Curriculum studiorum di Aurora Daniele

1980: Degree in Biological Sciences (110/110 summa cum laude), Faculty of Biological Sciences, University of Naples "Federico II".

1982-1985: Post Doc Fellowship of CNR in Organic Chemistry, Faculty of Medicine and Surgery, University of Naples "Federico II".

1985-1990: Post Doc Fellowship of CNR at the department of Genetics, Biology and Medical Chemistry, University of Turin.

1990: Graduate Technician, VIII level, at the Department of Genetics, Biology and Medical Chemistry, University of Turin.

1991: Researcher at the Department of Molecular of Baylor College of Medicine in Houston, Texas.

1995-1996: Project Fellow at the Telethon Institute of Genetics and Medicine, San Raffaele Biochemical Science Park, Milano.

2001-2010: Associate professor, Biochemistry, SSD: BIO/10 Biochemistry.

2011: Full professor, SSD: MEDF/01 at the Second University of Naples, Faculty of Pharmacological Sciences for Environment and Healthy, Department of Environmental Sciences.

Permanence in other laboratories

1985-1990: Visitor researcher at the Department of Genetics, Biology and Medical Chemistry at the University of Turin, in laboratory directed by prof. Lorenzo Silengo.

1991: Researcher at the Department of Molecular Genetics of the Baylor College of Medicine in Houston, Texas, in laboratory directed by prof. A. Ballabio.

1995-1996: Project Fellow at the Telethon Institute of Genetics and Medicine, San Raffaele Biochemical Science Park, Milano, in laboratory directed by prof. A. Ballabio.

DIAGNOSTIC ACTIVITY:

Study of monogenic metabolic diseases (Mucopolysaccharidosis, Hyperphenylalaninemias, Fabry disease) and multifactorial metabolic diseases (Obesity and Metabolic Syndrome). In this context, A. Daniele has contributed to the development of laboratories at the Department of Biochemistry and Medical Biotechnologies, University "Federico II" of Naples, at the Department of Health Sciences at the University of Molise and CEINGE-Advanced Biotechnology Naples today, "Regional Reference Center for Clinical Molecular Biology and Diagnostics Laboratory of Metabolic Diseases". In addition, A. Daniele contributed to the development of innovative methodologies for research and molecular and

biochemical diagnosis, development of procedures for cascade screening of patients, carriers and prenatal diagnosis.
1980-1982: Postgraduate training at the Institute of Molecular and Cellular Biochemistry of the Faculty of Medicine and Surgery, Federico II University of Naples.
1982-2000: Functional Area "Biochemistry and Molecular Diagnosis of Mucopolysaccharidosis".
1984: Professional qualification and membership of the National Association of Biologists.
1992: Professional Operator at the Department of Special Haematology Laboratory, Faculty of Medicine, University of Naples "Federico II".
1993-1995: Associate Biologist at the Department of Special Haematology Laboratory, gathered together in the Welfare Department of Laboratory Medicine, Faculty of Medicine, University of Naples "Federico II".
1995-2002: First level Director at the Department of Laboratory Medicine and Haematology, Faculty of Medicine, University of Naples "Federico II".
2002-2015: diagnostic activity through activation, execution and reporting of molecular analysis of Hyperphenylalaninemias, Mucopolysaccharidosis and Fabry disease.

RESEARCH ACTIVITIES

Prof. A. Daniele has developed research in the field of Biochemistry, Clinical Biochemistry and Clinical Molecular Biology at Department of Biochemistry and Medical Biotechnologies, University of Naples, at the CEINGE-Advanced Biotechnologies Naples, at the University of Molise and at the Second University of Naples. During her activity, she stayed at relevant national and foreign academic institutions attending the laboratories of the Department of Genetics, Biology and Medical Chemistry, University of Torino, the laboratories of Molecular Genetics at Baylor College of Medicine, Tigem laboratories of Milan, and those of Naples. Currently, Prof. A. Daniele guides a group composed by Phd student, Post-doc researchers, and University researcher.

1982-1985: Purification of iduronate sulfatase enzyme from human placenta; preparation of specific polyclonal antibodies in rabbit; use of antibodies for the study of iduronate sulfatase in patients Hunter.
1985-1986: Biosynthesis studies of the enzyme alpha-N-acetylglucosaminidase in normal fibroblasts and in Mucopolysaccharidosis III B fibroblasts.
1986-1989: Isolation and expression studies of:

a) gp42, a human membrane glycoprotein, with structural features similar to antigens of class II histocompatibility;
b) HP10, a human protein that regulates protein phosphorylation;
c) Functional expression of a recombinant human mini-hexokinase. 1986-1989: Mapping of the hexokinase gene on the long arm of chromosome 10.

1990-1995: Identification of the first European case of Mucopolysaccharidosis VI in Siamese cat, animal model of Maroteaux-Lamy syndrome.
• Studies of cell contact between normal fibroblasts and lymphoblasts from patients with Mucopolysaccharidosis as an approach to enzyme therapy.
• Molecular characterization of Mucopolysaccharidosis II patients.

