Biotecnologie medico-chirurgiche – Facoltà di Farmacia e Medicina

Decreto Rettore Università di Roma “La Sapienza” N. 2455/2018 del 16.10.2018

ISOTTA CHIMENTI CURRICULUM VITAE

GENERAL INFORMATION

Full name	Isotta Chimenti
Work Address	Corso della Repubblica 79 – 04100 Latina, Italy.
Work phone	+3907731757234 – (fax) +3907731757254
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Languages	Italian, English

CURRENT ACADEMIC APPOINTMENT

2011-ongoing: Researcher/Assistant Professor, MED/04–06/A2 General Pathology, Faculty of Pharmacy and Medicine, Department of Medical Surgical Sciences and Biotechnologies, "La Sapienza" University of Rome, Italy.

2014-2020 : Qualified for Associate Professorship MED/46–06/N1, Technical Sciences for Laboratory Medicine, "ASN 2012" procedure.

EDUCATION

Doctorate, PhD Nov 2006 – Feb 2010
PhD Program in Experimental Medicine – BeMM PhD School
"La Sapienza" University of Rome - P.zza Aldo Moro, 5 – ROMA, Italy.
Dissertation: *The role and contribution of paracrine effects in cardiac cell therapy with human adult cardiac progenitor cells.*

Master Degree Jan 2004 - Sep 2005
MS in Molecular and Cellular Medical Biotechnology, Final grade 110/110 cum laude. "La Sapienza" University of Rome - P.zza Aldo Moro, 5 – ROMA, Italy. Thesis: *Effects of ELF magnetic fields on adult cardiac stem cells (experimental).*

Bachelor

Oct 2000 - Sep 2003

Degree in Biotechnology, Final grade 110/110 cum laude. "La Sapienza" University of Rome - P.zza Aldo Moro, 5 – ROMA, Italy.
Thesis: *Methods for the study of the effects of mycophenolic acid on human Neuroblastoma cell lines (experimental)*.

RESEARCH APPOINTMENTS

- Period Feb 2010 – Aug 2011
Position Post-doc fellow, Pasteur Institute - Cenci Bolognetti Foundation
Project *Tissue engineering approaches for cardiac cell therapy with cardiospheres*.
University Dept. Experimental Medicine and Dept. Molecular Medicine, "La Sapienza" University of Rome, Italy.
- Period Mar 2009 - Jun 2009
Position Visiting scientist
Institution Cedars-Sinai Heart Institute - Los Angeles, CA, USA.
- Period Mar 2006 – Sep 2007
Position Post-doc
Activity Research Fellow
University Division of Cardiology, Johns Hopkins University, Baltimore, MD, USA.

OTHER FELLOWSHIPS AND SCHOLARSHIPS

- Feb 2010-Feb 2011: "*Teresa Ariaudo*" Postdoc Scholarship, Cenci Bolognetti Foundation – Pasteur Institute.
- Nov 2007-Oct 2009: Italian Ministry of University and Research, Scholarship for Graduate School (cycle XXII).

TEACHING ASSIGNMENTS FOR "LA SAPIENZA" UNIVERSITY OF ROME

- 2018-2019 Coordinator Seminar series: "*Molecular Medicine*", SSAS-Superior School for Advanced Studies.
- 2017-ongoing: Graduate School Committee Member, PhD program in Life Sciences.
- 2017-ongoing: "*General pathology and animal models*", Bachelor Degree in Biotechnology.
- 2017-2018 "*Cellular and molecular biology of stem cells*", Master of Science (II Level) in Aesthetic and Regenerative Medicine.
- 2017-2018 Coordinator Seminar series: "*Translational Medicine in Cardiology*", SSAS-Superior School for Advanced Studies.

- 2016-2017 Member of the Organizing Committee, Interdisciplinary Course 2016/2017 - "*Physical, virtual and conceptual barriers*", SSAS-Superior School for Advanced Studies.
- 2016-ongoing: "*Histology*", Nursing School Degree.
- 2013-ongoing: "*Cell, Tissue and Organ Bioengineering, Biotechnology techniques*", Master Degree in Medical Biotechnology.
- 2012-ongoing: Chairman of Examining Committee, "*Pathophysiology of diseases*", Nursing School Degree.
- 2012-ongoing: "*General Pathology*", Nursing School Degree.
- 2012-2015: Chairman of Examining Committee, "*Pathophysiology of diseases*", Physiotherapy Degree.
- 2008-2017: Member of the Examining Committee for: "*General Pathology*" (Bachelor of Biotechnology); "*Cellular and Molecular Pathology*" and "*Molecular Medicine*" (MS in Pharmaceutical Biotechnology).

