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Decreto Rettore Università di Roma “La Sapienza” n 2174/2020 del 27.08.2020

FRANCESCA NARDECCHIA **CURRICULUM VITAE**

Place Rome
Date 12/10/2020

PART I – GENERAL INFORMATION

Full Name	Francesca Nardecchia
E-mail	francesca.nardecchia@uniroma1.it
Spoken Languages	Italian, English

PART II - EDUCATION

November 2017 – today	PhD student in Clinical/Experimental Neuroscience and Psychiatry, Department of Human Neuroscience, Child Neurology and Psychiatry Institute, Sapienza, University of Rome. Supervisor: Prof. Vincenzo Leuzzi
Nov. 2013 – February 2017	PhD Degree in Pharmacology, Department of Physiology and Pharmacology, Sapienza, University of Rome. Supervisor: Prof. Ferdinando Nicoletti
July 2009 – June 2014	Specialization in Child and Adolescent Neurology and Psychiatry at Sapienza, University of Rome, Department of Pediatrics and Child Neurology and Psychiatry - Policlinico Umberto I, University Hospital. Final grade: 70/70 summa cum laude. Graduation thesis: “The role of biogenic amine/monoamine neurotransmitters in the physiopathology of phenylketonuria (PKU)”. Advisor: Prof. Vincenzo Leuzzi
February 2009	Professional Qualification of Medical Doctor at Sapienza, University of Rome
September 2002 – July 2008	Medical Doctor Degree at Sapienza, University of Rome. Final grade: 110/110 summa cum laude. Graduation thesis: “The neurodevelopmental hypothesis of early onset schizophrenia: changes in Wnt/GSK-3β/β-catenin cascade.” Advisors: Prof. Teresa I. Carratelli, Prof. Ferdinando Nicoletti

PART III – APPOINTMENTS

IIIA – ACADEMIC APPOINTMENTS

Oct. 2015 – September 2016	Research Fellowship on the effect of BH4 on biogenic amine peripheral metabolism and cognitive functions in Phenylketonuric patients. Department of Psychology, Sapienza, University of Rome. Advisor: Prof. Stefano Puglisi-Allegra
Oct. 2014 – September 2015	Research Fellowship on the cognitive functions in early treated Phenylketonuric patients. Department of Pediatrics and Child Neurology and Psychiatry, Sapienza, University of Rome. Advisor: Prof. Vincenzo Leuzzi

IIIB – OTHER APPOINTMENTS PROFESSIONAL EXPERIENCE

- March 2020 – today* Medical director in Child and Adolescent Neurology and Psychiatry at Policlinico Umberto I, University Hospital (Sapienza, University of Rome), via dei Sabelli 108, 00181 Rome (Permanent full-time employment)
- May 2017 – February 2020* Medical director in Child and Adolescent Neurology and Psychiatry at Policlinico Umberto I, University Hospital (Sapienza, University of Rome), Via dei Sabelli 108, 00181 Rome (Temporary full-time employment)
- June 2016 – April 2017* Freelance employment as consultant in Child and Adolescent Neurology and Psychiatry at Policlinico Umberto I, University Hospital (Sapienza, University of Rome), for the project “New approaches in early diagnosis and treatment for children with neurogenetic and metabolic diseases”, Via dei Sabelli 108, 00181 Rome (Full-time)
- April 2015 – April 2016* Freelance employment as consultant in Child and Adolescent Neurology and Psychiatry at ARMONIA, rehabilitation centre accredited and affiliated with the national health system, Via Piave Km. 69, 04100 Latina (40 h/month)
- January 2015 – March 2015* Freelance employment as consultant in Child and Adolescent Neurology and Psychiatry at Casa di Cura INI S.p.A. Unipersonale – Divisione Medicus, rehabilitation centre accredited and affiliated with the national health system, P.le San Giovanni di Dio, snc – 00019 Tivoli (RM) (10 h/month)
- November 2014 – March 2015* Freelance employment as consultant in Child and Adolescent Neurology and Psychiatry at VILLA ALBA, rehabilitation centre accredited and affiliated with the national health system, Via Nomentana 432, 00012 Fonte Nuova (RM) (40 h/month)

