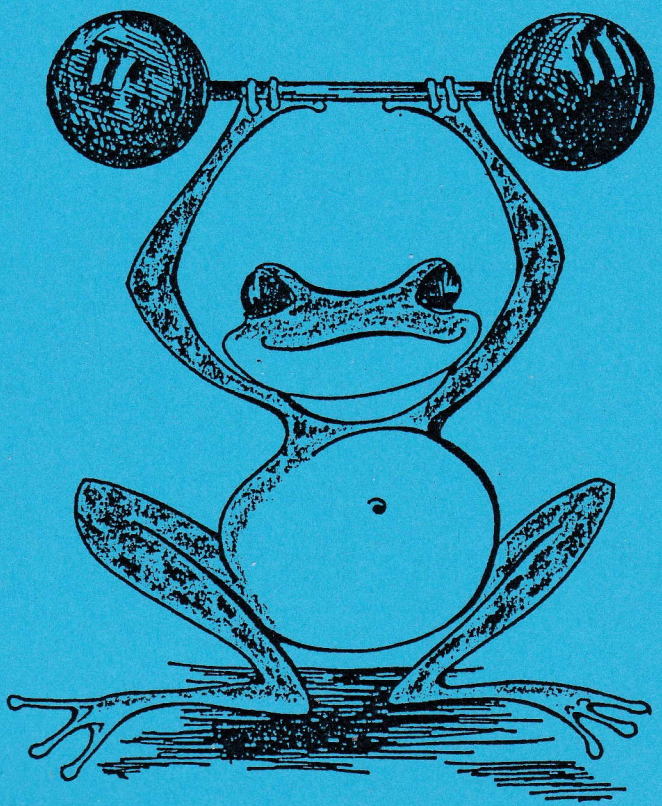
MARECHAL

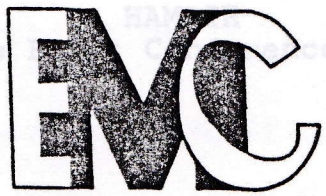
EMC

XIXth European Conference on MUSCLE CONTRACTION AND CELL MOTILITY



September 10th – 13th, 1990

Brussels, Belgium



XIXth European Conference on MUSCLE CONTRACTION AND CELL MOTILITY

September, 10th – 13th, 1990

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Cover design: N. Moens-Lefebvre

XIXth European Conference
on Muscle Contraction and Cell Motility
10 - 13 th September 1990
Brussels Belgium

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Dr M.C. Schaub, Institute of Pharmacology, University of Zürich, Gloriastrasse 32, CH-8006, Zürich, Switzerland
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LOCAL ORGANIZER: G. Maréchal

Secretariat: A. Mollet-Mombaerts.
Physiologie générale, 5540 UCL, Av. Hippocrate 55, 1200, Brussels. Phone: 32-2-764 5528. Fax: 32-2-764 5322. Belgium.

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Sponsorships: Ch. Navez.

This Conference is made possible by the financial support of:

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for which they are most gratefully aknowledged

PROGRAM

Monday 10th september 1990.

9.00 - 14.00: Coming together. Display of Posters.
14.30: Opening of the Conference.

1. New muscle proteins and their possible function
CHAIR: D. Mornet (Montpellier) & G. Offer (Bristol)

LECTURES:

15.00: J. Trinick (Bristol): Structure and function of skeletal vertebrate Titin

15.30: N. Augier (Montpellier): Structure and function of dystrophin

16.00: K. Weber (Goettigen): Twitchin

16.30: Coffee break.

BRIEF LECTURES:

17.00: Ziegler C. & Beinbrech G. (Münster).
Purification and characterization of a 350 kD protein from locust flight muscle.

17.20: Bullard, B. (Heidelberg).
Identification and localization of new proteins in insect flight muscle.

17.40: Michalak, M., Milner, R.E., Fliegel, L., Baksch S. & Opas M., (Toronto).
Calreticulin is the major calcium binding protein in smooth muscle sarcoplasmic reticulum and non-muscle endoplasmic reticulum.