• Isolation, from a cDNA library of thyme, of murine iduronate-2-sulfatase cDNA. Identification and characterization of a second messenger.
• Study of a membrane receptor for superoxide dismutase (SOD) to verify the effect on HMG-CoA reductase enzyme.
1995-1996: In vitro mutagenesis of arylsulfatase E gene responsible for X chromosome-linked Chondrodysplasia.
1996-1998: In vitro mutagenesis of iduronate sulfatase gene responsible for Mucopolysaccharidosis type II.
1996-1999: In vitro mutagenesis of heparin sulfamidase gene responsible for Mucopolysaccharidosis type IIIA. Characterization of glycosylation sites of heparin sulfamidase.
1999-2000: Hunter syndrome is a lysosomal storage disease that causes a severe mental retardation. To date, there is no specific treatment for reversing the damage caused by the disease. The replacement therapy, with administration of purified protein, is not effective since the latter does not pass the blood-brain barrier. To this purpose it has been developed a genetic strategy ex vivo, which provides for the production of recombinant human protein by human cells.
2002-2011: Analysis of PAH gene and of the genes involved in the biosynthesis of tetrahydrobiopterin.
2003-2015: Molecular analysis HPA patients through promoter, coding and exon-flanking intronic sequencing (detection rate: 96.4%).
2003-2011: Studies of expression of the gene wild-type and of PAH mutants of new identification using in vitro mutagenesis.We show that oligomerization and folding defects of PAH variants are the most common causes of HPAs, particularly as regards mild human phenotypes.
2008-2015: Long-term follow-up of patients with phenylketonuria treated with tetrahydrobiopterin demonstrating that it is safe and effective in increasing tolerance to phenylalanine.
2010-2012: Effective PKU gene therapy in mouse BTBR-Pahenu2. These studies are preclinical trials for the use of vectors HD-Ad PAH in the treatment of PKU.
2011-2014: Protein expression profiles in brain tissue of BTBR-PahEnu2 mice in comparison to those in normal heterozygous (HTZ) mouse brain to determine the pathological changes involved in phenylalanine-induced neurological damage and to identify markers associated with the neurological damage.
2006-2011: Adiponectin, a cytokine produced and secreted exclusively by adipocytes with multivalent protective biological functions: it has anti-inflammatory properties and antiatherosclerotic and plays an important role in regulating energy homeostasis and insulin sensitivity.
2007-2011: Studies of adiponectin gene (ACDC) and its receptors, AdipoR1 and AdipoR2, in Large White (lean phenotype) and Casertana (obese phenotype) breed pigs.
2007-2015: Studies of Human Beta Defensins, peptides involved in innate immunity. Novel analogs of defensins were designed and tested demonstrating that they may be added to the arsenal of tools available to combat antibiotic-resistant infectious diseases. Furthermore, the transmembrane protein CD98 was identified as a cell surface receptor involved in the internalization of human b-defensin 3 (hBD3) in human epithelial A549 cells.
2008-2011: Analysis of ACDC gene and of melanocortin gene in severely obese subjects, in order to detect correlations between polymorphisms and/or mutations and biochemical parameters characteristic of obesity and metabolic syndrome.

2008-2011: Studies of lactate metabolism in Hep G2 hepatoma cells.
2009-2011: Characterization and analysis of adiponectin expression in patients with Myotonic Dystrophy type I.
2010-2013: Analysis of adiponectin in patients with chronic obstructive pulmonary disease (COPD).
2011-2013: In vitro studies to clarify the effects of adiponectin in a cellular model of COPD: analysis of the anti-inflammatory and protective functions of adiponectin in A549 cells treated with inflammatory cytokines, typically increased in COPD.
2013-2015: Role of adiponectin in asthma. Analysis of adiponetcin serum expression and expression of its receptors in a murine model of asthma. Analysis of biological effects (lung function) of adiponectin administration in mouse models of asthma.
2011-2013: Study of potential new biomarkers in non-small lung cancer (NSCLC) by proteomic approach: detection of down regulation of carbonic anhydrase I and II as potential targets for the development of diagnostic and prognostic tools of NSCLC.
2014-2015: Analysis of serum expression of adiponectin in patients affected by NSCLC.
2014-2015: Molecular analysis of C.802C>T NOD2/CARD15 SNP in Crohn's Patients.
2015-2016: Analysis of serum expression of adiponectin in Water Polo professional athletes.

ORIGINAL ARTICLES IN REFEREED JOURNALS

1. P. Di Natale and ***A. Daniele***
"Iduronate sulfatase from human placenta"
Biochim. Biophys. Acta 839, 1985, 258-261

2. P. Di Natale, D. Salvatore, ***A. Daniele*** and S. Bonatti
"Biosynthesis of a-N-acetylglucosaminidase in cultured Human Kidney Carcinoma Cells"
Enzyme 33, 1985, 75-83

3. D. Salvatore, ***A. Daniele*** and P. Di Natale
"Biosynthesis of alpha-N-acetylglucosaminidase in normal and Sanfilippo B fibroblasts"
Perspectives in Inherited Metabolic Diseases vol. 6, 1985, 113-120

4. ***A. Daniele*** and P. Di Natale
"The active site of the enzyme iduronate 2-sulfate sulfatase"
Perspectives in Inherited Metabolic Diseases vol.7, 1987, 85-93

5. ***A. Daniele*** and P. Di Natale
"Hunter syndrome: presence of material cross reacting with antibodies against iduronate sulfatase**"**
Hum. Genet. 75, 1987, 234-238

6. F. Altruda, P. Cervella, M.L. Gaeta, ***A. Daniele***, F. Giancotti, G. Tarone, G. Stefanuto and L. Silengo
"Cloning of cDNA for a novel mouse membrane glycoprotein (gp42): shared identity to istocompatibility antigens, immunoglobulins and neural cell adhesion molecules"
Gene 85, 1989, 445-452

7. ***A. Daniele***, F. Altruda, M. Ferrone, L. Silengo, L. Chiarantini, M. Bianchi, V. Stocchi and M. Magnani
"Cloning and expression of a new human polypeptide which regulates protein phosphorylation in Escherichia Coli"
Mol. and Cell. Biochem. 107, 1991, 87-94