PART IV – TEACHING EXPERIENCE

- November 2018 – October 2019* Title: Lo sviluppo fisico e mentale del bambino e dell’adolescente. 2 CFU MED/39. CdS Terapia della neuro e psicomotricità dell’età evolutiva (cod. 29988).
- November 2019 – October 2020* Title: Lo sviluppo fisico e mentale del bambino e dell’adolescente. 2 CFU MED/39. CdS Terapia della neuro e psicomotricità dell’età evolutiva (cod. 29988).

PART V - SOCIETY MEMBERSHIPS, AWARDS AND HONORS

- September 2019* **Selected poster for guided poster tour** at International Congress of Parkinson’s Disease and Movement Disorders. Title: *Clinical Outcome in early-treated Sepiapterin Reductase Deficiency (SRD): A case report.* Authors: Nardeccchia F, Galosi S, Manti F, Giannini MT, Carducci Cl, Tolve E, Leuzzi V. 22-26 September 2019, Nice, France.
- October 2018* **Travel grant** for the participation at the International Congress of Parkinson’s Disease and Movement Disorders. 5-9 October 2018, Hong Kong, associated with the presentation of the following posters:

- Nardecchia F, Pollini L, Carducci Ca, Tolve M, De Leo Sabrina, Carducci Cl, Leuzzi V. *Movement disorder associated with 3-Idroxyisobutyryl-Coa hydrolase (HIBCH) deficiency.*
- Nardecchia F, Manti F, De Leo S, Carducci C, Leuzzi V. *Clinical characterization of tremor in patients with Phenylketonuria (PKU).*

2017-ongoing

Member of the International Parkinson and Movement Disorder Society

2010-ongoing

Member of the Italian Society for the Study of Inherited Metabolic Disorders and Neonatal Screening

2014-ongoing

Member of the International Working Group on Neurotransmitter Related Disorders, Patient Registry

PART VI - FUNDING INFORMATION [GRANTS AS PI-PRINCIPAL INVESTIGATOR OR I-INVESTIGATOR]

2019

Title: *Study of serotonergic system in phenylketonuria: insights from the ENU2 mouse model and early treated patients.* Research project – progetti medi Bando Ateneo Sapienza. Role: Participant. Grant value: 11.000€. PI: Vincenzo Leuzzi.

2018

Title: *Study of brain vulnerability to phenylalanine in adults with early-treated phenylketonuria: assessment of higher cortical functions and cerebral functional connectivity with respect to blood and brain phenylalanine.* NUTRICIA Metabolics Research Fund. Role: Participant. Grant value: 20.000€. PI: Vincenzo Leuzzi.

2019

Title: *Study of brain vulnerability to phenylalanine in adults with early-treated phenylketonuria: assessment of executive functions and cerebral connectivity with respect to blood and brain phenylalanine.* Research project – progetti medi Bando Ateneo Sapienza. Role: Participant. Grant value: 10.000€. PI: Vincenzo Leuzzi.

PART VII – RESEARCH ACTIVITIES

Keywords	Brief Description
Pediatric neurology	The research activity of Francesca Nardecchia focuses on neurological, neurocognitive, psychiatric, and genetic characterization of infantile neurometabolic diseases. She is involved in clinical research programmes aimed at diagnosing rare complex cases by means of next generation sequencing (NGS) techniques, coordinating the selection and discussion of patients' data for the Telethon and Ospedale Pediatrico Bambino Gesù Undiagnosed Diseases programmes. Her main research experience concerns the study of the natural history of such diseases and the outcome of patients affected by diseases amenable to early detection and early treatment through newborn screening programmes. The main research topic has been Phenylketonuria (PKU), alongside other treatable inborn errors of metabolism. Her research experience comprehends molecular biology techniques, that allowed the study of the structure and function of the defective enzyme responsible of PKU phenylalanine hydroxylase (PAH), but also the investigation of functional consequences of high phenylalanine levels in brain tissues of the murine model of PKU. She has been and she is still involved
Rare diseases	
Neurometabolic diseases	
Phenylketonuria	
Pediatric movement disorders	

