

## Sarcomeres

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### Recent Publications on Sarcomeres:

- [Evidence for the Oligomeric State of 'Elastic' Titin in Muscle Sarcomeres.](#)  
*The giant protein titin has important roles in muscle sarcomere integrity...* 1st October, 2008  
Institute for Molecular and Cellular Biology, University of Leeds, Leeds- *J Mol Biol.* 2008 Sep 20. ([DOI Direct Link](#))
- [Acceleration of Crossbridge Kinetics by Protein Kinase A Phosphorylation of Cardiac Myosin Binding Protein C Modulates Cardiac Function.](#)  
*Normal cardiac function requires dynamic modulation of contraction...* 20th September, 2008  
Department of Physiology, University of Wisconsin School of Medicine and- *Circ Res.* 2008 Sep 18. ([DOI Direct Link](#))
- [Minimally invasive high-speed imaging of sarcomere contractile dynamics in mice and humans.](#)  
*Sarcomeres are the basic contractile units of striated muscle. Our...* 19th September, 2008  
Bio-X Program, James H. Clark Center for Biomedical Engineering &- *Nature.* 2008 Aug 7;454(7205):784-8. Epub 2008 Jul 6. ([DOI Direct Link](#))
- [Thin filament length regulation in striated muscle sarcomeres: Pointed-end dynamics go beyond a nebulin ruler.](#)  
*The actin (thin) filaments in striated muscle are highly regulated and...* 17th September, 2008  
Center for Cell Dynamics, University of Washington, Friday Harbor- *Semin Cell Dev Biol.* 2008 Aug 26. ([DOI Direct Link](#))
- [Dystrophic skeletal muscle fibers display alterations at the level of calcium microdomains.](#)  
*The spatiotemporal properties of the Ca(2+)-release process in skeletal...* 13th September, 2008  
Department of Physiology, David Geffen School of Medicine, University of- *Proc Natl Acad Sci U S A.* 2008 Sep 23;105(38):14698-703. Epub 2008 Sep 11. ([DOI Direct Link](#))
- [Mechanoelectric Feedback as a Trigger Mechanism for Cardiac Electrical Remodeling: A Model Study.](#)  
*Regional variation in ionic membrane currents causes differences in action...* 9th September, 2008  
Department of Biomedical Engineering, Maastricht University, P.O. Box 616,- *Ann Biomed Eng.* 2008 Sep 6. ([DOI Direct Link](#))
- [The accessibility and interconnectivity of the tubular system network in toad skeletal muscle.](#)  
*The tubular (t) system is essential for normal function of skeletal muscle...* 6th September, 2008  
University of Queensland.- *J Physiol.* 2008 Sep 4. ([DOI Direct Link](#))
- [Myofibrillar architecture in engineered cardiac myocytes.](#)  
*Morphogenesis is often considered a function of transcriptional synchrony...* 6th September, 2008  
Disease Biophysics Group, School of Engineering and Applied Sciences,- *Circ Res.* 2008 Aug 15;103(4):340-2. Epub 2008 Jul 17. ([DOI Direct Link](#))

- [Engineering a multi-nucleated myotube, the role of the actin cytoskeleton.](#)  
*Myoblasts in vitro form characteristic arrays of bipolar-shaped cells...*30th August, 2008  
Institute of Cellular and Molecular Biology, Faculty of Biological- J Microsc. 2008 Sep;231(3):486-93. ([DOI Direct Link](#))
- [Detrimental effects of re-loading recovery on force, shortening velocity, and power of soleus muscles from hindlimb unloaded rats.](#)  
*To better understand how atrophied muscles recover from prolonged...*30th August, 2008  
Nutrition and Exercise Sciences, Oregon State University, Corvallis,- Am J Physiol Regul Integr Comp Physiol. 2008 Aug 27. ([DOI Direct Link](#))
- [Theoretical analysis of the adaptive contractile behaviour of a single cardiomyocyte cultured on elastic substrates with varying stiffness.](#)  
*In vivo, cardiomyocytes interact with surrounding extracellular matrix...*30th August, 2008  
Laboratoire TIMC-IMAG, Equipe DynaCell, 38706 La Tronche Cedex, France.- J Theor Biol. 2008 Jul 31. ([DOI Direct Link](#))
- [\[Effect of intravenous immunoglobulin and vitamin C on progression of experimental autoimmune myocarditis in mice\]](#)  
*OBJECTIVE: To evaluate the effect of intravenous immunoglobulin (IVIG) and...*16th August, 2008  
Department of Cardiology, the Children's Hospital, College of Medicine- Zhejiang Da Xue Xue Bao Yi Xue Ban. 2008 Jul;37(4):399-406.
- [The dynamic Z bands of striated muscle cells.](#)  
*The distribution of proteins in the sarcomeres of skeletal and cardiac...*14th August, 2008  
Department of Cell and Developmental Biology, SUNY Upstate Medical- Sci Signal. 2008 Aug 12;1(32):pe37. ([DOI Direct Link](#))
- [The role of cardiac troponin T quantity and function in cardiac development and dilated cardiomyopathy.](#)  
*BACKGROUND: Hypertrophic (HCM) and dilated (DCM) cardiomyopathies result...*10th July, 2008  
Cardiovascular Institute, Department of Medicine, University of- PLoS ONE. 2008 Jul 9;3(7):e2642. ([DOI Direct Link](#))
- [Cardiac oxidative stress determination and myocardial morphology after a single ecstasy \(MDMA\) administration in a rat model.](#)  
*Experimental and clinical data indicate that...*3rd July, 2008  
Department of Pharmacology "G. Segre", University of Siena, Siena, Italy.- Int J Legal Med. 2008 Jul 2. ([DOI Direct Link](#))

