

Bibliography

Adams, G. R., B. M. Hather, K. M. Baldwin, and G. A. Dudley. Skeletal muscle myosin heavy chain composition and resistance training. *J Appl Physiol.* 74(2): 911-915, 1993.

Allen D. G, J. Lannergren, and H. Westerblad. Muscle cell function during prolonged activity: Cellular mechanisms of fatigue. *Exp Physiol.* 80; 497-527, 1995.

Andersen, J. L., T. Gruschy-Knudsen, C. Sandri, L. Larsson and S. Schiaffino. Bed rest increases the amount of mismatched fibers in human skeletal muscle. *J Appl Physiol.* 86: 455-460, 1999.

Barany, M. ATPase activity of myosin correlated with speed of muscle shortening. *J. Gen. Physiol.* 50:197-216, 1967.

Bernocchi, P., C. Ceconi, P. Pedersini, E. Pasini, S. Curello, and R. Ferrari. Skeletal muscle metabolism in experimental heart failure. *J Mol Cell Cardiol.* 28: 2263-2273, 1996.

Bigard, A.-X, E. Boehm, V. Veksler, P. Mateo, K. Anflous, and R. Ventura-Clapier. Muscle unloading induces slow to fast transitions in myofibrillar but not mitochondrial properties. Relevance to skeletal muscle abnormalities in heart failure. *J Mol Cell Cardiol.* 30: 2391-2401, 1998.

Blough, E. R. and J. K. Linderman. Lack of skeletal muscle hypertrophy in very aged male Fischer 344 x Brown Norway rats. *J Appl Physiol.* 88: 1265-1270, 2000.

Bottinelli, R., R. Betto, S. Schiaffino and C. Reggiani. Unloaded shortening velocity and myosin heavy chain and light chain isoform composition in rat skeletal muscle fibres. *J Physiol.* 478: 341-349, 1994.

Bradford, M. M. A rapid and sensitive method for the quantification of microgram quantities of protein utilizing the principle of protein-dye binding. *Analytical Biochemistry.* 72: 248-254, 1976.

Buller, N. P., D. Jones, and P. A. Poole-Wilson. Direct measurement of skeletal muscle fatigue in patients with chronic heart failure. *Br Heart J.* 65: 20-24, 1991.

Coats, A. J. The "muscle hypothesis" of chronic heart failure. *J Mol Cell Cardiol.* 28: 2255-2262, 1996.

Delp, M. D., C. Duan, J. P. Mattson, and T. I Musch. Changes in skeletal muscle biochemistry and histology relative to fiber types in rats with heart failure. *J Appl Physiol.* 83(4): 1291-1299, 1997.

Dux, L. Muscle relaxation and sarcoplasmic reticulum function in different muscle types. *Rev. Physiol. Biochem. Pharmacol.* 122: 69-147, 1993.

- Fitts, R. H. and J. J. Widrick. Muscle mechanics: Adaptations with exercise training. *Exer. Sport Sci. Rev.* 24:427-473, 1996.
- Franciosa, J. A., M. Park, and T. B. Levine. Lack of correlation between exercise capacity and indexes of resting left ventricular performance in heart failure. *Am J Cardiol.* 47: 33-39, 1981.
- Grossman, E. J., R. R. Roy, R. J. Talmadge, H. Zhong, and V. R. Edgerton. Effects of inactivity on myosin heavy chain composition and size of rat soleus fibers. *Muscle & Nerve.* 21: 375-389, 1998.
- Grynkiwicz, G., G. M. Poenie, and R. Y. Tsien. A new generation of Ca²⁺ indicators with greatly improved fluorescent properties. *J Biol Chem.* 260; 3440-3450, 1985.
- Hambrecht, R., E. Fiehn, J. Yu, J. Niebauer, C. Weigl, L. Hilbrich, V. Adams, U. Riede, and G. Schuler. Effects of endurance training on mitochondrial ultrastructure and fiber type distribution in skeletal muscle of patients with stable chronic heart failure. *J Am Coll Cardiol.* 29: 1067-1073, 1997.
- Hiatt, W. R. Regarding: "Expression of myosin heavy chain isoforms in skeletal muscle of patients with peripheral arterial occlusive disease". *J Vasc Surg.* 31(6): 611-612, 2000.
- Kandarian, S. C., D. G. Peters, J. A Taylor, and J. H. Williams. Skeletal muscle overload upregulates the sarcoplasmic reticulum slow calcium pump gene. *Am J Physiol.* 266: C1190-C1197, 1994.
- Laemmli, U. K. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature.* 227: 680-685, 1970.
- Lang, C. C., D. B. Chomsky, G. Rayos, T. K. Yeoh, and J. R. Wilson. Skeletal muscle mass and exercise performance in stable ambulatory patients with heart failure. *J Appl Physiol.* 82(1): 257-261, 1997.
- Lunde, P. K., E. Verburg, N. K. Vollestad, and O. M. Sejersted. Skeletal muscle fatigue in normal subjects and heart failure patients. Is there a common mechanism? *Acta Physiol Scand.* 162: 215-228, 1998.
- Magnusson, G., A. Gordon, L. Kaijser, C. Sylven, B. Isberg, J. Karpakka, and B. Saltin. High intensity knee extensor training, in patients with chronic heart failure. Major skeletal muscle improvement. *Eur Heart J.* 17(7):1048-1055, 1996.
- Mancini, D. M., G. Walter, N. Reicheck, R. Lenkinski, K. McCulley, J. Mullen, and J. R. Wilson. Contribution of skeletal muscle atrophy to exercise intolerance and altered metabolism in heart failure. *Circulation.* 85: 1364-1373, 1992.