8. ***A. Daniele***, F. Altruda, M. Ferrone, L. Silengo, G. Romeo, N. Archidiacono and M. Rocchi
"Mapping of human hexokinase I gene to 10q11→qter"
Hum. Hered. 42, 1992, 107-110

9. M. Magnani, M. Bianchi, A. Casabianca, V. Stocchi, ***A. Daniele***, F. Altruda, M. Ferrone and L. Silengo
"A recombinant human 'mini'-hexokinase is catalytically active and regulated by hexose 6-phosphates"
Biochem. J. 285, 1992, 193-199

10. P. Di Natale, T. Annella, ***A. Daniele***, G. Spagnuolo, R. Cerundolo, D. De Caprariis and A. E. Gravino
"Animal models for lysosomal storage diseases: a new case of feline mucopolysaccharidosis VI"
J. Inher. Metab. Dis. 15, 1992, 17-24

11. P. Di Natale, T. Annella, ***A. Daniele***, R. Negri and L. Nitsch
"Cell-to-cell contact between normal fibroblasts and lymphoblasts deficient in lysosomal enzymes"
Biochim. Biophys. Acta 1138, 1992, 143-148

12. P. Di Natale, T. Annella, ***A. Daniele***, T. De Luca, E. Morabito, R. Pallini, P. Rosario and G. Spagnuolo
"Biochemical diagnosis of mucopolisaccharidoses. Experience of 297 diagnoses in a 15-year period (1977-1991)"
J. Inher. Metab. Dis. 16, 1993, 473-483

13. ***A. Daniele***, C.J. Faust, G.E. Herman, P. Di Natale and A. Ballabio
"Cloning and characterization of the cDNA for the Murine Iduronate Sulfatase Gene"
Genomics 16, 1993, 755-757

14. T. Annella, ***A. Daniele*** and P. Di Natale
"Heterogeneity of DNA and RNA in Hunter patients"
Hum. Genet. 92, 1993, 350-352

15. ***A. Daniele***, T. Russo, A. Ballabio and P. Di Natale
"The mouse iduronate sulfatase gene: identification of a novel transcript"
Biochem. Biophys. Res. Commun. 194, 1993, 1030-1037

16. T. Annella, ***A. Daniele***, T. Arrigo, G. Lombardo and P. Di Natale
"Identification of the carrier status in Hunter syndrome by molecular analyses"
Bull. Mol. Biol. Med. 19, 1994, 135-146

17. P. Mondola, M. Santillo, F. Santangelo, C. Garbi and ***A. Daniele***
"The calf superoxide dismutase receptor of rat hepatocytes"
Comp. Biochem. Physiol. 108B, 1994, 309-313

18. ***A. Daniele*** and P. Di Natale
"Espression of the two iduronate-2- sulfatase cDNAs"
Biochem. Mol. Biol. Int. 32, 1995, 311-317

19. ***A. Daniele***, G. Parenti, M. d'Addio, G. Andria, A. Ballabio and G. Meroni
"Biochemical Characterization of Arylsulfatase E and Functional Analysis of Mutations Found in Patients with X-Linked Chondrodisplasia Punctata"
Amer. J. Hum. Genet. 62, 1998, 562-572

20. S. Esposito, N. Balzano, ***A. Daniele***, G.R.D. Villani, K. Perkins, B. Weber, J.J. Hopwood, P. Di Natale

"Heparan N-sulfatase gene: two novel mutations and transient expression of 15 defects"
Biochim. Biophys. Acta 1501, 2000, 1-11

21. G.R.D.Villani, ***A. Daniele***, N. Balzano, P. Di Natale
"Expression of five iduronate-2-sulfatase site-directed mutations"
Biochim. Biophys. Acta Molecular Basis of Diseases, 1501, 2000, 71-80; **If 5,387**

22. P. Di Natale, B. Vanacore, ***A. Daniele***, S. Esposito
"Heparan N-sulfatase: in vitro mutagenesis of potential N-glycosilation sites"
Biochem. Biophys. Res. Commun. 280, 2001, 1251-1257

23. ***A. Daniele*** and P. Di Natale
"Heparan N-Sulfatase: cysteine 70 plays a role in the enzyme catalysis and processing"
FEBS Letters 505, 2001, 445-448

24. ***A. Daniele***, R. Tomanin, G.R.D. Villani, F. Zacchello, M. Scarpa, P. Di Natale
"Uptake of recombinant Iduronate-2-Sulfatase into neuronal and glial cells in vitro"
BBA-Molecular Basis of Disease 1588, 2002, 203-209

25. P. Di Natale, GR. Villani, C. Di Domenico, ***A. Daniele***, C. Dionisi Vici. A. Bartuli
"Analysis of Sanfilippo A gene mutations in a large pedigree"
Clin. Genet. 63 (4), 2003, 314-318

26. ***Daniele A***, Cardillo G, Pennino C, Carbone MT, Scognamiglio D, Correra A, Pignero A, Castaldo G, Salvatore F.
Molecular epidemiology of phenylalanine hydroxylase deficiency in Southern Italy: a 96% detection rate with ten novel mutations.
Ann Hum Genet. 2007 Mar;71(Pt 2):185-93

27. ***Daniele A***, Cardillo G, Pennino C, Carbone MT, Scognamiglio D, Esposito L, Correra A, Castaldo G, Zagari A, Salvatore F.
Five human phenylalanine hydroxylase proteins identified in mild hyperphenylalaninemia patients are disease-causing variants.
Biochim Biophys Acta. 2008 Jun;1782(6):378-84