#### Sarcomeres Clinical Trials:



- [Treatment of Preclinical Hypertrophic Cardiomyopathy With Diltiazem](#)  
*Hypertrophic Cardiomyopathy*



## Sarcomeres Patents:

- 6599255- [Portable intelligent stretching device](#)
- 6924415- [Transgenic mice comprising a constitutively-activated MEK5 and exhibiting cardiac hypertrophy and dilated cardiomyopathy](#)
- 6939303- [Method and system of determining cardiac contractility](#)
- 6942873- [Microfabrication of membranes containing projections and grooves for growing cells](#)
- 6946441- [Inhibition of histone deacetylase as a treatment for cardiac hypertrophy](#)
- 6962798- [Methods and compositions relating to a cardiac-specific nuclear regulatory factor](#)
- 6974688- [Human smooth muscle myosin heavy chain](#)
- 7033636- [Low cholesterol, functional, animal muscle protein composition and process](#)
- 7035691- [Resonant muscle stimulator](#)
- 7057171- [Patch-clamping and its use in analyzing subcellular features](#)
- 7061622- [Aspects of basic OCT engine technologies for high speed optical coherence tomography and light source and other improvements in optical coherence tomography](#)
- 6908424- [Stress reduction apparatus and method](#)
- 6900198- [Synthetic catalytic free radical scavengers useful as antioxidants for prevention and therapy of disease](#)
- 6855364- [Process for retaining moisture in cooked animal muscle](#)
- 6613506- [Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes](#)
- 6648744- [Method and apparatus for tenderizing meat](#)
- 6657104- [Transgenic mouse model for cardiac hypertrophy and methods of use thereof](#)
- 6664443- [Pathogenic Tau mutations in transgenic mice](#)
- 6673768- [Transgenic animal models for cardiac hypertrophy and methods of use thereof \(treating\)](#)
- 6682730- [Transplants for myocardial scars](#)
- 6706686- [Inhibition of histone deacetylase as a treatment for cardiac hypertrophy](#)
- 6737054- [Myocardial grafts and cellular compositions useful for same](#)
- 6748261- [Implantable cardiac stimulation device for and method of monitoring progression or regression of heart disease by monitoring interchamber conduction delays](#)
- 6818210- [Myocardial grafts and cellular compositions useful for same](#)
- 7067121- [Transplants for myocardial scars](#)
- 7070957- [STARS--a muscle-specific actin-binding protein](#)
- 7338356- [Method and apparatus for tenderizing meat](#)
- 7338517- [Tissue scaffold having aligned fibrils and artificial tissue comprising the same](#)
- 7338798- [System and method for forming a cardiac muscle construct](#)
- 7341719- [Myoblast therapy for cosmetic treatment](#)
- 7349834- [Molecular motor](#)
- 7364503- [Method and apparatus for tenderizing meat](#)
- 7384786- [Aligned scaffolds for improved myocardial regeneration](#)
- 7393652- [Methods for identifying a chemical compound that directly enhances binding of FKBP12.6 to PKA-phosphorylated type 2 ryanodine receptor \(RyR2\)](#)
- 7405286- [Stars--A muscle-specific actin-binding protein](#)
- 7425448- [Cardiomyocyte precursors from human embryonic stem cells](#)
- 7311731- [Prevention of myocardial infarction induced ventricular expansion and remodeling](#)
- 7297487- [Desmin gene having novel point mutation causative of dilated cardiomyopathy](#)

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- 7122537- [Cyclic salen-metal compounds as scavengers for oxygen radicals and useful as antioxidants in the treatment and prevention of diseases](#)
- 7148380- [Bio-energy muscle relaxants](#)
- 7160567- [Process for retaining moisture in cooked food with a peptide](#)
- 7160720- [CHAMP--a novel cardiac helicase-like factor](#)
- 7163707- [Food product and process for reducing oil and fat content in cooked food](#)
- 7220582- [Stem cells that transform to beating cardiomyocytes](#)
- 7226907- [Cardiac muscle function and manipulation](#)
- 7235588- [Method for reducing hypertension and heart failure](#)
- 7235709- [Transgenic animals with increased slow-twitch muscle fibers and methods of using such animals](#)
- 7425635- [Prodrugs and conjugates of thiol- and selenol-containing compounds and methods of use thereof](#)

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