Chiara Lanzillotta *Pharm.D., Ph.D.*

Spoken Languages: Italian *(mother tongue)*, English *(high level in writing and speaking)*

EDUCATIONAL BACKGROUND:

December 2017: Ph.D. in Biochemistry Department of Biochemical Sciences "A. Rossi-Fanelli" Sapienza University of Rome, Italy
December 2014: National Qualification as Pharmacist (Faculty of Pharmacy, University of Rome La Sapienza)

July 2014: Doctor in Pharmaceutical Chemistry and Technology, "Sapienza" University – Rome (Italy)

2002 – 2007: Secondary School Diploma, Liceo Scientifico "Bruno Touschek" – Grottaferrata (RM) Italia

APPOINTMENTS:

Academic appointments

March 2019-present: Post-doctoral Research: Department of Biochemical Sciences "A. Rossi-Fanelli" Sapienza University of Rome, Italy

February 2018- February 2019: Post-doctoral Research: Department of Biochemical Sciences "A. Rossi-Fanelli" Sapienza University of Rome, Italy

Other appointments

December 2017: Ph.D. in Biochemistry Department of Biochemical Sciences "A. Rossi-Fanelli" Sapienza University of Rome, Italy

May 2016 – June 2017: *Sanders-Brown Center on Aging- Lexington (KY) - USA* Laboratory of Prof. Jose F. Abisambra, working on *"ER stress and Neurodegeneration"*

Jan 2013 - July 2014: *Dept. of Biochemistry, "Sapienza" University – Rome (Italy)*
Internship in Pharmaceutical Technologies, laboratory of Prof. Fabio Di Domenico *"Alterations of proteins degradative systems: implication in the development of Alzheimer like dementia"*

HONORS AWARDS:

2019 Travel award 3rd International Conference Trisomy 21 Research Society Barcelona 2019
2017 Travel Grant Sapienza for study abroad.
2016 Travel Grant Italian Society of Biochemistry (SIB)

INVITED SPIKER:

- 3th *International Conference on Alzheimer's and Parkinson's Diseases ADPD™ 2017 March 29-April 2, 2017 in Vienna, Austria*. The Unfolded Protein Response: a major early participant in the development of Alzheimer–like neuropathology in Down syndrome mice

- *58° National Meeting of the Italian Society of Biochemistry and Molecular Biology (September 2015, Urbino, Italy)*. "Ubiquitin-bound protein profile in human brain from Down Syndrome individuals' prior and after the development of Alzheimer-like dementia"

2014-2018: number of selected abstracts: 14

FUNDING INFORMATION: [grants as PI-principal investigator or I-investigator]

2017: I Progetto grande Sapienza n pr: RG11715C773A333E

2016: I Progetto grande Sapienza n pr: RG116154C9214DIA

2016: Intranasal Rapamycin administration to prevent Alzheimer like dementia in DS model. I, Jerome Lejeune Foundation

2015: I progetto piccolo Sapienza n pr: C26A154KH7

SCIENTIFIC COLLABORATIONS:

Prof. Jose F. Abisambra, Department of Neuroscience Center for Translational Research in Neurodegenerative Disease, Gainesville, FL (USA)

SOCIETY MEMBERSHIP:

2017-present members of T21RS

2014-present Italian Society of Biochemistry (SIB)

RESEARCH ACTIVITIES:

Keywords

Oxidative stress, Neurodegenerative disease, Redox proteomics Autophagy in AD and Down Syndrome, Tauopathies and Unfolded Protein Response

SUMMARY OF SCIENTIFIC ACHIEVMENTS:

Product type Number Data Base Start End

Papers [international] 13

Total Citations Scopus: 195

(H) index Scopus: 5

Publications:

1_**Lanzillotta C**, Di Domenico F, Perluigi M, Butterfield DA. Targeting Mitochondria in AD: Rationale and Perspectives. CNS Drugs. Accepted

2_ Di Domenico F, Tramutola A, Barone E, **Lanzillotta C**, Defever O, Arena A, Zuliani I1, Foppoli C, Iavarone F, Vincenzoni F, Castagnola M, Butterfield DA, Perluigi M. Restoration of aberrant mTOR signaling by intranasal rapamycin reduces oxidative damage: Focus on HNE-modified proteins in a mouse model of down syndrome. Redox Biol. Pubmed PMID: 30876754

