Latini Andrea

Date and place of birth:

28/07/1991 in Civita Castellana 01033 (VT), Italy.

Education

2020: PhD in "Applied Biotechnology and Translational Medicine" (XXXII cycle) at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata"
Thesis: “Genomic and expression variability of miRNAs in Diabetic Neuropathy”

2016: Qualification to the profession of Biologist, University of Rome "Tor Vergata"

2016: Master’s Degree in Human Biology and Evolution (110/110 with honours), University of Rome "Tor Vergata"
Thesis: “Variabilità genetica nella Sindrome di Sjogren primaria: studio di polimorfismi associati con la suscettibilità ed il fenotipo della malattia”

Research and/or professional experience

Current position
Research fellow of the project "Genetic and immunological determinants of clinical manifestations of SARS-CoV-2 infection" at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata

From 2022
Teaching Assistant of General Pathology and Medical Genetics, Master’s Degree in Medical Biotechnology, at the University of Rome "Tor Vergata

From 2021
Teaching Assistant of Phamarcogenomics, Degree in Pharmacy at the University of Rome "Tor Vergata”.
Teaching Assistant of Medical Genetics, Degree in Medicine and Surgery at the University of Rome "Tor Vergata”.

From February 2022 to January 2023
Research fellow of the project "Development, Characterization, and Validation of predictive tests of genetic susceptibility to COVID-19" at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata ”

From January 2020 to December 2021
Research fellow of the project "Genomic and epigenetic biomarkers in diabetic neuropathy" at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata”

From November 2016 to October 2019

PhD student in "Applied Biotechnology and Translational Medicine " at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata"

From June 2016 to October 2016
Fellow of the project "Genomic variability of circulating microRNAs and their possible use as genomic biomarkers of response to therapy and risk of complications in type 2 diabetes" at the Laboratory of Medical Genetics, Department of Biomedicine and Prevention, University of Rome "Tor Vergata"

Research Area

Study of the genetic and epigenetic contribution in multifactorial diseases (Sjogren's Syndrome, Systemic Lupus Erythematosus, Type 2 Diabetes Mellitus, Crohn's Disease, Rheumatoid Arthritis, COVID-19), Pharmacogenetic studies (involvement of the genetic component in the response to pharmacological treatment in terms of efficacy and toxicity). The scientific activity is documented by 33 publications in peer-reviewed international journals and with h -index = 14 (Scopus source).

Hard Skills

Experience in data analysis and in the use of specific techniques and tools in scientific research laboratories applied to medical genetics.

Good theoretical/practical knowledge of molecular techniques: DNA extraction from whole blood by manual (Salting out) and automated method, RNA extraction, quantization of extracted nucleic acids by spectrophotometry, PCR and Real-Time PCR for allelic discrimination assays, Sequencing by Sanger method, Real-Time PCR for expression assays, analysis and interpretation of NGS (Next Generation Sequencing) data.

Basic knowledge in the application of complex statistical techniques (contingency tables, association tests, odds ratio calculation, analysis of variance (Anova), Regression) for the analysis of clinical data in gene association studies. Ability to infer and construct haplotypes using specific programs.

Other

Winner of the "Genes 2022 Best Paper Awards" for the publication "*COVID-19 and Genetic Variants of Protein Involved in the SARS-CoV-2 Entry into the Host Cells*" (doi: 10.3390 / genes11091010)

Winner of Educational Grant Eli Lilly-SID for participation in the EASD (European Association for the Study of Diabetes) Annual Congress. From 16 to 20 September 2019, Barcelona.

Participation in the 27th National Congress of the SID (Italian Society of Diabetology) as Speaker, with a lecture entitled: "MiRNA and Diabetic Neuropathy". From 16 to 19 May 2018, Rimini.

Winner of Educational Grant by the Italian Society of Personalized Medicine for the participation in ESPT 2017 Conference. From 4 to 7 October 2017, Catania

Participation in the 5th congress "INFLAMMATORY BOWEL DISEASE: OPEN DOORS" as Speaker, with a lecture entitled: " Role of miRNAs in IBD susceptibility". 10 September 2022, Verona.