SOCIETY MEMBERSHIPS, AWARDS AND HONORS

- Member of the European Society of Cardiology Working Group on "*Cardiovascular Regenerative and Reparative Medicine*", since 2018.
- Junior Fellow, SSAS-Superior School for Advanced Studies, "La Sapienza" University of Rome, since 2015.
- "*Who's who in the world*" since 2011.
- 2011 Award "Keystone Symposia Scholarship" for the conference: "*Molecular Cardiology: Disease Mechanisms and Experimental Therapeutics 2011*", Keystone, CO, USA.

GRANTS AND FUNDING AS PRINCIPAL INVESTIGATOR

- 2017-2020: Unit PI, Call "PRIN 2015", MIUR-Italian Ministry of Education, University and Research, "*Improving efficacy, efficiency and clinical application of normothermic ex vivo lung perfusion (EVLPE) to improve outcome in lung transplantation setting*". Protocol: 2015BN82FK.
- 2016-2019: Unit PI, Call "Ricerca Finalizzata 2013" from Italian Ministry of Health, "*The role of autophagy as a protective mechanism in cardiovascular diseases: new insights into oxidative stress modulation and cardiovascular regeneration*". Protocol: GR-2013-02355401.
- 2014-2017: Principal Investigator and Unit PI, Call "PRIN 2012", MIUR-Italian Ministry of Education, University and Research, "*A BioprocEss for the optimizATion of 3D cardiospHere-basEd constructs for cArdiac RegeneraTive medicine (BEAT3DHEART)*". Protocol: 20123E8FH4.
- 2014-2015: Task Coordinator, Grant from "Fondazione Roma" Foundation, Task title: "*Task 4.1: Set-up of cell culture/regenerative medicine laboratory*", part of Unit 4: "*Systems for simulated training in biomedicine*".

GRANTS AND FUNDING AS CO-INVESTIGATOR

- 2017-2021: Key staff of participant “UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA”, Horizon 2020, Call H2020-Euratom-1.4. 2016-2017 (NFRP-2016-2017-1), project title: “*Implications of Medical Low Dose Radiation Exposure (MEDIRAD)*”. Project ID: 755523.
- 2017: Co-investigator, Academic Funding 2016 from “Sapienza” University of Rome for Research, “*Study of autophagy in regulating endothelial damage after hyperglycemic stress and modulating cardiovascular regenerative potential*”.
- 2016: Co-investigator, Academic Funding 2015 from “Sapienza” University of Rome for Research, “*Investigating the role of beta-adrenergic-receptor signaling pathways on the biology of human resident cardiac progenitor cells isolated as cardiospheres*”. Protocol: C26H15L3AH.
- 2014: Co-investigator, Academic Funding 2013 from “Sapienza” University of Rome for Research, “*Role of cardiac stem cell exosomes in heart regeneration*”. Protocol: C26A13MECL.
- 2014: Co-investigator, Academic Funding 2013 from “Sapienza” University of Rome for Large Equipment, “*Last-generation portable echocardiographer for 2D and 3D imaging: assessment of cardiac stem cells in combination with ventricular assist device (VAD) for the treatment of end-stage heart failure in experimental animal models*”. Protocol: C26G13AXCK.
- 2013: Co-Investigator, Academic Funding 2012 from “Sapienza” University of Rome for Research, “*Boosting cardiac regeneration: breakthrough in left ventricular assist device (VAD) and autologous stem cell combined therapy*”. Protocol: C26A12NW4K.
- 2008-2010: Participant, Call “PRIN 2007”, MIUR-Italian Ministry of Education, University and Research, “*Study of in vitro and in vivo oxidative metabolism of cardiac stem cells*”. Protocol: 2007E4SCMR_002.

RESEARCH TOPICS

Regenerative medicine; cardiac tissue engineering; resident cardiac progenitor cells; stem cell spheroids; mesenchymal stromal cells; stem cell therapy for heart disease; oxidative stress in the cardiovascular system; mechano-sensing.

EDITORIAL ACTIVITY

- Academic Editor for “*Stem Cells International*”, ISSN: 1687-966X (latest IF=**3.54**).
- Review Editor for “*Frontiers in Cardiovascular Medicine*”, ISSN 2297-055X (IF not yet available).
- Associate Board Member for “*Current Stem Cell Research & Therapy*”, ISSN 2212-3946 (latest IF=**2.68**).

