

CURRICULUM VITAE

Nome: **Federico Quaini**

Data e luogo di nascita: 4 Luglio 1948, Cremona, ITALIA

Titoli di Studio

Liceo Classico 1966

Laurea in Medicina e Chirurgia, Università di Parma 1974

Specialista in Ematologia, Università di Modena 1977

Attuale posizione:

-Professore Associato di Oncologia Medica, Università di Parma 1996-

-Incarico di Alta Specializzazione –Medicina Rigenerativa, UO Clinica e Terapia Medica, Azienda Ospedaliero-Universitaria di Parma 2008-

-Direttore del Centro Interdipartimentale di Ricerca “Armando Tardini- Luigi Vitali Mazza-Giorgio Olivetti” per lo Studio delle Cellule Staminali Cardiache (CISTAC)- Università degli Studi di Parma 2005-

Titoli Accademici

Assistente incaricato in Medicina Interna, Università di Parma 1979-1985

Professore Associato in Medicina Interna, Università di Parma 1985-1996

Research Assistant Professor, New York Medical College, 1981, 1984, 1987

Adjunct Assistant Professor of Histology, City College University of the New York University, 1984

Visiting Professor, Cardiovascular Research Institute, Department of Medicine, New York Medical College 1994, 1997, 2001-2007

Fondi di Ricerca recenti:

Co-Principal Investigator of the NIH Grant entitled: Cardiac Stem Cells and the Infarcted aging heart, 2004-2009 (Principal Investigator: Piero Anversa);

-Principal Investigator of MIUR project entitled: Cardiotoxicity of anti-cancer therapy involves resident cardiac stem-progenitor cells. 2005-2009

-Co-Principal investigator of the European Project N° 214539 FP7-NMP-2007: BIOSCENT BIOactive highly porous and injectable Scaffolds controlling stem cell recruitment, proliferation and differentiation and enabling angiogenesis for Cardiovascular ENGINEERED Tissues, 2008-2012

-Co-Principal Investigator of Regional Project on Regenerative Medicine, THEAPLL, 2008-2011

