

# Curriculum Vitae

## INFORMAZIONI PERSONALI

**Nome** VALENTINA  
**Cognome** DI FELICE  
**Recapiti** Sezione di Anatomia Umana, Dipartimento BioNec, via del vespro 129, tel 0916553506  
**Telefono** 091-6553507  
392-8378584  
**E-mail** valentina.difelice@unipa.it  
vdfelice@inwind.it

## FORMAZIONE TITOLI

\*Master of Science in Biological Sciences (Laurea Magistrale) awarded from the University of Palermo the 21st July 1997 – First class honours (mark: 110/110 lode e menzione)  
\*Master in Immunology awarded from the University of Palermo July 1998  
\*Doctor of Philosophy in Animal Biology awarded from the University of Calabria the 17th December 2005.  
(For personal reasons I have been away from the academic world from the year 2000 to the year 2003.  
\*Medical Specialization in Virology and Microbiology awarded from the University of Palermo the 14<sup>th</sup> December 2008.

## ATTIVITA' DIDATTICA

\*Expert in Anthropology in the Faculty of Sport Sciences of the University of Palermo, academic years 2003/2004 – 2004/2005

\*Tutor for Human Anatomy in the degree course “Tecnici della Prevenzione negli Ambienti e nei Luoghi di Lavoro” of the University of Palermo for the academic year 2003/2004.  
\*Member of the examination commission of the following university courses: Pharmacy, Pharmaceutical Chemistry and Techniques, Expert in Drugs, Biological Sciences, Laboratory Technician, School of Medicine.  
\* Tenure for the Human Morphology course of the “Corso di Laurea triennale in Logopedia” Faculty of Medicine, academic years 2005/2006, 2006/2007, 2007/2008, 2008/2009.  
\*Tenure for the Human Anatomy course of the “Corso di Laurea Specialistica in Farmacia” Pharmacy Faculty, academic year 2005/2006.  
\*Tenure for the Human Anatomy course of the “Corso di Laurea triennale in Informatore Scientifico del Farmaco” Pharmacy Faculty, academic year 2006/2007, 2007/2008.  
\*Tenure for the Human Anatomy course of the “Corso di Laurea triennale in Infermieristica”, School of Medicine, academic year 2009/2010.  
\*Tenure for the Human Anatomy course of the “Corso di laurea triennale in Biotechnologie”, School of Medicine and Biology, academic year 2010/2011, 2011/2012, 2013/2014, 2014/2015, 2015/2016.  
\*Tenure for the Human Anatomy course of the “Corso di Laurea triennale in Dietistica”, School of Medicine, academic year 2011-2012.  
\*Tenure for the Human Anatomy I course of the School of Medicine of the University of Palermo, academic year 2014/2015.  
\*Reviewer of “Ministero della Ricerca Scientifica e Tecnologica” for the Research Projects of National Interest (PRINs), FIRBS and others.  
\* Tenure at the University of Palermo from 2010 for the PhD course in Experimental and Molecular Medicine of the BIONEC Department.  
\* PhD thesis supervisor for the PhD course in Experimental Medicine of the BIONEC Department.  
\* Thesis supervisor for the Bachelor degree in Biological Sciences.  
• Thesis supervisor for the Master of Science courses in Biological Sciences and Pharmaceutical studies  
• Coordinator of Erasmus+ exchanges between Erciyes University - Kayseri [ TR KAYSERI01 ] ERCIYES ÜNİVERSİTESİ and University of Palermo.

