First name: Valentina

Last name: Tedeschi

Education and training:

07.2003 Classical High school degree (86/100)

13.01.2009 Bachelor's Degree in Biological Sciences (108/110) Research thesis: "Production of recombinant proteins for the antigen presentation". Training coordinator: Prof Rosa Sorrentino "Sapienza" University of Rome

27.10.2011 Master's Degree in Biology applied to Biomedical Research (110/110 cum laude) Research thesis: "Analysis of CD8+ T cells response against both self and viral antigens in patients with Multiple Sclerosis". Training coordinator: Dr Maria Teresa Fiorillo "Sapienza" University of Rome

21.01.2015: PhD in Pasteurian Sciences Dissertation: "HLA-B27 and Ankylosing Spondylitis: functional aspects of HLA-B27 molecules and other factors involved in the disease pathogenesis" Supervisors: Prof Rosa Sorrentino and Dr Maria Teresa Fiorillo "Sapienza" University of Rome

1.02.2015 - to date: PostDoc Position in the laboratory coordinated by Prof Rosa Sorrentino

Areas of interests: Pathogenic role of HLA genes in autoimmune deseases

04.04 - 15.04.2016: Collaboration with the Chemokine and Immunity laboratory in the Institute for Research in Biomedicine (IRB) Bellinzona, Switzerland

Laboratory skills:

Prokaryotic and eukaryotic cell cultures

Cloning technique

Production of recombinant protein

PBMC isolation. Depletion of cellular subpopulations

Generation and production of CD8+ T cells

Cell transfection Isolation of DNA and RNA from cells PCR; RT-PCR; Real-Time PCR

Protein Extraction Western Blot

Flow cytometry Pentamer technique

Cytotoxicity assay

Immunofluorescence and Confocal Microscopy

Cell migration

Computer skills:

Microsoft Office (Word, Excel, PowerPoint)

Adobe Photoshop

Statistical analysis (R)

Data analysis (ABI ImageLab, ImageJ, BD CellQuest Pro, FlowJo software, ZEN microscope software, GraphPad Prism)

Congress communications:

- <u>Tedeschi V</u>, Nurzia E, Mechelli R, Salvetti M, Uchanska-Ziegler B, Saenger W, Sorrentino R, Fiorillo MT. "Transaldolase as target of CD8+ T cell reactivity in patients with Multiple Sclerosis: a functional/structural study". Convegno FISM, 26-27 Maggio 2011, Roma (poster presentation)

- <u>Tedeschi V</u>, Vitulano C, Mathieu A, Cauli A, Sorrentino R, Fiorillo MT. "HLA-B27 in Ankylosing Spondylitis:presentation of antigens devoid of the canonical binding motif". IX NATIONAL CONFERENCE of the SIICA, Florence, 28-31 May 2014 (poster presentation)

- <u>Tedeschi V</u>, Vitulano C, Cauli A, Mathieu A, Paladini F, Kormann D, Bockmann R, Sorrentino R, Fiorillo MT. "HLA-B*2705 and its double implication in viral defense and autoimmunity: unpredicted presentation of an immunodominant viral epitope devoid of the classical B27 binding motif". 4th European Congress of Immunology, Vienna, 6-9 September 2015 (poster presentation)

- <u>Tedeschi V</u>. "Dissecting the role of HLA-B*27 at the crossroads between "MHC-I-opathy"and antiviral defense". Giornata Romana di Immunologia Università 'La Sapienza', 6 June 2016 (oral presentation)

Publications:

- Cauli A, Dessole G, Piga M, Angioni MM, Pinna S, Floris A, Congia M, Mascia E, Paladini F, **Tedeschi V**, Sorrentino R, Fiorillo MT, Mathieu A. "Expression analysis of HLA-E and NKG2A and NKG2C receptors points at a role for natural killer function in ankylosing spondylitis." RMD Open. 2018 Jul 13;4(2):e000597. doi: 10.1136/rmdopen-2017-000597. eCollection 2018.

- Paladini F, Fiorillo MT, Vitulano C, **Tedeschi V**, Piga M, Cauli A, Mathieu A, Sorrentino R. "An allelic variant in the intergenic region between ERAP1 and ERAP2 correlates with an inverse expression of the two genes." Sci Rep. 2018 Jul 10;8(1):10398. doi: 10.1038/s41598-018-28799-8.

- Yair-Sabag S, **Tedeschi V**, Vitulano C, Barnea E, Glaser F, Melamed Kadosh D, Taurog JD, Fiorillo MT, Sorrentino R, Admon A. "The Peptide Repertoire of HLA-B27 may include Ligands with Lysine at P2 Anchor Position." Proteomics. 2018 May;18(9):e1700249. doi: 10.1002/pmic.201700249. Epub 2018 Mar 13

- Vitulano C, **Tedeschi V**, Paladini F, Sorrentino R, Fiorillo MT. "The interplay between HLA-B27 and ERAP1/ERAP2 aminopeptidases: from anti-viral protection to spondyloarthritis." Clin Exp Immunol. 2017 Dec;190(3):281-290. doi: 10.1111/cei.13020. Epub 2017 Aug 30. Review.

- Fiorillo MT, Paladini F, **Tedeschi V**, Sorrentino R. "HLA Class I or Class II and Disease Association: Catch the Difference If You Can." Front Immunol. 2017 Nov 7;8:1475. doi: 10.3389/fimmu.2017.01475. eCollection 2017

- **Tedeschi V**, Vitulano C, Cauli A, Paladini F, Piga M, Mathieu A, Sorrentino R, Fiorillo MT "The Ankylosing Spondylitis-Associated HLA-B*2705 Presents a B*0702-Restricted EBV Epitope and

Sustains the Clonal Amplification of Cytotoxic T Cells in Patients" MOL MED 22: 215-223 2016 doi: 10.2119/molmed.2016.00031

- Nurzia E, Narzi D, Cauli A, Mathieu A, **Tedeschi V**, Caristi S, Sorrentino R, Böckmann RA, Fiorillo MT "Interaction pattern of Arg62 in the A-pocket of differentially disease-associated HLA-B27 subtypes suggests distinct TCR binding modes" PlosOne, 7(3):e32865.doi:10.371/journal.pone.0032865