18.00: Damiani, E., Volpe, P. & Margreth, A., (Padova).
Protein composition of junctional sarcoplasmic reticulum of fast and slow muscle.

EVENING: Belgian Beer and Cheese Party (19.00 - 22.00)

Tuesday 11th September 1990.

8.00: POSTER SESSION.

2. Energy flows.

CHAIR: J. Lebacq (Brussels) & K.W. Ranatunga (Bristol)

LECTURES:

9.00: K.W. Ranatunga (Bristol): Temperature and muscle contraction

9.30: G. Cavagna (Milano): Storage and release of mechanical energy during contraction

10.00: J. Henriksson (Stockholm): The use of in vivo dialysis to study skeletal muscle glucose metabolisa

10.30: Coffee Break

BRIEF LECTURES:

11.00: Wondmikun Y. & Asmussen, G. (Leipzig).
The effects of caffeine and temperature on fast- ans slow-twitch muscles of the rat.

11.20: Bottinelli R., Betto R., Danieli-Betto D., Schiaffino S., Reggiani C. (Pavia).
Myosin isoform composition and shortening velocity in skinned fibres of rat skeletal muscles.

11.40: Maréchal G. & Beckers-Bleukx G. (Brussels).
Force-velocity and isomyosins in mouse soleus.

12.00: Medbo J.I. & Tabata I. (Oslo).
Type I and type II muscle fibres work with the same mechanical efficiency during bicycling.

12.20: LUNCH.

13.30: POSTER SESSION.

ROUND TABLES:

Schaub M.C (Zürich): Light chains of striated muscle myosin

Jones D.A. (London): Fatigue and training effects in skeletal muscle

Margreth A. (Padova): Sarcoplasmic reticulum Ca release channels

3. Myogenesis.

CHAIR: U. Carraro (Padova) & D. Parry (Ottawa)

LECTURES:

15.00: E.M. Füchtbauer (Bethesda): Molecular biology of myogenesis

15.30: G. Cossu (Roma): Muscle fibres heterogeneity and myogenic lineages

16.00: A. d'Albis (Orsay): Myosin isoforms regulation during post-natal development of the rat: muscle, hormone & nerve dependence.

16.30: Coffee Break.

BRIEF LECTURES:

16.50: Jarvis J.C., Sutherland H. & Salmons S.
The effect of chronic electrical stimulation on the speed, power output and fatigue resistance of fast twitch skeletal muscle.

17.10: Ausoni S., De Nardi C., Schiaffino S.
Characterization and developmental expression of cardiac troponin I mRNA.

17.30: Parry, D.J., Pilgrim, M. & Georganos, S.
Embryonic myoblast and satellite cell lineages in mouse.

17.50: Düsterhöft S., Yablonka-Reuveni Z. & Pette D.
Myosin expression in satellite cell cultures from fast and slow twitch muscles of the rat.

EVENING: Astoria Concert & Conference Dinner (20.00).

Wednesday 12th September.

8.00: POSTER SESSION.

4. Regeneration and grafting.
CHAIR: E. Schultz (Madison) & T.A. Partridge (London)

LECTURES:

9.00: E. Schultz (Madison): Behaviour of satellite cells in muscle regeneration

9.30: M. Grounds (Nedlands): Peptide growth factors in myogenesis and regeneration

10.00: U. Carraro (Padova): Use of transplanted skeletal muscle in cardiac assistance

10.30: Coffee Break.

BRIEF LECTURES:

11.00: Danieli-Betto, D., Megighian, A. (speaker), Catani, C., Midrio, M. & Carraro U.
Muscle regeneration after chronic lidocaine application in innervated and denervated rat soleus muscle.

11.20: Moens P.D., Partridge, T.A., Morgan, J.E., Beckers-Bleukx, G. & Maréchal, G. (Brussels).
Mechanical and biochemical modifications induced by an inherited myopathy in orthotopic free grafting of mouse soleus muscle.

11.40: Morgan J., Pagel, C. & Partridge T.A. (London).
The in vivo behaviour of implanted myogenic cells within degenerating MDX muscle.