in the clinical, neurological, neuroradiological, psychiatric, and neuropsychological characterization of early treated PKU patients that allowed the detection of a wide range of dysfunctions, not always related to the degree of adherence to the therapy. Indeed, her most recent investigations have focused on the research of biomarkers of brain vulnerability to the neurotoxic metabolite phenylalanine which accumulates in PKU patients, in order to support the implementation of personalized treatment strategies.

PRECLINICAL AND BASIC SCIENCE RESEARCH EXPERIENCE

<i>Nov. 2013 – February 2017</i>	Study of metabotropic glutamate receptors in a mouse model of intellectual disability (PhD project). Department of Human Physiology and Pharmacology at Sapienza, University of Rome. Advisor: Prof. Ferdinando Nicoletti
<i>Sept. 2011 – August 2012</i>	Molecular basis of the interallelic complementation of Phenylalanine Hydroxylase and its impact on phenotype-genotype correlation in Phenylketonuric patients. Department of Inborn Errors of Metabolism (Research Laboratory of Molecular Pediatrics) at Dr. von Hauner Children's Hospital, in Munich, Germany. Advisor: Prof. Ania C. Muntau
<i>January 2006 – July 2008</i>	Molecular biology survey on nuclear, cytoplasmatic and serum molecular markers expressed in adolescents suffering from early onset schizophrenia (MD thesis project). Department of Human Physiology and Pharmacology at La Sapienza, University of Rome. Advisor: Prof. Ferdinando Nicoletti

CLINICAL TRIALS EXPERIENCE

<i>January 2014 – ongoing</i>	Merck Serono Protocol EMR 700773-002: “A Phase IV Open-Label, Single-Cohort Study of the Long-Term Neurocognitive Outcomes in 4 to 5 Year-old Children with Phenylketonuria Treated with Sapropterin Dihydrochloride (Kuvan®) for 7 Years (KOGNITO)”
<i>August 2011 – May 2017</i>	Merck Serono Protocol EMR700773-003: “A Phase IIIb, Multicentre, Open-Label, Randomized, Controlled Study of the Efficacy, Safety, and Population Phamacokinetics of Sapropterin Dihydrochloride (Kuvan) in Phenylketonuria (PKU) Patients <4 Years Old (SPARK)”
<i>November 2010 – ongoing</i>	Observational Post-Authorization Safety Study (phase IV), EMR 700773-001, Kuvan® Adult Maternal Pediatric European Registry (KAMPER)

PART VIII – SUMMARY OF SCIENTIFIC ACHIEVEMENTS

Product type	Number	Data Base	Start	End
Papers [international]	22	Scopus	2010	2020
Papers [national]	1	Scopus	2009	2009
Books [scientific]	0			

Books [teaching]	0			
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Total Impact factor	74,482
Average Impact factor per Product	3,103
Total Citations	165 (<i>Scopus</i>)
Average Citations per Product	6,875
Hirsch (H) index	8 (<i>Scopus</i>)
Normalized H index*	0,667

*H index divided by the academic seniority.

ORCID ID: orcid.org/0000-0002-0808-2827

Scopus ID: 26653641500

PUBLICATIONS (FIRST OR CO-FIRST AUTHORSHIP)