28. ***A. Daniele***, R. Cammarata, M.Masullo, G. Nerone, F. Finamore, M. D'Andrea, G. Oriani
"Analysis of Adiponectin gene and comparison of its expression in two different pig breeds"
Obesity (Silver Spring) 16, 2008, 1869-1874

29. ***A. Daniele***, R. Cammarata, F. Pasanisi, C. Finelli, G. Salvatori, G. Calcagno, R. Bracale, G. La Bruna, C. Nardelli, P. Buono, L. Sacchetti, F. Contaldo and G. Oriani

"Molecular analysis of Adiponectin gene in severe obese patients from Southern Italy"
Ann. Nutr. Metab. 53, 2008, 155-161

30. A. Di Costanzo, M. de Cristofaro, G. Di Iorio, ***A. Daniele***, S. Bonavita, G. Tedeschi
"Paternally inherited case of congenital DM1: Brain MRI and review of literature"
Brain Dev. 31, 2009, 79-82

31. ***A. Daniele***, I. Scala, G. Cardillo, C. Pennino, C. Ungaro, M. Sibilio, G. Parenti, L.Esposito, A. Zagari, G. Andria and F. Salvatore
"Functional and structural characterization of novel mutations and genotype-phenotype correlation in 51 phenylalanine hydroxylase deficient families from Southern Italy"
FEBS J. 276, 2009, 2048-2059

32. A. Alfieri, F. Pasanisi, S. Salzano, L.Esposito, D. Martone, D. Tafuri, ***A. Daniele***, F. Contaldo, L. Sacchetti, A. Zagari, and P. Buono
"Functional analysis of melanocortin-4-receptor mutants identified in severely obese subjects living in Southern Italy"
Gene. 57(1-2), 2010, 35-41

33. Cerreto M, Cavaliere P, Carluccio C, Amato F, Zagari A, ***Daniele A***, Salvatore
Natural phenylalanine hydroxylase variants that confer a mild phenotype affect the enzyme's conformational stability and oligomerization equilibrium.
Biochim Biophys Acta. 2011 Nov;1812(11):1435-45

34. ***Daniele A***, De Rosa A, De Cristofaro M, Monaco ML, Masullo M, Porcile C, Capasso M, Tedeschi G, Oriani G, Di Costanzo A.
Decreased concentration of adiponectin together with a selective reduction of its high molecular weight oligomers are involved in metabolic complications of myotonic dystrophy type 1.
Eur J Endocrinol. 2011 Dec;165(6):969-975

35. R. Bracale, C. Finelli, G. Labruna, ***A. Daniele***, L. Sacchetti, G. Oriani, F. Contaldo and F. Pasanisi
"The absence of polymorphisms in ADRB3, UCP1, PPAR γ and ADIPOQ genes protects morbid obese patients toward insulin resistance".
Journal of Endocrinological Investigation 2012 Jan;35(1):2-4

36. M. Cerreto, B. Mehdawy, D. Ombrone, R. Nisticò, M. Ruoppolo, A. Usiello, ***A. Daniele***, L. Pastore and F. Salvatore.
"Reversal of metabolic and neurological symptoms of phenylketonuric mice treated with a PAH
containing helper-dependent adenoviral vector".
Current Gene Therapy 2012 Feb 1;12(1):48-56

37. ***Daniele A***, De Rosa A, Nigro E, Scudiero O, Capasso M, Masullo M, de Laurentis G, Oriani G, Sofia M, Bianco A.

"Adiponectin Oligomerization State and Adiponectin Receptors Airway Expression in Chronic Obstructive Pulmonary Disease".
The International Journal of Biochemistry & Cell Biology 2012 Mar;44(3):563-9

38. Pizzuto R; Paventi G; Porcile C; Sarnataro D; ***Daniele A***; Passarella S.
"l-Lactate metabolism in HEP G2 cell mitochondria due to the l-lactate dehydrogenase determines the occurrence of the lactate/pyruvate shuttle and the appearance of oxaloacetate, malate and citrate outside mitochondria".
Biochim Biophys Acta 2012 Sep;1817(9):1679-90

39. De Rosa A., Monaco M.L., Nigro E., Scudiero O., D'Andrea M, Pilla F, Oriani G**,. *Daniele A***.
"Tissue-specific downregulation of the adiponectin "system": possible implications for fat accumulation tendency in the pig"
Domestic Animal Endocrinology 2013**;** 44(3):131-8. doi: 10.1016/j

40. Bianco A, Turchiarelli V**,** Fatica F, Nigro E, Testa G, Vitale C, Thanassoulas T, Scudiero O, ***Daniele A.***
"COPD and metabolic disorders: role of adiponectin".
Shortness of Breath 2012; 1(1):2-6.

41. Scudiero O, Galdiero S, Nigro E, Vecchio LD, Di Noto R, Cantisani M, Colavita I, Galdiero M, Cassiman JJ, ***Daniele A***, Pedone C, Salvatore F.
"Chimeric beta-defensin analogs, including the novel 3NI analog, display salt resistant antimicrobial activity, and lack toxicity in human epithelial cell lines".
Antimicrob Agents Chemother. 2013**;** 57(4):1701-8. doi: 10.1128/AAC.00934-12

42. Nigro E, Scudiero O, Sarnataro D, Mazzarella G, Sofia M, Bianco A, ***Daniele A.***
Adiponectin affects lung epithelial A549 cell viability counteracting TNF α and IL-1ß toxicity through AdipoR1.
Int J Biochem Cell Biol. 2013 Jun;45(6):1145-53

