CURRICULUM VITAE

Maria Laura Idda
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Education:

May, 2013: **Doctor in Biology (PhD)** University of Heidelberg and Institute of Toxicology and Genetics-Karlsruhe Institute of Technology (ITG-KIT). BioInterfaces International Graduate School Program. Title of the dissertation: "Light, reactive oxygen species and the circadian clock".

April, 2008: **Master degree in Biology** University of Sassari, Dept. of Biomedical Science, Title of the dissertation: "Pathophysiological role of LRRK2 protein in Parkinson's disease-type 8".

February, 2006: **Bachelor degree in Biology** University of Sassari, Dept. of Biomedical Sciences, Title of the dissertation: "Immunofluorescence techniques to study the eukaryotic cytoskeleton cells remodeling induced by adhesive *E. coli*".

Research Experience:

Dec. 2018 – now: Researcher
Institute of Genetic and Biomedical Research - National Research Council (IRGB-CNR) Cagliari (ITALY). Research topic: Functional follow-up of genetic associations implicated in disease (mainly autoimmune) pathogenesis.

Nov. 2013- Dec. 2018: Postdoc
Institute of Genetic and Biomedical Research - National Research Council (IRGB-CNR) Cagliari (ITALY). Research topic: Functional follow-up of disease (mainly autoimmune) genetic associations. Advisor: Prof. Francesco Cucca.

Apr. 2016 - Giug. 2018: Visiting Fellow-Postdoc
National Institutes of Health (NIH) - National Institute on Aging (NIA), Baltimora (USA). Research topic: RNA regulation in autoimmune diseases. Advisor: Dr. Myriam Gorospe.

Apr.2014-June 2014: NIH Special Volunteer Program
National Institutes of Health (NIH) - National Institute on Aging (NIA), Baltimora (USA). Research topic: Functional follow-up of disease (mainly autoimmune) genetic associations. Advisor: Dr. Myriam Gorospe and Prof. Francesco Cucca.

Nov. 2009 – May 2013: Doctoral student
University of Heidelberg and Institute of Toxicology and Genetics - Karlsruhe Institute of Technology (ITG-KIT, GERMANY). Research topic: Light, reactive oxygen species and the circadian clock. Advisor: Prof. Dr. Nicholas Foulkes.

Nov. 2008 – Nov. 2009: Student Research Project
University of Heidelberg and Institute of Toxicology and Genetics - Karlsruhe Institute of Technology (ITG-KIT, GERMANY) and University of Sassari. Research topic: Analysis of circadian rhythms in zebrafish. Advisor: Prof. Dr. Nicholas Foulkes and Prof. Dr. Claudia Crosio.

Jan. 2007– Jan. 2008: Master Student
University of Sassari Research topic: Pathophysiological role of LRRK2 protein in Parkinson's disease-type 8. Advisor: Prof. Dr. Claudia Crosio

Sept. 2005-Dec. 2005: Bachelor Student
University of Sassari Research topic: Immunofluorescence techniques to study the eukaryotic cytoskeleton cells remodeling induced by adhesive *E. coli*. Advisor: Prof. Dr. Pierluigi Fiori.

Scholarships and Grant:

2009 - Master and Back: PhD program

2014 - Dissection of the BAFF pathway in Multiple Sclerosis with a view toward more specific and effective therapies (FISM, with Prof. F. Cucca).
2015 - Understanding of the role of BAFF in Multiple Sclerosis and Malaria (with Prof. F. Cucca).
2016 – 2017 Role of RNA-binding protein HuD in obesity traits (2016) (co-PI with Dr. M. Gorospe).
2017 - Analysis of Senescent Cells in Human Aging Tissues (2017) (co-PI with Dr. M. Gorospe).

Publications:
Idda ML, Kage E, Lopez-Olmeda JF, Mracek P, Foulkes NS, Vallone D. Circadian timing of injury-induced cell proliferation in zebrafish. PLoS One (2012).

Idda ML, Bertolucci C, Vallone D, Gothilf Y, Sánchez-Vázquez FJ, Foulkes NS. Circadian clocks: lessons from fish. Prog Brain Res (2012).

Mracek P, Santoriello C, Idda ML, Pagano C, Ben-Moshe Z, Gothilf Y, Vallone D, Foulkes NS. Regulation of per and cry Genes Reveals a Central Role for the D-Box Enhancer in Light-Dependent Gene Expression. PLoS One (2012).

Mracek P, Pagano C, Fröhlich N, Idda ML, Cuesta IH, Lopez-Olmeda JF, Sánchez- Vázquez FJ, Vallone D, Foulkes NS. ERK Signaling Regulates Light-Induced Gene Expression via D-Box Enhancers in a Differential, Wavelength-Dependent Manner. PLoS One (2013).

Steri M, Orrù V, Idda ML et al. Overexpression of the cytokine BAFF and autoimmunity risk. New Engl. J. Med. (2017).

Idda ML, Munk R, Abdelmohsen K, Gorospe M. Noncoding RNAs in Alzheimer's disease. WIREs RNA (2017).

Steri M, Idda ML, Whalen MB, Orru V. Genetic Variants at Untranslated Regions. WIREs RNA (2018).

Pagano C, Siucinate R, Idda ML, Ruggiero G, Ceinos R, Pagano M, Frigato E, Bertolucci C, Foulkes NS and Vallone D. Evolution shapes the responsiveness of the D-box enhancer element to light and reactive oxygen species in vertebrates. Scientific Report (2018).

Noh JH, Kim KM, Idda ML, Martindale JL, Yang X, Abdelmohsen K, Gorospe M. GRSF1 suppresses cell senescence. Aging (2018).

Idda ML, Lodde V, McClusky W, Martindale J, Yang X, Munk R, Steri M, Cucca F, Abdelmohsen K, Gorospe M. Cooperative translational control of polymorphic BAFF by NF90 and miR-15. Nucleic Acids Research. Nucleid Acid Research (2018).

Idda ML, Lodde L, Galleri G, Martindale JL, Cucca F, Abdelmohsen K, Gorospe M. Role of NF90 in the immune response to malaria infection. Cell cycle. (2019).

Technical Skills:

Cell Biology: Fish and mammalian cell culture, primaries cell culture from zebrafish embryos and adult tissue, *Plasmodium fanciparum* culture, isolation and culture of primary monocytes cell derived from human blood. Transient/stable transfections, immunofluorescence, light and fluorescent microscopy Confocal Microscope Sp5 and Sp8 (Leica Advanced Confocal Microscopie Course, Nov. 2014 Milan).

Molecular Biology: DNA and RNA Isolation, Molecular cloning, DNA sequencing, PCR, RT-PCR, in vitro/in vivo Luciferase assays, gene editing (Morpholino, siRNA). Immunoprecipitation (IP) and RNA-Protein Pull-Down, iCLIP. Protein isolation and purification, Western Blot analysis.

Developmental Biology: Handling zebrafish and medaka embryos and adult, RNA in situ hybridization, BrdU assay in embryos and adult fins, microinjection in embryos and experience with transgenic animals.

Software: Proficiency with Microsoft Office (Word, Excel, Outlook, Powerpoint), Primer3, Basic and Specialized BLAST, ImageJ, ABI StepOnePlus Software, EndNote, Adobe Illustrator CS5.