- Nardecchia F, Manti F, De Leo S, Carducci C, Leuzzi V. Clinical characterization of tremor in patients with phenylketonuria. *Mol Genet Metab.* 2019 Sep-Oct;128(1-2):53-56.
- Nasca A, Nardecchia F, Common A, Semeraro M, Legati A, Garavaglia B, Ghezzi D, Leuzzi V. Clinical and Biochemical Features in a Patient With Mitochondrial Fission Factor Gene Alteration. *Front Genet.* 2018 Dec 7;9:625.
- Manti F, Nardecchia F, Barresi S, Venditti M, Pizzi S, Hamdan FF, Blau N, Burlina A, Tartaglia M, Leuzzi V. Neurotransmitter trafficking defect in a patient with clathrin (CLTC) variation presenting with intellectual disability and early-onset parkinsonism. *Parkinsonism Relat Disord.* 2018 Oct 11.
- Nardecchia F, Orlando R, Iacovelli L, Colamartino M, Fiori E, Leuzzi V, Piccinin S, Nistico R, Puglisi-Allegra S, Di Menna L, Battaglia G, Nicoletti F, Pascucci T. Targeting mGlu5 Metabotropic Glutamate Receptors in the Treatment of Cognitive Dysfunction in a Mouse Model of Phenylketonuria. *Front Neurosci.* 2018 Mar 16;12:154.
- Nardecchia F, Chiarotti F, Carducci C, Santagata S, Valentini G, Angeloni A, Blau N, Leuzzi V. Altered tetrahydrobiopterin metabolism in patients with phenylalanine hydroxylase deficiency. *Eur J Pediatr.* 2017 Jul;176(7):917-924.
- Manti F, Nardecchia F, Chiarotti F, Carducci C, Carducci C, Leuzzi V. Psychiatric disorders in adolescent and young adult patients with phenylketonuria. *Mol Genet Metab.* 2016 Jan;117(1):12-8.
- Nardecchia F, Manti F, Chiarotti F, Carducci C, Carducci C, Leuzzi V. Neurocognitive and neuroimaging outcome of early treated young adult PKU patients: A longitudinal study. *Mol Genet Metab.* 2015 Jun-Jul;115(2-3):84-90.

PUBLICATIONS (CO-AUTHORSHIP)

- Romani C, Manti F, Nardecchia F, Valentini F, Fallarino N, Carducci C, De Leo S, MacDonald A, Palermo L, Leuzzi V. Cognitive Outcomes and Relationships with Phenylalanine in Phenylketonuria: A Comparison between Italian and English Adult Samples. *Nutrients.* 2020 Oct 3;12(10):E3033.
- Manti F, Nardecchia F, Banderali G, Burlina A, Carducci C, Carducci C, Donati MA, Gueraldi D, Paci S, Pochiero F, Porta F, Ortolano R, Rovelli V, Schiaffino MC, Spada M, Blau N, Leuzzi V. Long-term clinical

outcome of 6-pyruvoyl-tetrahydropterin synthase-deficient patients. Mol Genet Metab. 2020 Jun 24:S1096-7192(20)30148-7.