Massie, B., M. Conway, R. Yonge, S. Frostick, J. Ledingham, P. Sleight, G. Radda, and B. Rajagopalan. Skeletal muscle metabolism in patients with congestive heart failure: relation to clinical severity and blood flow. *Circulation*. 76(5): 1009-1019, 1987.

Minotti, J. R., P. Pillay, R. Oka, L. Wells, I. Christoph, and B. M. Massie. Skeletal muscle size: relationship to muscle function in heart failure. *J Appl Physiol*. 75(1): 373-381, 1993.

Minotti, J. R. and B. M. Massie. Exercise training in heart failure patients. Does reversing the peripheral abnormalities protect the heart? *Circulation*. 85(6): 2323-2325, 1992.

Minotti, J. R., I. Christoph, R. Oka, M. W. Weiner, L. Wells, and B. M. Massie. Impaired skeletal muscle function in patients with congestive heart failure. *J Clin Invest*. 88: 2077-2082, 1991.

Musch, T. I. and J. A. Terrell. Skeletal muscle blood flow abnormalities in rats with a chronic myocardial infarction: rest and exercise. *Am J Physiol*. 262: H411-H419, 1992.

Okita, K., K. Yonezawa, H. Nishijima, A. Hanada, M. Ohtsubo, T. Kohya, T. Murakami, and A. Kitabatake. Skeletal muscle metabolism limits exercise capacity in patients with chronic heart failure. *Circulation*. 98: 1886-1891, 1998.

Perreault, C. P., H. Gonzalez-Serratos, S. Litwin, X. Sun, C. Franzini-Armstrong, and J. P. Morgan. Alterations in contractility and intracellular Ca^{2+} transients in isolated bundles of skeletal muscle fibers from rats with chronic heart failure. *Circ Res*. 73: 405-412, 1993.

Peters, D. G., H. L. Mitchell, S. A. McCune, S. Park, J. H. Williams, and S. K. Kandarian. Skeletal muscle sarcoplasmic reticulum calcium ATPase gene expression in congestive heart failure. *Circulation*. 81: 703-710, 1997.

Pfeffer, M. A., J. Pfeffer, M. Fishbein, P. Fletcher, J. Spadaro, R. Kloner, and E. Braunwald. Myocardial infarct size and ventricular function in rats. *Circ Res*. 44: 503-512, 1979.

Reggiani, C., R. Bottinelli, and G. J. M. Stienen. Sarcomeric myosin isoforms: fine tuning of a molecular motor. *NIPS*. 15: 26-33, 2000.

Roy, R. R., J. A. Kim, E. J. Grossman, A. Bekmezian, R. J. Talmadge, H. Zhong, and V. R. Edgerton. Persistence of myosin heavy chain-based fiber types in innervated but silenced rat fast muscle. *Muscle & Nerve*. 23: 735-747, 2000.

Roy, R. R., R. J. Talmadge, K. Fox, M. Lee, A. Ishihara, and V. R. Edgerton. Modulation of MHC isoforms in functionally overloaded and exercised rat plantaris fibers. *J Appl Physiol*. 83(1): 280-290, 1997.