## RICERCHE FINANZIATE

1. Principal Investigator in the research project “Progetto Ex-60% MURST 2007”: “Studio del possibile recettore di membrana della Vasostatina-1 umana e dal corrispondente peptide di ratto su colture tridimensionali di miocardiociti di ratto adulto.”
2. Co-investigator in the research project “L'unita' trofica epitelio-mesenchimale nella patogenesi dell'asma: un nuovo modello sperimentale.” (codice OIPA07FHBX) Progetti innovativi ordinari University of Palermo year 2007. €17.400.
3. Co-investigator in the “Ricerca Finalizzata IZI-2007-634467: Adult mesenchymal stem cells: differentiative lineages and applications in autologus and allogenic implantation and tissue remodeling.”
4. Co-investigator in the “PRIN 2009 - National Research Projects from Ministry of the University and Research: Correlation between the overexpression of Heat Shock Proteins and exercise in the tumor mass reduction of a mouse model of cachexia”.
5. Co-investigator in a research project “Intensive Erasmus Programme”, whose title was “Stem Cell Application: from Benchside to Bedside” founded to the University of Erciyes – Kayseri – Turkey in 2013.
6. Principal investigator in the project: “CORI 2011 - University of Palermo - funds to write, organise and send an European Project on cardiac stem cells and regenerative medicine to the FP7.
7. Principal Investigator nel progetto Finanziamenti Ricerca di Ateneo a valere sul Fondo Finalizzato alla Ricerca (FFR) 2012/2013 dal titolo “Effetti dell'esercizio fisico su un modello animale di osteoporosi e valutazioni morfologiche” € 3.087.
8. Co-investigator nel progetto “PRIN2012 – Progetti di Ricerca di Interesse Nazionale: L'Esercizio Fisico per Prevenire e Contrastare Sarcopenia e Cachessia Muscolare: il Ruolo dell’Omeostasi Redox” €83.000.

## INCARICHI / CONSULENZE

- 1994-95 Winner of an ERASMUS fellowship, to spend 9 months as a student at the 'University of Swansea, Galles, UK.  
1997 Winner of a prize for an excellent university curriculum from "CartaSi Campus".  
1997 Winner of an University Fellowship to spend 3 month in the "Transformation" laboratory of the Ludwig Institute for Cancer Research of London.  
1998 1 year fellowship for a research project on Heart Failure from Prof. Condorelli, University of Naples "Federico II".  
2003 Winner of a 3-year fellowship for the PhD course of the University of Calabria.

## ASSOCIAZIONI SCIENTIFICHE

- \*American Heart Association, enrolled from 1 July 2005, as an Early Career Member, Premium Professional Member since July 2009. Protégée for the American Heart Association's International Mentoring Program from October 2007 to July 2009. Actually enrolled in the Basic Cardiovascular Sciences Council.  
\*Italian Society of Anatomists since 2004  
\*Italian Society of Immunohistochemistry since 2005  
\*Stem Cell Research Italy since 2010  
\*ABCD since 2010  
\*Interuniversity Institute of Myology (IIM) since 2011