- Trimarco B, Manti F, Nardecchia F, Melogno S, Testa M, Meledandri G, Carducci C, Penge R, Leuzzi V. Executive functioning, adaptive skills, emotional and behavioral profile: A comparison between autism spectrum disorder and phenylketonuria. Mol Genet Metab Rep. 2020 Mar 9;23:100577.
- Pollini L, Tolve M, Nardecchia F, Galosi S, Carducci C, di Carlo E, Carducci C, Leuzzi V. Multiple sclerosis and intracellular cobalamin defect (MMACHC/PRDX1) comorbidity in a young male. Mol Genet Metab Rep. 2020 Jan 7;22:100560.
- Galosi S, Nardecchia F, Leuzzi V. Treatable Inherited Movement Disorders in Children: Spotlight on Clinical and Biochemical Features. Mov Disord Clin Pract. 2020 Feb 4;7(2):154-166.
- Pollini L, Galosi S, Nardecchia F, Musacchia F, Castello R, Nigro V, Leuzzi V. Parkinsonism, Intellectual Disability, and Catatonia in a Young Male With MECP2 Variant. Mov Disord Clin Pract. 2019 Nov 21;7(1):118-119.
- Romani C, Manti F, Nardecchia F, Valentini F, Fallarino N, Carducci C, De Leo S, MacDonald A, Palermo L, Leuzzi V. Adult cognitive outcomes in phenylketonuria: explaining causes of variability beyond average Phe levels. Orphanet J Rare Dis. 2019 Nov 28;14(1):273.
- van Vliet D, van Wegberg AMJ, Ahring K, Bik-Multanowski M, Casas K, Didycz B, Djordjevic M, Hertecant JL, Leuzzi V, Mathisen P, Nardecchia F, Powell KK, Rutsch F, Stojiljkovic M, Trefz FK, Usurelu N, Wilson C, van Karnebeek CD, Hanley WB, van Spronsen FJ. Untreated PKU Patients without Intellectual Disability: What Do They Teach Us? Nutrients. 2019 Oct 25;11(11).
- Leuzzi V, Chiarotti F, Nardecchia F, van Vliet D, van Spronsen FJ. Predictability and inconsistencies of cognitive outcome in patients with phenylketonuria and personalised therapy: the challenge for the future guidelines. J Med Genet. 2020 Mar;57(3):145-150.
- van Vliet D, van Wegberg AMJ, Ahring K, Bik-Multanowski M, Blau N, Bulut FD, Casas K, Didycz B, Djordjevic M, Federico A, Feillet F, Gizewska M, Gramer G, Hertecant JL, Hollak CEM, Jørgensen JV, Karall D, Landau Y, Leuzzi V, Mathisen P, Moseley K, Mungan NÖ, Nardecchia F, Öunap K, Powell KK, Ramachandran R, Rutsch F, Setoodeh A, Stojiljkovic M, Trefz FK, Usurelu N, Wilson C, van Karnebeek CD, Hanley WB, van Spronsen FJ. Can untreated PKU patients escape from intellectual disability? A systematic review. Orphanet J Rare Dis. 2018 Aug 29;13(1):149.
- Manti F, Nardecchia F, Paci S, Chiarotti F, Carducci C, Carducci C, Dalmazzone S, Cefalo G, Salvatici E, Banderoli G, Leuzzi V. Predictability and inconsistencies in the cognitive outcome of early treated PKU patients. J Inherit Metab Dis. 2017 Nov;40(6):793-799. doi: 10.1007/s10545-017-0082-y. Epub 2017 Aug 23.
- Panaccione I, Iacovelli L, di Nuzzo L, Nardecchia F, Mauro G, Janiri D, De Blasi A, Sani G, Nicoletti F, Orlando R. Paradoxical sleep deprivation in rats causes a selective reduction in the expression of type-2 metabotropic glutamate receptors in the hippocampus. Pharmacol Res. 2017 Mar;117:46-53. doi: 10.1016/j.phrs.2016.11.029. Epub 2016 Nov 23.
- Leuzzi V, Rossi L, Gabucci C, Nardecchia F, Magnani M. Erythrocyte-mediated delivery of recombinant enzymes. J Inherit Metab Dis. 2016 Jul;39(4):519-30. doi: 10.1007/s10545-016-9926-0. Epub 2016 Mar 30.
- Mastrangelo M, Chiarotti F, Berillo L, Caputi C, Carducci C, Di Biasi C, Manti F, Nardecchia F, Leuzzi V. The outcome of white matter abnormalities in early treated phenylketonuric patients: A retrospective longitudinal long-term study. Mol Genet Metab. 2015 Nov;116(3):171-7. doi: 10.1016/j.ymgme.2015.08.005. Epub 2015 Aug 10.
- Papetti L, Parisi P, Leuzzi V, Nardecchia F, Nicita F, Ursitti F, Marra F, Paolino MC, Spalice A. Metabolic epilepsy: an update. Brain Dev. 2013 Oct;35(9):827-41. doi: 10.1016/j.braindev.2012.11.010. Epub 2012 Dec 27.
- Ardizzone I, Nardecchia F, Marconi A, Carratelli TI, Ferrara M. Antipsychotic medication in adolescents suffering from schizophrenia: a meta-analysis of randomized controlled trials. Psychopharmacol Bull. 2010;43(2):45-66.