43. De Rosa A, Monaco ML, Capasso M, Forestieri P, Pilone V, Nardelli C, Buono P, ***Daniele A.*** "Adiponectin oligomers as potential indicators of adipose tissue improvement in obese subjects".
Eur J Endocrinol. 2013 Jun 1;169(1):37-43

44. Costagliola C, ***Daniele A***, Dell'omo R, Romano MR, Aceto F, Agnifili L, Semeraro F, Porcellini A.
"Aqueous humor levels of vascular endothelial growth factor and adiponectin in patients with type 2 diabetes before and after intravitreal bevacizumab injection".
Exp Eye Res. 2013 May;110:50-4. doi: 10.1016/j.exer.2013.02.004

45. Corbi G, Bianco A, Turchiarelli V, Cellurale M, Fatica F, ***Daniele A,*** Mazzarella G, Ferrara N.
"Potential Mechanisms Linking Atherosclerosis and Increased Cardiovascular Risk in COPD: Focus On Sirtuins".
Int J Mol Sci. 2013 Jun 17;14(6):12696-713

46. Bianco A, Mazzarella G, Turchiarelli V, Nigro E, Corbi G, Scudiero O, Sofia M, ***Daniele A.***
"Adiponectin: An Attractive Marker for Metabolic Disorders in Chronic Obstructive Pulmonary Disease (COPD)"
Nutrients. 2013 Oct 14;5(10):4115-25. doi: 10.3390/nu5104115

47. Scudiero O, Monaco ML, Nigro E, Capasso M, Guida M, Sardo AD, Prezioso D, Daniele A, Castaldo G. "Mannose-binding lectin genetic analysis: possible protective role of the HYPA haplotype in the development of recurrent urinary tract infections in men".
Int J Infect Dis. 2013 Dec 7. S1201-9712(13)00349-4 doi: 10.1016/j.ijid.2013.10.019

48. Imperlini E, Orrù S, Corbo C, ***Daniele A***, Salvatore F. "Altered brain protein expression profiles are associated with molecular neurological dysfunction in the PKU mouse model".
J Neurochem. 2014 Feb 18. doi: 10.1111/jnc.12683

49. Porcile C, Di Zazzo E, Monaco ML, D'Angelo G, Passarella D, Russo C, Di Costanzo A, Pattarozzi A, Gatti M, Bajetto A, Zona G, Barbieri F, Oriani G, Moncharmont B, Florio T, ***Daniele A***. "Adiponectin as Novel Regulator of Cell Proliferation in Human Glioblastoma".
J Cell Physiol. 2014 Feb 14. doi: 10.1002/jcp.24582

50. Nigro E, Scudiero O, Monaco ML, Palmieri A, Mazzarella G, Costagliola C, Bianco A, ***Daniele A***. "New insight into adiponectin role in obesity and obesity-related diseases."
Biomed Res Int. 2014;2014:658913. doi: 10.1155/2014/658913

51. Assmann G., Buono P., ***Daniele A.,*** Della Valle E., Farinaro E., Ferns G., Krogh V., Kromhout D., Masana L., Merino J., Misciagna G., Panico S., Riccardi G., Rivellese A.A., Rozza F., Salvatore F., Salvatore V., Stranges S., Trevisan M., Trimarco B., Vetrani C.
Functional foods and cardiometabolic diseases.
Nutr Metab Cardiovasc Dis. 2014 Oct 28;24(12):1272-1300. doi: 10.1016/j.numecd.2014.10.010

52. Nigro E., Piombino P., Scudiero O., Monaco M.L., Schettino P., Chambery A., ***Daniele A***.
Evaluation of salivary adiponectin profile in obese patients.
Peptides. 2014. 63; 150-155

53. Cazzorla C., Cegolon L., Celato A., Pamela M., Giordano L., Polo G., ***Daniele A.,*** Salvatore F., Burlina A.B.
Quality of Life (QoL) assessment in a cohort of Phenilketonuria patients.
BMC Public Health. 2014 Dec 4;14(1):1243

54. Nigro E., ***Daniele A.,*** Scudiero O., Monaco M. L., Roviezzo F., D'Agostino B., Gennaro Mazzarella G., Bianco A.

Adiponectin in Asthma: Implications for Phenotyping.
Current Protein and Peptide Science, 2015. 16(3):182-7

55. Colavita I., Nigro E., Sarnataro D., Scudiero D., Granata V., ***Daniele A.,*** Zagari A., Pessi A., Salvatore F.
Membrane protein 4F2/CD98 is a cell surface receptor involved in the internalization and trafficking of human β-Defensin 3 in epithelial cells.
Chem Biol. 2015 Feb 19;22(2):217-28. doi: 10.1016/j.chembiol.2014.11.020

56. Scala I, Concolino D, Casa R, Nastasi A, Ungaro C, Paladino S, Capaldo B, Ruoppolo M, ***Daniele A***, Bonapace G, Strisciuglio P, Parenti G, Andria G.
Long-term follow-up of patients with phenylketonuria treated with tetrahydrobiopterin: a seven years experience.
Orphanet J Rare Dis. 2015. 10(1):14

57. Maione L, Tortora F, Modica R, Ramundo V, Riccio E, ***Daniele A***, Belfiore MP, Colao A, Pisani A, Faggiano A.
Pituitary function and morphology in Fabry disease.
Endocrine. 2015 Apr 21

58. Nigro E, Imperlini E, Scudiero O, Monaco ML, Polito R, Mazzarella G, Orrù S, Bianco A, ***Daniele A.***
Differentially expressed and activated proteins associated with non small cell lung cancer tissues.
Respir Res. 2015 Jun 24;16:74. doi: 10.1186/s12931-015-0234-2

59. Mancini A, Imperlini E, Nigro E, Montagnese C, ***Daniele A***, Orrù S, Buono P.
Biological and Nutritional Properties of Palm Oil and Palmitic Acid: Effects on Health.
Molecules. 2015 Sep 18;20(9):17339-61. doi: 10.3390/molecules200917339

60. Scudiero O, Nigro E, Monaco ML, Oliviero G, Polito R, Borbone N, D'Errico S, Mayol L, ***Daniele A***, Piccialli G.
New synthetic AICAR derivatives with enhanced AMPK and ACC activation.
J Enzyme Inhib Med Chem. 2015 8:1-6.