Publications

De Benedittis G, **Latini A**, Spallone V, Novelli G, Borgiani P, Ciccacci C. ATG5 gene expression analysis supports the involvement of autophagy in microangiopathic complications of type 2 diabetes. Nutr Metab Cardiovasc Dis. 2023

Murdocca M, Citro G, Centanini E, Giannini R, **Latini A**, Centofanti F, Piano Mortari E, Cocciadiferro D, Novelli A, Bernardini S, Novelli G, Sangiuolo F. *COVID-19: S-Peptide RBD 484–508 Induces IFN-γ T-Cell Response in Naïve-to-Infection and Unvaccinated Subjects with Close Contact with SARS-CoV-2-Positive Patients*. Viruses. 2023

Latini A, De Benedittis G, Colafrancesco S, Perricone C, Novelli G, Novelli L, Priori R, Ciccacci C, Borgiani P. *PCSK3 Overexpression in Sjögren's Syndrome Patients May Be Regulated by rs4932178 SNP in Its Promoter Region and Correlates with IFN-γ Gene Expression.* Genes (Basel). 2023

Di Lorenzo F, Marchionni E, Ferradini V, **Latini A**, Pezzoli L, Martino A, Romeo F, Iorio A, Bianchi S, Iascone M, Calò L, Novelli G, Mango R, Sangiuolo F. *DSP-Related Cardiomyopathy as a Distinct Clinical Entity? Emerging Evidence from an Italian Cohort.* Int J Mol Sci. 2023

Centofanti F, Alonzi T, **Latini A**, Spitalieri P, Murdocca M, Chen X, Cui W, Shang Q, Goletti D, Shi Y, Duranti A, Tomino C, Biancolella M, Sangiuolo F, Capobianchi MR, Jain S, Novelli G, Pandolfi PP. *Indole-3-carbinol in vitro antiviral activity against SARS-Cov-2 virus and in vivo toxicity.* Cell Death Discov. 2022

De Benedittis G, **Latini A**, Colafrancesco S, Priori R, Perricone P, Novelli L, Borgiani P, Ciccacci C. *Alteration of Mitochondrial DNA Copy Number and Increased Expression Levels of Mitochondrial Dynamics-Related Genes in Sjögren's Syndrome.* Biomedicines. 2022

Latini A, Vancheri C, Amati F, Morini E, Grelli S, Claudia M, Vita P, Colona VL, Murdocca M, Andreoni M, Malagnino V, Raponi M, Cocciadiferro D, Novelli A, Borgiani P, Novelli G. *Expression analysis of miRNA hsa-let7b-5p in naso-oropharyngeal swabs of COVID-19 patients supports its role in regulating ACE2 and DPP4 receptors.* J Cell Mol Med. 2022

De Benedittis G, **Latini A,** Ciccacci C, Conigliaro P, Triggianese P, Fatica M, Novelli L, Chimenti MS, Borgiani P. *Impact of TRAF3IP2, IL10 and HCP5 Genetic Polymorphisms in the Response to TNF-i Treatment in Patients with Psoriatic Arthritis.* Journal of Personalized Medicine. 2022

De Benedittis G, **Latini A**, Conigliaro P, Triggianese P, Bergamini A, Novelli L, Ciccacci C, Chimenti MS, Borgiani P. *A multilocus genetic study evidences the association of autoimmune-related genes with Psoriatic Arthritis in Italian patients*. Immunobiology. 2022

Spitalieri P, Centofanti F, Murdocca M, Scioli MG, **Latini A**, Di Cesare S, Citro G, Rossi A, Orlandi A, Miersch S, Sidhu SS, Pandolfi PP, Botta A, Sangiuolo F, Novelli G. *Two Different Therapeutic Approaches for SARS-CoV-2 in hiPSCs-Derived Lung Organoids.* Cells. 2022