PEER REVIEWING ACTIVITY (LATEST IF)

European Heart Journal (23.4), Circulation Research (15.2), Nature Protocols (12.4), Hypertension (6.82), Acta Biomaterialia (6.38), Cell Death & Disease (5.6), Stem Cells (5.59), Oxidative Medicine and Cellular Longevity (4.94), Stem Cells Translational Medicine (4.93), Pharmacological Research (4.9), Journal of Cellular and Molecular Medicine (4.3), Scientific Reports (4.12), Journal of Steroid Biochemistry and Molecular Biology (4.09), International Journal of Cardiology (4.03), Stem Cells International (3.99), Respiratory Research (3.75), Frontiers in Physiology (3.39), American Journal of Cardiology (3.17), Regenerative Medicine (2.99), PloS One (2.77).

GRANT REVIEWING ACTIVITY

- MIUR-Italian Ministry of Education, University and Research
- Austrian Science Fund (FWF)
- University of Genoa, Italy
- University of Insubria, Italy
- University of Padua, Italy.

SUMMARY AND BIBLIOMETRICS OF SCIENTIFIC ACHIEVEMENTS Scopus database (as of October 2018)

Author Scopus ID	15831256400
Orcid ID	0000-0002-0865-8814
Year of 1 st pub	2007
Printed papers	54 (international)
First/last names	19
Total citations	1196
Citations/year	99.5
Citations/paper	22.1
H-index	<u>18</u> (normalized by academic seniority= <u>1.5</u> , by years since MS= <u>1.38</u>)
Cumulative IF	249.74 (latest IF) – 223.67 (year of pub)
Average IF	4.62 (latest IF) – 4.38 (year of pub)
Book Chapters	2 (scientific)

SELECTED PUBLICATIONS 2013-2018 (IF year of publication)

#corresponding author

1. CASTALDO C, **CHIMENTI I**# (2018). *Cardiac progenitor cells: the Matrix has you*. STEM CELL TRANSL MED, vol. 7:506–510. (IF=4.93. Cit.=1)
2. PAGANO F, ANGELINI F, SICILIANO C, TASCOTTI J, MANGINO G, DE FALCO E, CARNEVALE R, SCIARRETTA S, FRATI G, **CHIMENTI I**# (2018). *Beta2-*

- adrenergic signaling affects the phenotype of human cardiac progenitor cells through EMT modulation*. PHARMACOL RES, vol. 127:41-48. (IF=4.90. Cit.=3)
3. **CHIMENTI I[#]**, FRATI G (2018). *Cell-derived exosomes for cardiovascular therapies: Y (not) RNAs?*. HYPERTENSION, vol. 72:279-280. (IF=6.82. Cit.=0)
 4. STRAFACE E, GAMBARDELLA L, PAGANO F, ANGELINI F, ASCIONE B, VONA R, DE FALCO E, CAVARRETTA E, LA RUSSA R, MALORNI W, FRATI G, **CHIMENTI I** (2017). *Sex differences of human cardiac progenitor cells in the biological response to TNF- α treatment*. STEM CELLS INT, vol. 2017:4790563. (IF=3.99. Cit.=1)
 5. PAGANO F, ANGELINI F, CASTALDO C, PICCHIO V, MESSINA E, SCIARRETTA S, MAIELLO C, BIONDI-ZOCCAI G, FRATI G, DI MEGLIO F, NURZYNSKA D, **CHIMENTI I[#]** (2017). *Normal versus pathological cardiac fibroblast-derived extracellular matrix differentially modulates cardiosphere-derived cells paracrine properties and commitment*. STEM CELLS INT, vol. 2017:7396462. (IF=3.99. Cit.=1)
 6. DE FALCO E, BORDIN A, SCACCIA E, PAGANO F, IBRAHIM M, SCHIRONE L, ANGELINI F, PALMERIO S, MADONNA M, FIANCHINI L, **CHIMENTI I**, SCIARRETTA S, FRATI G (2017). *Histone acetylation favors the cardiovascular commitment of adipose tissue-derived stromal cells*. INT J CARDIOL, vol. 243:421-423. (IF=4.03. Cit.=1)
 7. **CHIMENTI I**, MASSAI D, MORBIDUCCI U, BELTRAMI AP, PESCE M, MESSINA E (2017). *Stem cell spheroids and ex vivo niche modeling: rationalization and scaling-up*. J CARDIOVASC TRANSL RES, vol. 10(2):150-166. (IF=2.34. Cit.=5)
 8. **CHIMENTI I[#]**, PAGANO F, ANGELINI F, SICILIANO C, MANGINO G, PICCHIO V, DE FALCO E, CARNEVALE R, PERUZZI M, IBRAHIM M, BIONDI-ZOCCAI G, MESSINA E, FRATI G (2017). *Human lung spheroids as in vitro niches of lung progenitor cells with distinctive paracrine and plasticity properties*. STEM CELLS TRANSL MED, vol. 6:767-777. (IF=4.93. Cit.=6)
 9. **CHIMENTI I[#]**, PAGANO F, CAVARRETTA E, ANGELINI F, PERUZZI M, BARRETTA A, GRECO E, DE FALCO E, MARULLO AGM, SCIARRETTA S, BIONDI-ZOCCAI G, FRATI G (2016). *B-blocker treatment of cardiac surgery patients enhances isolation and improves phenotype of cardiosphere-derived cells*. SCIENTIFIC REPORTS, vol. 6:36774. (IF=4.26. Cit.=12)
 10. SICILIANO C, **CHIMENTI I**, BORDIN A, PONTI D, IUDICONE P, PERUZZI M, RENDINA EA, CALOGERO A, PIERELLI L, IBRAHIM M, DE FALCO E (2015). *The potential of GMP-compliant platelet lysate to induce a permissive state for cardiovascular transdifferentiation in human mediastinal adipose tissue-derived mesenchymal stem cells*. BIOMED RES INT, vol. 2015:162439. (IF=2.13. Cit.=8)
 11. SICILIANO C, **CHIMENTI I**, IBRAHIM M, NAPOLETANO C, MANGINO G, SCAFETTA G, ZOCCAI GB, RENDINA EA, CALOGERO A, FRATI G, DE FALCO E (2015). *Cardiosphere conditioned media influence the plasticity of human mediastinal adipose tissue-derived mesenchymal stem cells*. CELL TRANSPLANT, vol.24(11):2307-22. (IF=3.43. Cit.=18)
 12. **CHIMENTI I**, GAETANI R, FORTE E, ANGELINI F, DE FALCO E, BIONDI ZOCCAI G, MESSINA E, FRATI G, GIACOMELLO A (2014). *Serum and*