61. Nigro E, Matteis M, Roviezzo F, Iacono VM, Scudiero O, Spaziano G, Tartaglione G, Urbanek K, Filosa R, ***Daniele A***, D'Agostino B.
Role of adiponectin in sphingosine-1-phosphate induced airway hyperresponsiveness and inflammation.
Pharmacol Res. 2015; S1043-6618(15)00247-9. doi: 10.1016/j.phrs.2015.10.004

62. Scudiero O, Nigro E, Cantisani M, Colavita I, Leone M, Mercurio FA, Galdiero M, Pessi A, ***Daniele A***, Salvatore F, Galdiero S.
Design and activity of a cyclic mini-β-defensin analog: a novel antimicrobial tool.
Int J Nanomedicine. 2015 Oct 15;10:6523-39. doi: 10.2147/IJN.S89610

63. Scudiero O, Nigro E, Monaco ML, Polito R, Capasso M, Canani BR, Castaldo G, ***Daniele A***

C.802C>T NOD2/CARD15 SNP is Associated to Crohn's Disease in Italian Patients
Hereditary Genetics. 2015 S7, doi.org/10.4172/2161-1041.S7-005

63. Nigro E, Sangiorgio D, Scudiero O, Monaco ML, Polito R, Villone G, ***Daniele A***.
Gene molecular analysis and Adiponectin expression in Professional Water Polo Players.
Cytokine. 2016 81:88-93. doi: 10.1016/j

BOOK CHAPTERS AND MONOGRAPHS

1. La mobilità genica
   John F. Pulitzer, Maria Ciaramella, Aurora Daniele
   Quaderni di Biologia vol. 36, 1987; ed. Piccin. ISBN 0412127601

2. Biochimica dell'accrescimento con schede cliniche.
   F. Salvatore, A. Daniele, E. Nigro. Biochimica Umana- Idelson Gnocchi. 2013. ISBN 978-88-7947-556-3.

3. Ersilia Nigro, Aurora Daniele, Olga Scudiero
   Human Beta Defensins analogs as therapeutic targets for infections. 2013
   LAP LAMBERT Academic Publishing ISBN: 978-3-659-41742-9

4. Aurora Daniele, Olga Scudiero, Ersilia Nigro
   Adiponectin and AdipoRs in vivo and in vitro lung inflammatory state. 2013
   LAP LAMBERT Academic Publishing ISBN: 978-3-659-42579-0

5. Aurora Daniele, Olga Scudiero, Ersilia Nigro
   Adiponectina: barriera tra l'eccesso di tessuto adiposo e l'obesità
   Casa Editrice Pai Presse Accademiche Italiane ISBN: 978-3-639-78865-5

INTERNATIONAL ABSTRACTS

4th Workshop European Study group on lysosomal Diseases, Asnieres sur Oise (France) September 23-26, 1983
P. Di Natale, S. Bonatti, D. Salvatore, L. De Petrocellis, ***A. Daniele*** and N. Pannone
Recent advances in lysosomal a-N-acetylglucosaminidase and iduronate sulphatase

5th European Study Group on Lysosomal Diseases, Bergisch-Gladbach (F.R. of Germany) September 27-30, 1985
A. Daniele, D. Salvatore, S. Bonatti and P. Di Natale
Studies on iduronate sulfatase and alpha-N-acetyl- glucosaminidase

7th ICHG-Satellite Workshop on "New techniques and approaches to the molecular study of human inherited disease"
Meeting of the Italian Federation for the study of inherited disease (A.I.C.M.-A.I.G.M.-S.I.S.E.C.M.), Genova, September 18-20, 1986
A. Daniele and P. Di Natale
Hunter syndrome: presence of material cross reacting with antibodies against iduronate sulfatase

Congresso Internazionale della Comunità Europea, Biotechnology Action Program, Capri, Italia, Maggio 1987.
A. Daniele, P. Cervella, F. Altruda and L. Silengo
Molecular cloning of human hexokinase gene

Congresso Internazionale della Comunità Europea, Biotechnology Action Program, Atene, Grecia, 18-21 Ottobre 1988
F. Altruda, C. Botta, P. Cervella, L. Chiarantini, ***A. Daniele***, M. Magnani and L. Silengo
Immunological characterization of human hexokinase recombinant clones

European Journal of Cell Biology 47, 1988
F. Altruda, P. Cervella, ***A. Daniele***, G. Tarone, G. Stefanuto, M.L. Gaeta, F. Giancotti and L. Silengo
Analysis of the amino acid sequence of the glycoprotein gp42: a novel membrane protein related to class II antigens of the MHC

Congresso Internazionale della Comunità Europea, Biotechnology Action Program, Troia, Portogallo, 12-15 Novembre 1989
A. Daniele, M. Ferrone, F. Altruda, C. Robotti P. Cervella and L. Silengo
Eucaryotic expression of human hexokinase recombinant clones