Latini A, De Benedittis G, Perricone C, Colafrancesco S, Conigliaro P, Ceccarelli F, Chimenti MS, Novelli L, Priori R, Conti F, Ciccacci C, Borgiani P. *VDR Polymorphisms in Autoimmune Connective Tissue Diseases: Focus on Italian Population.* J Immunol Res. 2021

Biancolella M, Ouédraogo NLM, Zongo N, Zohoncon TM, Testa B, Rizzacasa B, **Latini A**, Conte C, Compaore TR, Ouedraogo CMR, Traore SS, Simpore J, Novelli G. *Breast cancer in West Africa: molecular analysis of BRCA genes in early-onset breast cancer patients in Burkina Faso*. Hum Genomics. 2021

Spallone V, Ciccacci C, **Latini A**, Borgiani P. *What Is in the Field for Genetics and Epigenetics of Diabetic Neuropathy: The Role of MicroRNAs.* J Diabetes Res. 2021

De Benedittis G, Ciccacci C, **Latini A**, Novelli L, Novelli G, Borgiani P. *Emerging Role of microRNAs and Long Non-Coding RNAs in Sjögren's Syndrome*. Genes (Basel). 2021

Latini A, Novelli L, Ceccarelli F, Barbati C, Perricone C, De Benedittis G, Conti F, Novelli G, Ciccacci C, Borgiani P. *mRNA expression analysis confirms CD44 splicing impairment in systemic lupus erythematosus patients.* Lupus. 2021

Novelli G, Liu J, Biancolella M, Alonzi T, Novelli A, Patten JJ, Cocciadiferro D, Agolini E, Colona VL, Rizzacasa B, Giannini R, Bigio B, Goletti D, Capobianchi MR, Grelli S, Mann J, McKee TD, Cheng K, Amanat F, Krammer F, Guarracino A, Pepe G, Tomino C, Tandjaoui-Lambiotte Y, Uzunhan Y, Tubiana S, Ghosn J; COVID Human Genetic Effort; French COVID Cohort Study Group; CoV-Contact Cohort, Notarangelo LD, Su HC, Abel L, Cobat A, Elhanan G, Grzymski JJ, **Latini A**, Sidhu SS, Jain S, Davey RA, Casanova JL, Wei W, Pandolfi PP. *Inhibition of HECT E3 ligases as potential therapy for COVID-19.* Cell Death Dis. 2021

Latini A, Ciccacci C, Benedittis G, Novelli L, Ceccarelli F, Conti F, Novelli G, Perricone C, Borgiani P. *Altered expression of miR-142, miR-155, miR-499a and of their putative common target MDM2 in systemic lupus erythematosus*. Epigenomics. 2021

Amati F, Vancheri C, **Latini A**, Colona VL, Grelli S, D'Apice MR, Balestrieri E, Passarelli C, Minutolo A, Loddo S, Di Lorenzo A, Rogliani P, Andreoni M, Novelli G. *Expression profiles of the SARS-CoV-2 host invasion genes in nasopharyngeal and oropharyngeal swabs of COVID-19 patients*. Heliyon. 2020

Di Maria E, **Latini A**, Borgiani P, Novelli G. *Genetic variants of the human host influencing the coronavirus-associated phenotypes (SARS, MERS and COVID-19): rapid systematic review and field synopsis*. Hum Genomics. 2020

Latini A, Agolini E, Novelli A, Borgiani P, Giannini R, Gravina P, Smarrazzo A, Dauri M, Andreoni M, Rogliani P, Bernardini S, Helmer-Citterich M, Biancolella M, Novelli G. *COVID-19 and Genetic Variants of Protein Involved in the SARS-CoV-2 Entry into the Host Cells*. Genes (Basel). 2020

Latini A, Borgiani P, De Benedittis G, D'Amato C, Greco C, Lauro D, Novelli G, Spallone V, Ciccacci C. *Mitochondrial DNA copy number in peripheral blood is reduced in Type 2 Diabetes patients with Polyneuropathy and associated with a MIR 499a gene polymorphism* DNA Cell Biol. 2020