3_ Cimini FA, Arena A, Barchetta I, Tramutola A, Ceccarelli V, **Lanzillotta C**, Fontana M, Bertoccini L, Leonetti F, Capoccia D, Silecchia G, Di Cristofano C, Chiappetta C, Di Domenico F, Baroni MG, Perluigi M, Cavallo MG, Barone E. Reduced biliverdin reductase-A levels are associated with early alterations of insulin signaling in obesity. Biochim Biophys Acta Mol Basis Dis. Pubmed PMID: 30826467

4_Sharma N, Tramutola A, **Lanzillotta C**, Arena A, Blarzino C, Cassano T, D. Butterfield DA, Di Domenico F, Perluigi M, Barone E. Loss of biliverdin reductase-A limits the oxidative stress-induced Akt-mediated inhibition of GSK-3β: implications for Alzheimer disease. Free Radical Biology and Medicine. Pubmed PMID: 30738142

5_Tramutola A*, **Lanzillotta C***, Barone E, Arena A, Zuliani I, Mosca L, Blarzino C, Butterfield DA, Perluigi M and Di Domenico F. Intranasal rapamycin ameliorates cognitive decline in a mouse model of Down syndrome. Translational Neurodegeneration. PubMed PMID: 30410750

6_Di Domenico F, **Lanzillotta C**, Tramutola A. Therapeutic potential of rescuing protein O-GlcNAcylation in tau-related pathologies. PubMed PMID: 30354776

7_Tramutola A*, Abate G*, **Lanzillotta C**, Triani F, Barone E, Iavarone F, Vincenzoni F, Castagnola M, Marziano M, Memo M, Garrafa E, Butterfield DA, Perluigi M Di Domenico F, Uberti D. Free Radical Biology and Medicine. Redox proteomics analysis of 3-NT-modified proteins in T-cell from Alzheimer disease patients: Involvement in immunesenescence and/or pathology prediction. PubMed PMID: 30321702

8_Tramutola A, Sharma N; Barone E; **Lanzillotta C**, Castellani A, Iavarone F, Vincenzoni F,Castagnola M, Butterfield DA, Cassano T, Perluigi M, Di Domenico F. Altered protein O GlcNAcylation profile in 3xTg-AD mice: Novel insights on protein signalling mechanisms revealed by proteomics. BBA - Molecular Basis of Disease. PubMed PMID:30031227

9_**Lanzillotta C**, Tramutola A, Meier SE, Schmitt F, Barone E, Perluigi M, Di Domenico F, Abisambra JF. Early and selective activation and subsequent alterations to the Unfolded Protein Response in Down Syndrome mouse models. J Alzheimers Dis 2017. PubMed PMID: 29439332

10_Fontaine SN, Ingram A, Cloyd RA, Meier SE, Miller E, Lyons D, Nation GK, Mechas E, Weiss B, **Lanzillotta C**, Di Domenico F, Schmitt F, Powell DK, Vandsburger M, Abisambra JF. Identification of changes in neuronal function as a consequence of aging and tauopathic neurodegeneration using a novel and sensitive magnetic resonance imaging approach. Neurobiol Aging. 2017 PubMed PMID: 28500878

11_Tramutola A, **Lanzillotta C**, Di Domenico F. Targeting mTOR to reduce Alzheimer-related cognitive decline: from current hits to future therapies. Expert Rev Neurother. 2016 Oct 2. PubMed PMID: 27690737.

12_Tramutola A, **Lanzillotta C**, Perluigi M, Butterfield DA. Oxidative stress, protein modification and Alzheimer disease. Brain Res Bull. 2016 Jun 15. Review. PubMed PMID: 27316747.

13_Tramutola A, Pupo G, Di Domenico F, Barone E, Arena A, **Lanzillotta C**, Broekaart D, Blarzino C, Head E, Butterfield DA, Perluigi M. Activation of p53 in Down Syndrome and in the Ts65Dn Mouse Brain is Associated with a Pro-Apoptotic Phenotype. J Alzheimers Dis. PubMed PMID: 26967221

14_Tramutola A, **Lanzillotta C**, Arena A, Barone E, Perluigi M, Di Domenico F. Increased mTOR signaling contributes to the accumulation of protein oxidative damage in a mouse model of Down syndrome. Neurodegenerative Diseases: Epub 2015 Nov 26. PMID: 26606243

Luogo e data

06/08/2019

IL/LA DICHIARANTE