Human gene mapping 10, New Haven Conference, 10th International Workshop on Human Gene Mapping, 1989
L. De Benedetti, P. Ronchetto, M. Devoto, M. Rocchi, ***A. Daniele***, M. Ferrone, L. Silengo, M. Magnani and G. Romeo
Linkage between the CF gene and an unidentified kinase (A2229)

19th Meeting of the Federation of European Biochemical Societes, Rome, 2-7 July 1989
A. Daniele, E. Hirsch, L. Silengo, A. Negro and F. Altruda
Expression of the human beta nerve growth factor gene using a baculovirus vector

2° International Symposium on the mucopolysaccharidoses and related diseases, Manchester, 31 Agosto - 3 Settembre 1990
P. Di Natale, ***A. Daniele*** and T. Annella
Transfer of lysosomal enzymes from fibroblasts to lymphoblasts

8° Congresso ESGLD (European Study Group On Lysosomal Diseases) Workshop, Les Pensieres, Annecy, France 24-27 October 1991

P. Di Natale, A.E. Gravino, R. Cerundolo, D. de Caprariis, G. Spagnuolo, ***A. Daniele*** and T. Annella
Feline Mucopolysaccharidosis VI: report of two cases

International Meeting CLINBIO, Capri (Napoli), 27-30 May 1992
A. Daniele, G. Hermann, T. Annella, P. Di Natale and A. Ballabio
Isolation, characterization and chromosomal localization of the gene encoding the mouse iduronate sulfatase

9° Congresso ESGLD (European Study Group On Lysosomal Diseases) Workshop, European Cultural Centre, Delphi, Greece, 7-10 October 1993
A. Daniele, T. Russo, A. Ballabio and P. Di Natale
Cloning and characterization of two cDNAs for iduronate-2-sulfatase in mouse

10th ESGLD Workshop, Cambridge, U.K., 16-19 September 1995
A. Daniele and P. Di Natale
Expression of the two iduronate-2-sulfatase cDNAs
29th annual meeting of the European Society of Human Genetics, Genova, Italy, 17-20 May 1997
G. Meroni, ***A. Daniele***, G. Parenti, M. d'Addio, G. Andria and A Ballabio
Biochemical characterization of Arylsulfatase E and functional analysis of mutations found in patients with CDPX

11th ESGLD Workshop, Bad Deutsch-Altenburg, Osterreich, Austria, September 1997
G.R.D. Villani, P. Di Natale, N. Balzano and ***A. Daniele***
Site-directed mutagenesis of iduronate-2-sulfatase gene

Scientific Convention Telethon. Bologna, Novembre 1997
P. Di Natale, ***A. Daniele***, G.R.D. Villani, N. Balzano, S. Esposito and G. Madonna
Molecular bases of mucopolysaccharidoses types II, IIIA and VI

International conference, prospects in the treatment of rare diseases, July 1998, Trieste
P. Di Natale, ***A. Daniele***, G.R.D. Villani, N. Balzano and S. Esposito
Mutational analysis in mucopolysaccharidoses: a pre-requisite for therapy

5th International Symposium on Mucopolysaccharides and Related Diseases, Vienna (Austria), 18-21 Marzo 1999
S. Esposito, N. Balzano, ***A. Daniele***, G.R.D. Villani, K. Perkins, B. Weber, J.J. Hopwood and P. Di Natale
Expression studies of Sanfilippo A mutations

World Congress of The International Society for Enzymology- CLINBIO 2000, Capri 21-24 Maggio 2000
S. Esposito, N. Balzano, ***A. Daniele***, G.R.D. Villani and P. Di Natale

Mucopolisaccaridosi IIIA: espressione in vitro di 15 difetti molecolari

5th International Symposium on Mucopolysaccharides and Related Diseases, 18-21 Marzo 1999, Vienna, Austria
S.Esposito, N.Balzano, ***A.Daniele***, G.R.D.Villani, K.Perkins, B.Weber, J.J.Hopwood and P.Di Natale
Expression studies of Sanfilippo A mutations

12th ESGLD Workshop, Vidago-Portugal, September 23-25 1999
G.R.D.Villani, N. Balzano, P. Di Natale and ***A.Daniele***
Characterization of five iduronate-2-sulfatase site-directed mutations

"Scientific Convention Telethon", Rimini, 12-14 Novembre 2000
P.Di Natale, ***A.Daniele***, G.R.D.Villani, S.Esposito, N.Balzano, A.Tessitore, C.Di Domenico, B. Vanacore and J.J.Hopwood
Mucopolysaccharidoses: from gene defect to protein expression

World Congress of The International Society For Enzymology- CLINBIO 2003, Capri 27 -29 Giugno 2003
A.Daniele, G.Cardillo, C.Pennino, D.Scognamiglio, A.Pignero, G.Castaldo and F.Salvatore
A novel Denaturing-HPLC (D-HPLC) procedure for the screening of PAH gene in phenylketonuria

15th International Conference on Laboratory Medicine and 12th European Conference of Clinical Molecular Biology - CLINBIO 2005 Napoli, 11-12 Novembre 2005
A.Daniele, G.Cardillo, C.Pennino, M.T.Carbone, G.Castaldo and F.Salvatore
Phenylalanine-Hydroxylase: in vitro mutagenesis of five novel mutations

8°Annual BeSHG meeting april 25Th 2008 UZ Leuven Campus Gasthiusberg- Belgium "The human genome: past, present and future"
O.Scudiero, S.Galdiero, M.Cantisani, M.Galdiero, ***A.Daniele***, C.Pedone, G.Castaldo and F. Salvatore
Defensins as a therapeutic target for infectious diseases

ESGCT 2008
M.Cerreto, R.Nistico, D.Ombrone, M.Ruoppolo, A.Usiello, A.Daniele, L.Pastore and F.Salvatore
Correction of reference memory and synaptic plasticity impairments of PKU mice after a single injection of a helper-dependent adenoviral vector expressing PAH
Hum Gene Ther October, 2008; 19 (10): 1119.