Membership

European Society of Cardiology

Council Basic Cardiovascular Science

American Heart Association

Italian Society of Cardiovascular Research

Federazione Italiana di Cardiologia

COMU-Comitato Oncologi Medici Universitari

Collaborazioni Internazionali

Bristol Heart Institute, University of Bristol, UK-Prof. Paolo Madeddu

Brigham & Women's Hospital, Harvard Medical School, Boston, Prof. Piero Anversa

Massachusetts General Hospital, Harvard University, Boston, Prof. David Scadden

Pubblicazioni Scientifiche Significative

1. Beltrami CA, Finato N, Rocco M, Feruglio GA, Puricelli C, Cigola E, Quaini F, Sonnenblick EH, Olivetti G, Anversa P Structural basis of end-stage failure in ischemic cardiomyopathy in humans *Circulation* 89:151-163, 1994
2. Olivetti G, Melissari M, Balbi T, Quaini F, Cigola E, Sonnenblick EH, Anversa P Myocyte cellular hypertrophy is responsible for ventricular remodeling in the hypertrophied heart of middle aged individuals in the absence of cardiac failure *Cardiovasc Res* 28: 1199-1208, 1994
3. Olivetti G, Melissari M, Balbi T, Quaini F, Sonnenblick EH, Anversa P Myocyte nuclear and possible cellular hyperplasia contribute to ventricular remodeling in the hypertrophic senescent heart in humans *J Am Coll Cardiol* 24: 140-149, 1994
4. Quaini F, Cigola E, Lagrasta C, Saccani G, Quaini E, Rossi C, Olivetti G, Anversa P End-stage cardiac failure in humans is coupled with the induction of proliferating cell nuclear antigen and nuclear mitotic division in ventricular myocytes *Circ Res* 75: 1050-1063, 1994
5. Cheng W, Reiss K, Kajstura J, Kowal K, Quaini F, Anversa P Downregulation of the IGF-1 system parallels the attenuation in the proliferative capacity of rat ventricular myocytes during postnatal development *Lab Invest* 72: 646-58, 1995
6. Kajstura J, Mansukhani M, Cheng W, Krajewski S, Reed JC, Quaini F, Sonnenblick EH, Anversa P Programmed Cell Death and expression of the protooncogene bcl-2 in myocytes during postnatal maturation of the heart *Exper Cell Res* 219, 110-121, 1995
7. Anversa P, Kajstura J, Reiss K, Quaini F, Baldini A, Olivetti G, Sonnenblick EH Ischemic Cardiomyopathy: myocyte cell loss, myocyte cellular hypertrophy, and myocyte cellular hyperplasia *Ann NY Acad Sci* 752, 47-64, 1995
8. Olivetti G, Quaini F, Lagrasta C, Cigola E, Ricci R, Maestri R, Anversa P Cellular basis of ventricular remodeling after myocardial infarction in rats *Cardioscience* 6:101-6, 1995
9. Olivetti G, Quaini F, Sala R, Lagrasta C, Corradi D, Bonacina E, Gambert S, Cigola E, Anversa P Acute myocardial infarction in humans is associated with activation of programmed myocyte cell death in the surviving portion of the heart *J Mol Cell Cardiol* 28: 2005-2016, 1996
10. Olivetti G, Abbi R, Quaini F, Kajstura J, Cheng W, Nitahara JA, Quaini E, Di Loreto C, Beltrami CA, Krajewsky S, Reed J, Anversa P Apoptosis in the failing human heart *N Engl J Med* 336: 1131-114, 1997
11. Olivetti G, Cigola E, Maestri R, Lagrasta C, Quaini F The Failing Heart *Adv Clin Path* 1:137-148, 1997
12. Olivetti G, Cigola E, Maestri R, Corradi D, Lagrasta C, Quaini F. [Does apoptosis participate in heart failure?]. *Cardiologia*. 44 Suppl 1:859-61. 1999
13. Fiorina P, Astorri E, Albertini R, Secchi A, Mello A, Lanfredini M, Craveri A, Olivetti G, Quaini F Soluble antiapoptotic molecules and immune activation in chronic heart failure and unstable angina pectoris *J Clin Immunol* 20:101-6, 2000
14. Olivetti G, Cigola E, Maestri R, Lagrasta C, Corradi D, Quaini F Recent advances in cardiac hypertrophy *Cardiovasc Res* 45:68-75, 2000
15. Orlic D, Kajstura J, Chimenti S, Limana F, Jakoniuk I, Quaini F, Nadal-Ginard B, Bodine DM, Leri A, Anversa P Mobilized bone marrow cells repair the infarcted heart, improving function and survival *Proc Natl Acad Sci USA* 98: 10344-349, 2001
16. Leri A, Quaini F, Kajstura J, Anversa P Myocyte death and myocyte regeneration in the failing human heart *Ital Heart J* 2:12S-14S, 2001
17. Quaini F, Urbanek K, Beltrami AP, Finato N, Beltrami CA, Nadal-Ginard B, Kajstura J, Leri A, Anversa P Chimerism of the transplanted human heart *N Engl J Med* 346:15-22, 2002