## PUBBLICAZIONE

1. *Effects of conjugated linoleic acid (CLA) associated with endurance exercise on muscle fibers and PGC-1 isoforms.* Barone R, Sangiorgi C, Marino Gammazza A, D'Amico D, Salerno M, Cappello F, PomaraC, Zummo G, Farina F, **Di Felice V**, Macaluso F, *Journal of Cellular Physiology*, under revision.
2. *Autophagic flux restoration by exercise or pharmacological treatment counteracts cancer cachexia,* Pigna E, Berardi E, Aulino P, Rizzuto E, Zampieri S, Carraro U, Merigliano S, Kern H, Merciskay M, Li Z, Rocchi M, Barone R, Macaluso F, **Di Felice V**, Adamo S, Coletti D, Moresi V, *Sci. Rep.* under revision.
3. *Hsp60 expression and levels changes in doxorubicin-induced replicative senescence in mucoepidermoid carcinoma cells.* Marino Gammazza A, Campanella C, Barone R, Caruso Bavisotto C, Gorska M, Wozniak M, Cappello F, Zummo G, Conway de Macario E, Macario AJL, **Di Felice V**, *Cell Stress Chaperones* under revision.
4. *Skeletal muscle Heat shock protein 60 increases after endurance training and induces peroxisome proliferator-activated receptor gamma coactivator 1 I expression.* Barone R, Macaluso F, Sangiorgi C, Campanella C, Marino Gammazza A, Moresi V, Coletti D, Conway de Macario E, Macario AJ, Cappello F, Adamo S, Farina F, Zummo G, **Di Felice V**. *Sci Rep.* 2016 Jan 27;6:19781. doi: 10.1038/srep19781.
5. *Alcoholic Liver Disease: A Mouse Model Reveals Protection by Lactobacillus fermentum.* Barone R, Rappa F, Macaluso F, Caruso Bavisotto C, Sangiorgi C, Di Paola G, Tomasello G, **Di Felice V**, Marcianò V, Farina F, Zummo G, Conway de Macario E, Macario AJ, Cocchi M, Cappello F, Marino Gammazza A. *Clin Transl Gastroenterol.* 2016 Jan 21;7:e138. doi: 10.1038/ctg.2015.66.
6. *Effects of Nandrolone Stimulation on Testosterone Biosynthesis in Leydig Cells.* Pomara C, Barone R, Marino Gammazza A, Sangiorgi C, Barone F, Pitruzzella A, Locorotondo N, Di Gaudio F, Salerno M, Maglietta F, Sarni AL, **Di Felice V**, Cappello F, Turillazzi E. *J Cell Physiol.* 2016 Jun;231(6):1385-91. doi:10.1002/jcp.25272.
7. *SFRR-E Young Investigator Awardee B-crystallin modulation after acute exercise in skeletetal muscle: the role of oxidative stress and fiber composition.* Grazioli E, Dimauro I, Mercatelli N, Barone R, Macaluso F, Fittipaldi S, **Di Felice V**, Caporossi D. *Free Radic Biol Med.* 2014 Oct;75 Suppl 1:S13-4. doi:10.1016/j.freeradbiomed.2014.10.585. Epub 2014 Dec 10.
8. *The Pros and Cons of Heart Re-engineering.* **Di Felice V**. Commentary on: "Tissue engineering: How to build a heart". *Front Physiol.* 2015 Mar 19;6:84. doi: 10.3389/fphys.2015.00084.
9. *Biomaterials and bioactive molecules to drive differentiation in striated muscle tissue engineering.* **Di Felice V**, Forte G, Coletti D. *Front Physiol.* 2015 Feb 23;6:52. doi: 10.3389/fphys.2015.00052. eCollection 2015. Editorial.
10. *Cardiac tissue engineering: a reflection after a decade of hurry.* **Di Felice V**, Barone R, Nardone G, Forte G. *Front Physiol.* 2014 Sep 23;5:365. doi: 10.3389/fphys.2014.00365. eCollection 2014.
11. *Maximum water temperature limit in open-water swimming events.* Macaluso F, Barone R, Isaacs AW, Farina F, Morici G, **Di Felice V**. *Wilderness Environ Med.* 2014 Jun;25(2):245-6. doi: 10.1016/j.wem.2013.12.002.
12. *Heat Stroke Risk for Open-Water Swimmers During Long-Distance Events.* Macaluso F, Barone R, Isaacs AW, Farina F, Morici G, **Di Felice V**. *Wilderness Environ Med.* 2013 Jul 25. doi: 10.1016/j.wem.2013.04.008. [Epub ahead of print]
13. *Do Fat Supplements Increase Physical Performance?* Filippo Macaluso, Rosario Barone, Patrizia Catanese, Francesco Carini, Luigi Rizzuto, Felicia Farina and **Valentina Di Felice**. *Nutrients* 2013, 5(2), 509-524; doi:10.3390/nu5020509
14. *Muscle wasting and cardiac muscle damage in cachectic patients.* Claudia Sangiorgi, Filippo Macaluso, Rosario Barone, Elisa Dino, **Valentina Di Felice**. *Euromediterranean Biomedical Journal* 2013, 8(21): 130-136. doi: 10.3269/1970-5492.2013.8.21
15. *Stem cell populations in the heart and the role of Isl1 positive cells.* **Di Felice V**, Zummo G. *European Journal of Histochemistry* 2013; 57:e14
16. *Silk fibroin scaffolds enhance cell commitment of adult rat cardiac progenitor cells.* **Di Felice V**, Serradifalco C, Rizzuto L, De Luca A, Rappa F, Barone R, Di Marco P, Cassata G, Puleio R, Verin L, Motta A, Migliaresi C, Guercio A, Zummo G. *J Tissue Eng Regen Med.* 2013 Apr 17. doi: 10.1002/term.1739.
17. *Presence of Oxytocin, Vasopressin and Atrial Natriuretic Peptide and Their Modification in Rat Hypothalamic Paraventricular Nucleus During Resistance Training.* Farina EV, Cappello F, Lipari L, Valentino A, **Di Felice V**, Valentino B. *Anat Histol Embryol.* 2013 Apr 3. doi: 10.1111/ahc.12051.
18. *Identification and characterization of the nano-sized vesicles released by muscle cells.* Daniele P Romancino; Gaetano Paterniti; Yvan Campos; Angela De Luca; **Valentina Di Felice**; Alessandra d'Azzo; Antonella Bongiovanni. *FEBS Lett.* 2013 May 2;587(9):1379-84.