Ciccacci C, **Latini A**, Colantuomo A, Politi C, D'Amato C, Greco C, Rinaldi ME, Lauro D, Novelli G, Spallone V, Borgiani P. *Expression study of candidate miRNAs and evaluation of their potential use as biomarkers of diabetic neuropathy.* Epigenomics. 2020

Novelli G, Biancolella M, **Latini A**, Spallone A, Borgiani P, Papaluca M. *Precision Medicine in Non-Communicable Diseases.* High Throughput. 2020

Latini A, Borgiani P, Novelli G, Ciccacci C*. miRNAs in drug response variability: potential utility as biomarkers for personalized medicine.* Pharmacogenomics. 2019

Ciccacci C, **Latini A**, Perricone C, Conigliaro P, Colafrancesco S, Ceccarelli F, Priori R, Conti F, Perricone R, Novelli G, Borgiani P. *TNFAIP3 gene polymorphisms in three common autoimmune diseases: Systemic Lupus Erythematosus, Rheumatoid Arthritis and primary Sjogren Syndrome. Association with diseases susceptibility and clinical phenotypes in Italian patients.* J Immunol Res. 2019

Colafrancesco S, Ciccacci C, Priori R, **Latini A**, Picarelli G, Arienzo F, Novelli G, Valesini G, Perricone C, Borgiani P. *STAT4, TRAF3IP2, IL10, and HCP5 Polymorphisms in Sjögren's Syndrome: Association with Disease Susceptibility and Clinical Aspects.* J Immunol Res. 2019

Latini A, Spallone V, D'Amato C, Novelli G, Borgiani P, Ciccacci C. *A common polymorphism in MIR155 gene promoter region is associated with a lower risk to develop type 2 diabetes.* Acta Diabetol. 2019

Ciccacci C, Perricone C, Alessandri C, **Latini A**, Politi C, Delunardo F, Pierdominici M, Conti F, Novelli G, Ortona E, Borgiani P. *Evaluation of ATG5 polymorphisms in Italian patients with systemic lupus erythematosus: contribution to disease susceptibility and clinical phenotypes*. Lupus. 2018

Ciccacci C, **Latini A**, Greco C, Politi C, D'Amato C, Lauro D, Novelli G, Borgiani P, Spallone V. *Association between a MIR499A polymorphism and diabetic neuropathy in type 2 diabetes.* J Diabetes Complications. 2018

Latini A, Ciccacci C, Novelli G, Borgiani P. *Polymorphisms in miRNA genes and their involvement in autoimmune diseases susceptibility.*Immunol Res. 2017

Ciccacci C, **Latini A**, Politi C, Mancinelli S, Marazzi MC, Novelli G, Palombi L, Borgiani P. *Impact of glutathione transferases genes polymorphisms in nevirapine adverse reactions: a possible role for GSTM1 in SJS/TEN susceptibility*. Eur J Clin Pharmacol. 2017

Ciccacci C, Politi C, Biancone L, **Latini A**, Novelli G, Calabrese E, Borgiani P. *Polymorphisms in MIR122, MIR196A2 and MIR124A genes are associated with clinical phenotypes in Inflammatory Bowel Diseases*. Mol Diagn Ther. 2017

Conigliaro P, Ciccacci C, Politi C, Triggianese P, Rufini S, Kroegler B, Perricone C, **Latini A**, Novelli G, Borgiani P, Perricone R. *Polymorphisms in STAT4, PTPN2, PSORS1C1 and TRAF3IP2 Genes Are Associated with the Response to TNF Inhibitors in Patients with Rheumatoid Arthritis*.PLoS One. 2017

Ciccacci C, Perricone C, Politi C, Rufini S, Ceccarelli F, Cipriano E, Alessandri C, **Latini A**, Valesini G, Novelli G, Conti F, Borgiani P. *A polymorphism upstream MIR1279 gene is associated with pericarditis development in Systemic Lupus Erythematosus and contributes to definition of a genetic risk profile for this complication.* Lupus. 2017