- Ardizzone I, Marconi A, Nardcchia F. [Obstetric complications and early-onset schizophrenia: a case-control study]. Riv Psichiatr. 2009 Mar-Apr;44(2):117-21.

INVITED SPEAKER AT NATIONAL OR INTERNATIONAL CONGRESSES

- Advanced course on rare diseases of metabolism. Modica (RG), 24th -26th September 2020. Title: Phenylketonuria: pharmacological approach.
- Advanced course on rare diseases of metabolism. Isola delle Femmine (PA), 4th -6th October 2019. Title: Phenylketonuria: pharmacological approach.
- Sponsored Symposium Biomarin at SSIEM 2019: Navigating and understanding consequences of high Phe in PKU. Title: Diving into the pathways of neurotransmitters in PKU. Rotterdam, 3rd September 2019.
- The transition of phenylketonuric patient from pediatrics into adult care. Florence, 27th & 28th June 2019. Title: Adult to bring back to diet + practical case study
- Rare diseases: therapeutic news for a better quality of life... L'Aquila, 13th April 2019. Title: Phenylketonuria: clinical aspects and neonatal screening programs.
- The 5th Conference of the European Societies of Neuropsychology and the 12th Nordic Meeting in Neuropsychology. Title: Neurocognitive and neuroimaging outcome of early treated young adult PKU patients: A longitudinal study. Tampere, Finland, 9-11 September 2015.

SELECTED FOR ORAL COMMUNICATION AT NATIONAL OR INTERNATIONAL CONGRESSES

- Speaker: **Nardcchia F.** Co-authors: Manti F, Carducci C, Carducci C, De Leo S, Leuzzi V. Title: Clinical characterization of tremor in patients with Phenylketonuria. Congress: Society for the Study of Inborn Errors of Metabolism, SSIEM 2018 Annual Symposium, 4-7 September 2018, Athens, Grecia.
- Speaker: **Nardcchia F.** Altri autori: Manti F, Barresi S, Venditti M, Hamdan F; Blau N, Burlina A, Martinelli S, Tartaglia M, Leuzzi V. Title: Neurotransmitter trafficking defect in a patient with the clathrin (CLTC) alteration presenting with hyperphenylalaninemia and Parkinsonism. Congress: Society for the Study of Inborn Errors of Metabolism, SSIEM 2018 Annual Symposium, 4-7 September 2018, Athens, Grecia.
- Speaker: **Nardcchia F.** Co-authors: Orlando R, Iacovelli L, Colamartino M, Fiori E, Leuzzi V, Piccinin S, Nistico R, Puglisi-Allegra S, Di Menna L, Battaglia G, Nicoletti F, Pascucci T. Title: Targeting mGlu₅ Metabotropic Glutamate Receptors in the Treatment of Cognitive Dysfunction in a Mouse Model of Phenylketonuria. Congress: 50th EMG Conference 2018, 7-9 June 2018, Hamburg, Germany.
- Speaker: **Nardcchia F.** Co-authors: Orlando R, Iacovelli L, Colamartino M, Fiori E, Leuzzi V, Piccinin S, Nistico R, Puglisi-Allegra S, Di Menna L, Battaglia G, Nicoletti F, Pascucci T. Title: Ruolo dei recettori metabotropici del glutammato nell'alterazione cognitiva in un modello animale di fenilchetonuria. Congress: VIII Congresso Annuale Società Italiana Malattie Metaboliche e screening neonatali (SIMMESN). 29-30 November e 1 December 2017. Rome.
- Speaker: **Nardcchia F.** Co-authors: A.Commone, M.Mastrangelo, C. Carducci, C. Carducci, V.Angeloni, V. Leuzzi. Title: Biomarkers liquorali nei disturbi del movimento ad esordio infantile. Congress: VIII Congresso Annuale Società Italiana Malattie Metaboliche e screening neonatali (SIMMESN). 29-30 November e 1 December 2017. Rome.
- Speaker: **Nardcchia F.** Co-authors: Valentini G, Chiarotti F, Santagata S, Carducci C, Angeloni A, Leuzzi V. Title: Secondary pterins alteration in patients with Phenylalanine Hydroxylase deficit. Congress: Society for the Study of Inborn Errors of Metabolism, SSIEM 2016 Annual Symposium, 6-9 September 2016, Rome.
- Speaker: Melogno S. Co-authors: Trimarco B, **Nardcchia F.** Title: Funzioni esecutive e difficoltà affettivo-comportamentali: un confronto tra bambini con ASD ad alto funzionamento e bambini con fenilchetonuria. Congress: Autismo: Trasformazioni possibili in rapporto all'età e ai sottotipi clinici, 19-20 OCtober 2015, Rome.