19. *Do Fat Supplements Increase Physical Performance?* Filippo Macaluso, Rosario Barone, Patrizia Catanese, Francesco Carini, Luigi Rizzuto, Felicia Farina and **Valentina Di Felice**. *Nutrients* **2013**, *5*(2), 509-524; doi:10.3390/nu5020509
20. *Cardiac stem cell-loaded poly-lactic acid and fibrinogen scaffolds as devices for cardiac muscle tissue regeneration.* Cappello, F; Serradifalco, C; Rizzuto, L; Gammazza, AM; Di Marco, P; Cassata, G; Puleio, R; Verin, L; Motta, A; Guercio, A; Zummo, G; **Di Felice, V.** *FASEB JOURNAL* **2011**; *25*.
21. *MicroRNA and Cardiac Stem Cell Therapy.* Serradifalco C., Zummo G., **Di Felice V.** *Journal of Clinical and Experimental Cardiology J Clin Exp Cardiol* **2012** *S11:001*. doi:10.4172/2155-9880.S11-001.
22. *Effect of conjugated linoleic Acid on testosterone levels in vitro and in vivo after an acute bout of resistance exercise.* Macaluso F, Morici G, Catanese P, Ardizzone NM, Marino Gammazza A, Bonsignore G, Lo Giudice G, Stampone T, Barone R, Farina F, **Di Felice V.** *Journal of Strength and Conditioning Research* **2012 Jun**; *26*(6):1667-74.
23. *Alix protein is substrate of Ozz-E3 ligase and modulates actin remodeling in skeletal muscle.* Bongiovanni A, Romancino DP, Campos Y, Paterniti G, Qiu X, Moshiach S, **Di Felice V.**, Vergani N, Ustek D, d'Azzo A. *Journal of Biological Chemistry* **2012 Apr 6**; *287*(15):12159-71.
24. *Embryonic and foetal Islet-1 positive cells in human hearts are also positive to c-Kit.* Serradifalco C., Catanese P., Rizzuto L., Cappello F., Barresi V., Nunnari C.M., Zummo G., **Di Felice V.** *European Journal of Histochemistry* **(2011)** *55*, e41.
25. Chapter: *Foreign body response to subcutaneously implanted scaffolds for cardiac tissue engineering.* Serradifalco C., Rizzuto L., De Luca A., Marino Gammazza A., Di Marco P., Cassata G., Puleio R., Verin L., Motta A., Guercio A., Zummo G., **Di Felice V.** In *Disputationes, Editor Di Nardo Paolo, River Publisher (in press)*.
26. *Effects of three different water temperatures on dehydration in competitive swimmers.* Macaluso F, **Di Felice V.**, Boscaino G, Bonsignore G, Stampone T, Farina F, Morici G. *Science & Sports* **(2011)** *26*, 265—271
27. *Soccer players have a better standing balance in non-dominant one-legged stance.* Barone R, Macaluso F, Traina M, Leonardi V, **Di Felice V.** *Open Access Journal of Sports Medicine* **2011**:2 1–6. 10.2147/OAJSM.S1259
28. *Adult stem cells, scaffolds for in vivo and in vitro myocardial tissue engineering.* **Di Felice V.**, De Luca A, Serradifalco C, Di Marco P, Verin L, Motta A, Guercio A, Zummo G. *Italian Journal of Anatomy and Embryology* **2010**; *115*:65-69.
29. *Cytoskeleton mediates negative inotropism and lusitropism of chromogranin A-derived peptides (human vasostatin1-78 and rat CgA(1-64)) in the rat heart.* Angelone T, Quintieri AM, Goumon Y, **Di Felice V.**, Filice E, Gattuso A, Mazza R, Corti A, Tota B, Metz-Boutigue MH, Cerra MC. *Regul Pept.* **2010 Nov 30**; *165*(1):78-85.
30. *Tetralogy of fallot as a model to study cardiac progenitor cell migration and differentiation during heart development.* **Di Felice V.**, Zummo G. *Trends Cardiovasc Med.* **2009 May**; *19*(4):130-5.
31. *OPLA scaffold, collagen I, and horse serum induce an higher degree of myogenic differentiation of adult rat cardiac stem cells.* **Di Felice V.**, Ardizzone NM, De Luca A, Marcianò V, Gammazza AM, Macaluso F, Manente L, Cappello F, De Luca A, Zummo G. *J Cell Physiol.* **2009 Dec**; *221*(3):729-39.
32. *Chlamydia trachomatis infection and anti-Hsp60 immunity: the two sides of the coin.* Cappello F, Conway de Macario E, **Di Felice V.**, Zummo G, Macario AJ. *PLoS Pathog.* **2009 Aug**; *5*(8):e1000552.
33. *Cardiac stem cell research: an elephant in the room?* **Di Felice V.**, De Luca A, Colorito ML, Montalbano A, Ardizzone NM, Macaluso F, Gammazza AM, Cappello F, Zummo G. *Anat Rec (Hoboken)* **2009 Mar**; *292*(3):449-54.