supplement optimization for EU GMP-compliance in cardiospheres cell culture. J CELL MOL MED, vol. 18(4):624-634. (IF=4.01. Cit.=16)

BOOK CHAPTERS

1. **CHIMENTI I**; GAETANI R; BARILE L; FORTE E; IONTA V; ANGELINI F; FRATI G; MESSINA E; GIACOMELLO A (2012). *Isolation and expansion of adult cardiac stem/progenitor cells in the form of cardiospheres from human cardiac biopsies and murine hearts*. In: Singh SR (ed): "Somatic Stem Cells. Methods and Protocols". Springer, 2012. METHODS MOL BIOL series, vol. 879:327-338. ISBN: 978-1-61779-815-3. DOI: 10.1007/978-1-61779-815-3_19.
2. **Chimenti I**, Gaetani R, Barile L, Forte E, Ionta V, Angelini F, Messina E, Giacomello A. *Chapter 9: Evidence for the existence of resident cardiac stem cells*. In: Cohen IS, Glenn R (eds): "Regenerating the heart". Humana Press, 2011. ISBN 978-1-61779-020-1. DOI: 10.1007/978-1-61779-021-8_9.

INVITED TALKS

- "Cardiac regeneration". Invited speaker at: XXXII National SIPMET Conference. Italian Society of Pathology and Translational Medicine, and American Society for Investigative Pathology, September 17th-20th 2014, Palermo, Italy.
- "Cardiac progenitor cells: current and future directions for cell therapy". Invited speaker at: 2013 Autumn Padua Muscle Days. University of Padua, and Ludwig Boltzmann Institute, November 14th-16th 2013, Terme Euganee – Padua, Italy.
- "The role and contribution of paracrine effects in cardiac cell therapy with human adult cardiac progenitor cells". Invited speaker and member of the Scientific and Organizing Committee for the BeMM PhD Symposium 2009, "Sapienza" University of Rome, December 10th 2009, Rome, Italy.
- "Paracrine properties assessment of cardiac progenitor cells". Invited speaker at: International Symposium on Cardiac stem cells differentiation and biopsy-derived cardiac regenerative cells: clinical implications and basic research. "Sapienza" University of Rome, CNR, and Pasteur Institute, October 14th-16th 2009, Rome, Italy.
- "Autologous cardiospheres for myocardial regeneration". Invited speaker at: XXVI Meeting of the Association of Cardiac Surgeons. Escola Superior de Tecnologia da Saude de Lisboa, June 24th-26th 2009, Lisbon, Portugal.