Annual Symposium of the Society for the Study of Inborn Errors of Metabolism Lisbona 2008
I.Scala, C.Ungaro, S.Paladino, A.Nastasi, A.Zuppaldi, M.Sibilio, C.Figliuolo, E.Scarpato, B. Capaldo, G.Cardillo, A. Daniele, R.Della Casa, G.Parenti and G.Andria

Tetrahydrobiopterin (BH4)-responsiveness and long term treatment with BH4 in hyperphenylalaninemia
J Inherit Metab Dis 2008; 31(Suppl.1): 82 n°323.

19th European Respiratory Journal, Vienna, Austria, 2009
A. De Rosa, A. Daniele, G.De Laurentis, N.De Rosa, G.Oriani, M.Sofia and A.Bianco
Adiponectin and its isoforms are overexpressed in COPD patients
European Respiratory Journal volume 34 (S53) 2009 p136s.

ESGCT 2009
M.Cerreto, R.Nistico, D.Ombrone, M.Ruoppolo, A.Usiello, A.Daniele, L.Pastore and F.Salvatore
"Complete reversal of metabolic and neurological symptoms in PKU mice after PAH-HD-Ad vector treatment"

36° FEBS Congress, Turin, 2011
M. Cerreto, P. Cavaliere, A. Zagari, A. Daniele, F. Salvatore
"Mutation Q301P promotes structural instability and formation of high molecular mass oligomers in the phenylalanine hydroxylase enzyme".

36° FEBS Congress, Turin, 2011
E. Nigro, F. Formiggini, O. Scudiero, A. Bianco, F. Salvatore, A. Daniele
"Adiponectin is involved in the control of human lung epithelial A549 cell viability".

36° FEBS Congress, Turin, 2011
F. Salvatore, G. Esposito, A. Daniele and A. Zagari
"Nature and nurture in genetic diseases: the cases of hereditary fructose intolerance and hyperphenyalaninemias".

48° Congresso dell'Associazione Italiana di Neuropatologia e Neurobiologia Clinica AINPeNC e 38° Congresso dell'Associazione Italiana di Ricerca sull'Invecchiamento Cerebrale AIRIC, Napoli, 24-26 maggio 2012
A. Palmieri, V. D'Argenio, G. Guerri, A. De Rosa, C. Canero, A. Daniele e F. Salvatore.
"Molecular analysis of PAH gene in Italian patients affected by Phenylketonuria by DNA high throughput sequencing".

48° Congresso dell'Associazione Italiana di Neuropatologia e Neurobiologia Clinica AINPeNC e 38° Congresso dell'Associazione Italiana di Ricerca sull'Invecchiamento Cerebrale AIRIC, Napoli, 24-26 maggio 2012
M.L. Monaco, E. Nigro, G. Cacciapuoti, O.Scudiero, L. Di Lorenzo e A. Daniele.
"Decreased concentration of total Adiponectin, its HMW oligomers and mannose binding lectin in patients affected by Myotonic Dystrophy type 1".

48° Congresso dell'Associazione Italiana di Neuropatologia e Neurobiologia Clinica AINPeNC e 38° Congresso dell'Associazione Italiana di Ricerca sull'Invecchiamento Cerebrale AIRIC, Napoli, 24-26 maggio 2012
E. Nigro, O. Scudiero, M.L. Monaco, B. Messere, M.T. Carbone, A. Correra e A**.** Daniele.
"A Case of Maternal Phenylketonuria: molecular analysis of neutral amino acid transporter 1 gene".

48° Congresso dell'Associazione Italiana di Neuropatologia e Neurobiologia Clinica AINPeNC e 38° Congresso dell'Associazione Italiana di Ricerca sull'Invecchiamento Cerebrale AIRIC, Napoli, 24-26 maggio 2012
C. Porcile, E. Di Zazzo, M. L. Monaco, G. D'Angelo, D. Passarella, C. Russo, A. Di Costanzo, A. Pattarozzi, M. Gatti, A. Bajetto, G. Oriani, A. Daniele e T. Florio.
"Adiponectin reduces cell proliferation in glioblastoma cells through a prolonged activation of MAPK (Erk 1/2)".

22° ERS Congress, Vienna 2012 S 56 vol 40
Nigro E, Scudiero O, Sarnataro D, Monaco ML, De Rosa N, Sofia M, Bianco A, Daniele A
Anti-inflammatory effects of adiponectin in A549 cells exposed to TNF α and IL-1 β European Respiratory Journal;

Congress Obesity, Diabetes and Cancer: the role of Insulin and Insulin-like Growth Factors. Taormina (Italy), Hotel Villa Diodoro, 3-5 October 2013.
P. Stiuso, E. Nigro, I. Scognamiglio, M. Caraglia, A. Daniele.
Adiponectin-induced apoptosis is paralleled by oxidative stress in lung adenocarcinoma A549 cells.

ERS Research seminars-protein quality control in lung disease. Munich, Germany, 1-2 March 2013.
E. Nigro, P. Stiuso, O. Scudiero, I. Scognamiglio, M. Caraglia, A. Bianco, A. Daniele.
Adiponectin affects cell proliferation, cell death and oxidative stress in lung adenocarcinoma A549 cells