18. Limana F, Urbanek K, Chimenti S, Quaini F, Leri A, Kajstura J, Nadal-Ginard B, Izumo S, Anversa P bcl-2 overexpression promotes myocyte proliferation Proc Natl Acad Sci USA 99: 6257-62, 2002
19. Urbanek K, Quaini F, Tasca G, Torella D, Castaldo C, Nadal-Ginard B, Leri A, Kajstura J, Quaini E, Anversa P Intense myocyte formation from cardiac stem cells in human cardiac hypertrophy Proc Natl Acad Sci USA 100:10440-5, 2003
20. Quaini F, Urbanek K, Graiani G, Lagrasta C, Maestri R, Monica M, Boni A, Ferraro F, Delsignore R, Tasca G, Leri A, Kajstura J, Quaini E, Anversa P The regenerative potential of the human heart Int J Cardiol 95: 26-8, 2004
21. Kajstura J, Rota M, Whang B, Cascapera S, Hosoda T, Bearzi C, Nurzynska D, Kasahara H, Zias E, Bonafè M, Nadal-Ginard B, Torella D, Nascimbene A, Quaini F, Urbanek K, Leri A, Anversa P Bone marrow cells differentiate in cardiac lineages after infarction independently of cell fusion Circ Res 96:127-37, 2005
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23. Linke A, Muller P, Nurzynska D, Casarsa C, Torella D, Nascimbene A, Castaldo C, Cascapera S, Bohm M, Quaini F, Urbanek K, Leri A, Hintze T, Kajstura J, Anversa P: Cardiac stem cells in the dog heart regenerate infarcted myocardium improving cardiac performance Proc Natl Acad Sci USA 102: 8966-71, 2005
24. Graiani G, Lagrasta C, Migliaccio E, Spillmann F, Meloni F, Madeddu P, Quaini F, Padura IM, Lanfrancone L, Pelicci PG, Emanuelli C Genetic deletion of the p66Shc adaptor protein protects from Angiotensin II-induced myocardial damage Hypertension 46: 1-8, 2005
25. Urbanek K, Rota M, Cascapera S, Bearzi C, Nascimbene A, De Angelis A, Hosoda T, Chimenti S, Baker M, Limana F, Nurzynska D, Torella D, Rotatori F, Rastaldo R, Musso E, Quaini F, Leri A, Kajstura J, Anversa P Cardiac stem cells possess growth factor-receptor systems that after activation regenerate the infarcted myocardium, improving ventricular function and long-term survival Circ Res 97: 663-673, 2005
26. Spillmann F, Graiani G, Van Linthout S, Meloni M, Campesi I, Lagrasta C, Westermann D, Tschöpe C, Quaini F, Emanuelli C, Madeddu P Regional and global protective effects of tissue kallikrein gene delivery to the peri-infarct myocardium Regenerative Medicine; 1, 2: 235-254, 2006
27. Bearzi C, Rota M, Hosoda T, Tillmanns J, Nascimbene A, De Angelis A, Yasuzawa-Amano S, Trofimova I, Siggins RW, Lecapitaine N, Cascapera S, Beltrami AP, D'Alessandro DA, Zias E, Quaini F, Urbanek K, Michler RE, Bolli R, Kajstura J, Leri A, Anversa P Human cardiac stem cells Proc Natl Acad Sci U S A 28;104:14068-7, 2007
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35. Rossini A, Frati C, Lagrasta C, Graiani G, Scopece A, Cavalli S, Musso E, Baccarin M, Di Segni M, Fagnoni F, Germani A, Quaini E, Mayr M, Xu Q, Barbuti A, Difrancesco D, Pompilio G, Quaini F, Gaetano C, Capogrossi MC. Human Cardiac and Bone Marrow Stromal Cells exhibit distinctive properties related to their origin. *Cardiovasc Res.* 89:650-60, 2011
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39. Mormile R, Vittori G, De Michele M, Squarcia U, Quaini F. Is telomerase the final downstream effector of the escape of cardiomyocytes from the point-of-no-return of apoptosis in infants of diabetic mothers? *Int J Cardiol.* 2011 151:378-80
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41. Mormile R, Vittori G, De Michele M, Squarcia U, Quaini F. Postnatal regression of hypertrophic cardiomyopathy in infants of diabetic mothers: a crosstalk between Hox genes and epidermal growth factor (EGF) gene polymorphism? *Int J Cardiol.* 2011 150:340
42. Kajstura J, Rota M, Hall SR, Hosoda T, D'Amario D, Sanada F, Zheng H, Ogòrek B, Rondon-Clavo C, Ferreira-Martins J, Matsuda A, Arranto C, Goichberg P, Giordano G, Haley KJ, Bardelli S, Rayatzadeh H, Liu X, Quaini F, Liao R, Leri A, Perrella MA, Loscalzo J, Anversa P. Evidence for human lung stem cells. *N Engl J Med.* 2011 364:1795-806

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47. Mormile R, Vittori G, De Michele M, Squarcia U, Quaini F. Is a deceptive role of IGF-1 in Sirt1-PARP1 interactions the primary step of postnatal regression of hypertrophic cardiomyopathy in infants of diabetic mothers? *Int J Cardiol*. 2012 Jan 12;154(1):87-8. Epub 2011 Nov 7.
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52. Carnevali L, Mastorci F, Audero E, Graiani G, Rossi S, Macchi E, Callegari S, Bartolomucci A, Nalivaiko E, Quaini F, Gross C, Sgoifo A. Stress-induced susceptibility to sudden cardiac death in mice with altered serotonin homeostasis. *PLoS One*. 2012;7(7):e41184. Epub 2012 Jul 18.
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Carbognani P, Tiseo M, Barocelli E, Petronini PG, Ardizzoni A. Combined use of anti-ErbB monoclonal antibodies and erlotinib enhances antibody-dependent cellular cytotoxicity of wild-type erlotinib-sensitive NSCLC cell lines. *Mol Cancer*. 2012 Dec 12;11:91. doi: 10.1186/1476-4598-11-91.