34. *A comparative analysis of the products of GROEL-1 gene from Chlamydia trachomatis serovar D and the HSP60 var1 transcript from Homo sapiens suggests a possible autoimmune response.* Campanella C, Marino Gammazza A, Mularoni L, Cappello F, Zummo G, **Di Felice V.** *Int J Immunogenet.* **2009 Feb**; *36*(1):73-8.
35. *Effects of water temperature on swimmers – Gli effetti della temperatura dell'acqua sui nuotatori.* Macaluso F, Palumbo D, Barone R, Battaglia G, Farina F, **Di Felice V.** *Capsula Eburnea* **2008**; *3* (8):1-5.
36. *Upon oxidative stress, the antiapoptotic Hsp60/procaspase-3 complex persists in mucoepidermoid carcinoma cells.* Campanella C, Buccieri F, Ardizzone NM, Marino Gammazza A, Montalbano A, Ribbene A, **Di Felice V.**, Bellafiore M, David S, Rappa F, Marasà M, Peri G, Farina F, Czarnecka AM, Conway de Macario E, Macario AJ, Zummo G, Cappello F. *Eur J Histochem.* **2008 Oct-Dec**; *52*(4):221-8.
37. *Atrial natriuretic peptide and CD34 overexpression in human idiopathic dilated cardiomyopathies.* Ardizzone N, Cappello F, **Di Felice V.**, Rappa F, Minervini F, Marasà S, Marasà L, Rabl W, Zummo G, Sergi C. *APMIS.* **2007 Nov**; *115*(11):1227-33.
38. *Adult stem cells: the real root into the embryo?* Zummo G, Buccieri F, Cappello F, Bellafiore M, La Rocca G, David S, **Di Felice V.**, Anzalone R, Peri G, Palma A, Farina F. *Eur J Histochem.* **2007**; *51 Suppl 1*:101-3.
39. *HSP90 and eNOS partially co-localize and change cellular localization in relation to different ECM components in 2D and 3D cultures of adult rat cardiomyocytes.* **Di Felice V.**, Cappello F, Montalbano A, Ardizzone NM, De Luca A, Macaluso F, Amelio D, Cerra MC, Zummo G. *Biol Cell.* **2007 Dec**; *99*(12):689-99.
40. *Human recombinant vasostatin-1 may interfere with cell-extracellular matrix interactions.* **Di Felice V.**, Cappello F, Montalbano A, Ardizzone N, Campanella C, De Luca A, Amelio D, Tota B, Corti A, Zummo G. *Ann NY Acad Sci.* **2006 Dec**; *1090*:305-10.
41. *Effects of conjugated linoleic acid and endurance training on peripheral blood and bone marrow of trained mice.* **Di Felice V.**, Macaluso F, Montalbano A, Gammazza AM, Palumbo D, Angelone T, Bellafiore M, Farina F. *J Strength Cond Res.* **2007 Feb**; *21*(1):193-8.
42. *New biological aspects of chromogranin A-derived peptides: focus on vasostatins.* Tota B, Quintieri AM, **Di Felice V.**, Cerra MC. *Comp Biochem Physiol A Mol Integr Physiol.* **2007 May**; *147*(1):11-8.
43. Chapter: *Heat Shock Proteins may have a direct effect on cellular senescence and may lead to neoplastic transformation,* V. **Di Felice**, C. Campanella, A. Marino Gammazza, F. Cappello, G. Zummo, In: *New Research on Cell Aging, Editor: Reginald B. Garvey, © Nova Science Publishers, Inc, ISBN 1-60021-401-0 (2006)*
44. *Senescence-associated HSP60 expression in normal human skin fibroblasts,* V. **Di Felice**, N. Ardizzone, V. Marcianò, E. Bartolotta, F. Cappello, F. Farina G. Zummo, *Anat Rec A Discov Mol Cell Evol Biol.* **2005 May**; *284*(1):446-53
45. *Is chlamydial Heat Shock Proteins 60 a risk factor for oncogenesis?*, V. **Di Felice**, S.David, F. Cappello, F. Farina, G. Zummo, *Cell Mol Life Sci.* **2005 Jan**; *62*(1):4-9
46. *Involvement of Fas/FasL system in the pathogenesis of autoimmune diseases and Wilson's disease,* G.Stassi, V.**Di Felice**, M.Todaro, F.Cappello, G.Zummo, F.Farina and R.De Maria. *Arch Immunol Ther Exp (Warsz).* **1999**; *47*(3):129-33
47. *Defective apoptosis as potential mechanism in the tumorigenesis of myelolipoma,* F.Cappello, F.Farina, V.**Di Felice**, V.Marciano', M.Todaro, G.Balsano, G.Zummo and G.Stassi, *Eur J Histochem.* **1999**; *43*(1):15-8
48. *The apoptotic effects of cisplatin and carboplatin in retinoblastoma Y79 cells,* V.**Di Felice**, M.Lauricella, M.Giuliano, S.Emanuele, R.Vento and G.Tesoriere. *Int J Oncol.* **1998 Aug**; *13*(2):225-32