- Speaker: **Nardecchia F.** Co-authors: Pascucci T, Manti F, Carducci C, Puglisi-Allegra S, Leuzzi V. Title: Marker periferici del metabolismo delle amine biogene e possibile rapporto con il profilo neuropsicologico e psicopatologico della Fenilchetonuria. Congress: VI Congresso nazionale Società Italiana Malattie Metaboliche e screening neonatali (SIMMESN), 20-23 November 2014, Milan.
- Speaker: **Nardecchia F.** Co-authors: Tiziana Pascucci, Filippo Manti, Claudia Carducci, Stefano Puglisi-Allegra, Vincenzo Leuzzi. Title: Marker periferici del metabolismo delle amine biogene e possibile rapporto con il profilo neuropsicologico e psicopatologico della Fenilchetonuria. Congress: XXVI Congresso Nazionale della Società Italiana di Neuropsichiatria dell'Infanzia e dell'Adolescenza, 10-13 September 2014, Rome.
- Speaker: Danecka MK. Co-authors: Reiss DD, **Nardecchia F**, Muntau AC, Gersting SW. Title: Mechanisms underlying interallelic complementation: lesson learnt from phenylketonuria, glutaric aciduria type 1 and Alzheimer disease. Congress: International Congress Of Inborn Errors of Metabolism. Barcelona, Spain 3-6 September, 2013.
- Speaker: Sabatello U. Co-author: **Nardecchia F.** Title: La formazione in psichiatria infantile: tra storia e prospettive. Gior Neuropsich Età Evol 2011;31 (Suppl.1):29-36.

EDITORIAL EXPERIENCE

<i>Peer reviewer</i>	Review of 9 papers published in international journals (<i>Cognitive Neuropsychology</i> , <i>Journal of Pediatric Genetics</i> , <i>Neuropsychology</i> , <i>NeuroImage: Clinical</i> , <i>Neuropsychiatric Disease and Treatment</i> , <i>PLOS ONE</i>)
<i>Review editor</i>	Editorial Board of the international journal <i>Frontiers in Psychology - Cognition</i>