- Schoen, F. J. The heart. *In* Cotran, R. S. et al. (eds.). Pathological basis of disease. Philadelphia, W. B. Saunders Co., 1994, 517-582.
- Simonini A., K Chang, P Yue, C. S. Long, and B. M. Massie. Expression of skeletal muscle sarcoplasmic reticulum calcium-ATPase is reduced in rats with postinfarction heart failure. *Heart*. 81: 303-307, 1999.
- Simonini A., C. S. Long, G. A. Dudley, P. Yue, J. McElhinny, and B. M. Massie. Heart failure in rats causes changes in skeletal muscle morphology and gene expression that are not explained by reduced activity. *Circ Res*. 79: 128-136, 1996a.
- Simonini, A. B. M. Massie, C. S. Long, M. Qi, and A. L. Samarel. Alterations in skeletal muscle gene expression in rat with chronic congestive heart failure. *J Mol Cell Cardiol*. 28: 1683-1691, 1996b.
- Sugiura, T, H. Miyata, Y. Kawai, H. Matoba, and N. Murakami. Changes in myosin heavy chain isoform expression of overloaded rat skeletal muscles. *Int J Biochem*. 25(11): 1609-1613, 1993.
- Sullivan, M. J. B. D. Duscha, H. Klitgaard, W. E. Kraus, F. R. Cobb, and B. Saltin. Altered expression of myosin heavy chain in human skeletal muscle chronic heart failure. *Med Sci Sport Exerc*. 29(7): 860-866, 1997.
- Sullivan, M. J., H. J. Green, and F. R. Cobb. Altered skeletal muscle metabolic response to exercise in chronic heart failure: relation to skeletal muscle aerobic enzyme activity. *Circulation*. 84: 1597-1607, 1991.
- Sullivan, M. J., H. J. Green, and F. R. Cobb. Skeletal muscle biochemistry and histology in ambulatory patients with long-term heart failure. *Circulation*. 81: 518-527, 1990.
- Talmadge, R. J. Myosin heavy chain isoform expression following reduced neuromuscular activity: potential regulatory mechanism. *Muscle & Nerve*. 23: 661-679, 2000.
- Talmadge, R. J., R. R. Roy, and V. R. Edgerton. Persistence of hybrid fibers in rat soleus after spinal cord transection. *Anat Rec*. 255: 188-201, 1999.
- Talmadge, R. J., R. R. Roy, G. R. Chalmers, and V. R. Edgerton. MHC and sarcoplasmic reticulum protein isoforms in functionally overloaded cat plantaris muscle fibers. *J Appl Physiol*. 80(4): 1296-1303, 1996.
- Talmadge, R. J. and R. R. Roy. Electrophoretic separation of rat skeletal muscle myosin heavy chain isoforms. *J Appl Physiol*. 75(5): 2337-2340, 1993.

Towbin, H., T Staehelin, and J. Gordon. Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: procedure and some applications. *Proc Natl Acad Sci U S A*: 76(9):4350-4354, 1979.

Vescovo, G., C. Ceconi, P. Bernocchi, R. Ferrari, U. Carraro, G. B. Ambrosio, and L. D. Liberia. Skeletal muscle myosin heavy chain expression in rats with monocrotaline-induced cardiac hypertrophy and failure. Relation to blood flow and degree of muscle atrophy. *Cardiovascular Res.* 39: 233-241, 1998.

Vescovo, G. F. Serafini, L. Facchin, P. Tenderini, U. Carraro, L. D. Libera, C. Catani, and G. B. Ambrosio. Specific changes in skeletal muscle myosin heavy chain composition in cardiac failure: differences compared with disuse atrophy as assessed on microbiopsies by high resolution electrophoresis. *Heart.* 76: 337-343, 1996.

Volterrani, M., A. L. Clark, P. F. Ludman, J. W. Swan, S. Adamopoulos, M. Piepoli, and A. J. S. Coats. Predictors of exercise capacity in chronic heart failure. *Eur Heart J.* 15: 801-809, 1994.

Ward, C. W., E. E. Spangenburg, L. M. Diss, and J. H. Williams. Effects of varied fatigue protocols on sarcoplasmic reticulum calcium uptake and release rates. *Am J Physiol.* 275: R99-R104, 1998.

Williams, J. H. and C. W. Ward. Changes in skeletal muscle sarcoplasmic reticulum function and force production following myocardial infarction in rats. *Exp Physiol.* 83: 85-94, 1998.

Williams J. H., C. W. Ward, E. E. Spangenburg, and R. M. Nelson. Functional aspects of skeletal muscle contractile apparatus and sarcoplasmic reticulum function after fatigue. *J Appl Physiol.* 1998; 85: 619-626.

Williams JH, and G. A. Klug. Calcium exchange hypothesis of skeletal muscle fatigue: a brief review. *Muscle & Nerve* 1995;18: 421-434.

Wu, K. and J. Lytton. Molecular cloning and quantifications of sarcoplasmic reticulum Ca^{2+} -ATPase isoforms in rat muscles. *Am J Physiol.* 264: C333-C341, 1993.

Yamaguchi, F., K. Kawana, K. Tanonaka, I. Kamano, T. Igarashi, E. Gen, Y. Fujimoto, T. Maki, A. Sanbe, Y. Nasa, and S. Takeo. Improvement of exercise capacity of rats with chronic heart failure by long-term treatment with trandolapril. *Brit J of Pharm.* 126: 1585-1592, 1999.