49. *Fas e FasL mediano la distruzione delle cellule bersaglio della autoimmunitàorgano-specifica*, G.Stassi,V.**Di Felice**, R.De Maria.  
**Giorn. It. Allergol. Immunol. Clin.** **1998; 8:81- 83**

## **ATTIVITA' SCIENTIFICHE**

### **Visiting scientist:**

- \* Transformation studies laboratory, Ludwig Institute For Cancer Research, London, UK.
- \* Marine Biology laboratory, CNR (National Institute for Research), Mazzara del Vallo (TP), Italy
- \* Istituto Zooprofilattico Sperimentale della Sicilia, Palermo, Italy.
- \* San Raffaele del Monte Tabor Institute, Milane, Italy.
- \* Animal Physiology laboratory, University of Calabria, Italy.
- \* Department of Histology and Medical Embryology, University La Sapienza, Rome, Italy.

### **Invited speaker:**

- \* Stem Cell Research Italy - International Society for Cellular Therapy Europe Joint Meeting - Montesilvano 10-12 June 2011

- 1st International Conference on Stem Cell Research and Application. Kayseri, Turkey, 7-9 October 2011.
- Stem Cell Research Italy - International Society for Cellular Therapy Europe Joint Meeting - Ferrara, Italy, 20-22 Giugno 2012.

## **AMBITI DI RICERCA**

Chromogranin A derived peptides and their role in heart function and NO synthetase.

Extracellular matrix – cell interactions and HSP90 and eNOS involvement.

Relicative senescence and chlamydial infections. Chlamydia spp and its role in carcinogenesis and autoimmunity.

CLA supplementation and strength development in human. Effects of CLA supplementation and exercise on mouse bone marrow.

Cardiac Stem Cells, differentiation and tissue engineering for clinical application.

MicroRNAs and heart development.

Exercise and cachexia