PART IX– SELECTED PUBLICATIONS

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. Nardecchia F, Manti F, Chiarotti F, Carducci C, Carducci C, Leuzzi V. Neurocognitive and neuroimaging outcome of early treated young adult PKU patients: A longitudinal study. Mol Genet Metab. 2015 Jun-Jul;115(2-3):84-90. IF: 3.093. Citations: 30.
2. Manti F, Nardecchia F, Chiarotti F, Carducci C, Carducci C, Leuzzi V. Psychiatric disorders in adolescent and young adult patients with phenylketonuria. Mol Genet Metab. 2016 Jan;117(1):12-8. IF: 3.769. Citations: 18.
3. Nardecchia F, Manti F, De Leo S, Carducci C, Leuzzi V. Clinical characterization of tremor in patients with phenylketonuria. Mol Genet Metab. 2019 Sep-Oct;128(1-2):53-56. IF: 4.17. Citations: 3.
4. Nardecchia F, Orlando R, Iacovelli L, Colamartino M, Fiori E, Leuzzi V, Piccinin S, Nistico R, Puglisi-Allegra S, Di Menna L, Battaglia G, Nicoletti F, Pascucci T. Targeting mGlu5 Metabotropic Glutamate Receptors in the Treatment of Cognitive Dysfunction in a Mouse Model of Phenylketonuria. Front Neurosci. 2018 Mar 16;12:154. IF: 3.648. Citations: 1.
5. Nardecchia F, Chiarotti F, Carducci C, Santagata S, Valentini G, Angeloni A, Blau N, Leuzzi V. Altered tetrahydrobiopterin metabolism in patients with phenylalanine hydroxylase deficiency. Eur J Pediatr. 2017 Jul;176(7):917-924. IF: 2.242. Citations: 0.
6. Mastrangelo M, Chiarotti F, Berillo L, Caputi C, Carducci C, Di Biasi C, Manti F, Nardecchia F, Leuzzi V. The outcome of white matter abnormalities in early treated phenylketonuric patients: A retrospective longitudinal long-term study. Mol Genet Metab. 2015 Nov;116(3):171-7. IF: 3.093. Citations: 15.
7. van Vliet D, van Wegberg AMJ, Ahring K, Bik-Multanowski M, Blau N, Bulut FD, Casas K, Didycz B, Djordjevic M, Federico A, Feillet F, Gizewska M, Gramer G, Hertecant JL, Hollak CEM, Jørgensen JV, Karall D, Landau Y, Leuzzi V, Mathisen P, Moseley K, Mungan NÖ, Nardecchia F, Öunap K, Powell KK, Ramachandran R, Rutsch F, Setoodeh A, Stojiljkovic M, Trefz FK, Usurelu N, Wilson C,

- van Karnebeek CD, Hanley WB, van Spronsen FJ. Can untreated PKU patients escape from intellectual disability? A systematic review. *Orphanet J Rare Dis.* 2018 Aug 29;13(1):149. IF: 3.687. Citations: 11.
- 8. Manti F, Nardecchia F, Paci S, Chiarotti F, Carducci C, Carducci C, Dalmazzone S, Cefalo G, Salvatici E, Banderali G, Leuzzi V. Predictability and inconsistencies in the cognitive outcome of early treated PKU patients. *J Inherit Metab Dis.* 2017 Nov;40(6):793-799. doi: 10.1007/s10545-017-0082-y. Epub 2017 Aug 23. IF: 4.092. Citations: 9.
 - 9. Leuzzi V, Chiarotti F, Nardecchia F, van Vliet D, van Spronsen FJ. Predictability and inconsistencies of cognitive outcome in patients with phenylketonuria and personalised therapy: the challenge for the future guidelines. *J Med Genet.* 2020 Mar;57(3):145-150. IF: 4.943. Citations: 4.
 - 10. Romani C, Manti F, Nardecchia F, Valentini F, Fallarino N, Carducci C, De Leo S, MacDonald A, Palermo L, Leuzzi V. Adult cognitive outcomes in phenylketonuria: explaining causes of variability beyond average Phe levels. *Orphanet J Rare Dis.* 2019 Nov 28;14(1):273. IF: 3.523. Citations: 1.
 - 11. Galosi S, Nardecchia F, Leuzzi V. Treatable Inherited Movement Disorders in Children: Spotlight on Clinical and Biochemical Features. *Mov Disord Clin Pract.* 2020 Feb 4;7(2):154-166. IF: 0.760. Citations: 1.
 - 12. Manti F, Nardecchia F, Banderali G, Burlina A, Carducci C, Carducci C, Donati MA, Gueraldi D, Paci S, Pochiero F, Porta F, Ortolano R, Rovelli V, Schiaffino MC, Spada M, Blau N, Leuzzi V. Long-term clinical outcome of 6-pyruvoyl-tetrahydropterin synthase-deficient patients. *Mol Genet Metab.* 2020 Jun 24:S1096-7192(20)30148-7. IF: 4.170. Citations: 0.

Rome, 12th October 2020

Francesca Nardecchia