12.00: Soukup, T., Nordlund, A.K., Bednar J. & Thornell L.E. (Praha).
Regenerated intrafusal fibres not innervated by sensory axons do not restore their morphological, histochemical and immunocytochemical characteristics in autotranplanted rat EDL muscle.

12.20: LUNCH

13.30: POSTER SESSION.

ROUND TABLES:

Reggiani C. (Pavia): Contraction and isoforms of contractile proteins

Vial C. (Lyon): Energy metabolism

Rowlerson A. (London): Comparative aspects of muscle proteins

5. Muscle relaxation
CHAIR: M.A. Ferenczi (London) & J.M. Gillis (Brussels)

LECTURES:

15.00: B. Brenner (Ulm): Cross-bridge action: implications for muscle relaxation.

15.30: S. Sys (Antwerpen): Relaxation of the myocardium

16.00: Rall, J. (Columbus): The role of parvalbumin in skeletal muscle relaxation.

16.30: Coffee Break.

BRIEF LECTURES:

16.50: Ferenczi, M. (London).
Cross-bridge detachment and muscle relaxation studied by photolysis of stereoisomers of caged ATP.

17.10: Palmer R.E., Mulligan I.P. & Ashley C.C. (Oxford).
A comparison of the rates of relaxation between frog and scallop muscle fibres upon photolysis of the caged calcium chelator diazo-2.

17.30: Berquin A. & Lebacq, J.
Functions of parvalbumin: old questions revisited.

17.50: Lännergren J. & Westerblad H.
Effects of fatiguing stimulation and CO2 on force and relaxation in isolated mouse muscle fibres.

18.10: Business Meeting.

Thursday 13th September.

8.00: POSTER SESSION.

6. Genetics and structure of myosins and actins

CHAIR: J.J. Léger (Montpellier) & J. Vandekerckhove (Gent)

LECTURES:

9.00: M.F. Morales (San Francisco):
Origin and transmission of force in subfragment-1.

9.30: P. Eldin (Montpellier):
Actin-myosin interfaces studied by genetic engineered myosin heavy chain fragments.

10.00: W. Kabsch (Heidelberg):
3-D structure of actin.

10.30: Coffee Break.

BRIEF LECTURES:

11.00: Boey W., Everett A.W., Kendrick-Jones J., dos Remedios C.G. (Sidney).
Role of myosin light chains in actomyosin interaction.

11.20: Sri Widada J., Ferraz C., Bartegi A., Fattoum A., Heitz F., Kassab R. & Liautard J-P. (Montpellier).
The mechanism of ATPase regulation by tropomyosin as revealead by directed mutagenesis.

11.40: Hennessey E., Drummond D. & Sparrow J. (York).
Using protein engineering to study actin function.

12.00: Huber P.A.J. & Schaub, M.C. (Zürich).
Formation of an intrachain disulfide bridge in the regulatory light chain dissociates it from the heavy chain of skeletal muscle myosin.

12.20: Conclusion of the Conference.

12.30: LUNCH

13.30: POSTER SESSION.

ROUND TABLES:

Goldspink G. (London): Gene switching during growth and development of muscle

Eppenberger H. (Zürich): Myocytes and cardiomyocytes in cultures as models for differentiation

Spurway N.C. (Glasgow): Ions and smooth muscle force

17.30: Removal of Posters.

PAPER in CONFERENCE BOOK.

The conference will publish a book printed by INTERCEPT with papers presented by delegates. Here follow the necessary instructions.

1.- The manuscript must be ready for publication: no changes can be made once it has been mailed to the local organizer. It is the responsibility of the author to ensure that the typescript is correct in style, syntax and spelling. The paper will be 3 to 6 printed pages in length. This corresponds to 3 to 6 A4 pages for text and 1 or 2 pages for Tables and Figures.

2.- The text must be typed double spaced throughout on one side of A4 paper with a 3 cm left-hand margin: title in uppercase; initial of first name and last name of authors; affiliation and address; introduction; methods; results; discussion; aknowledgements; references; tables; figures captions.

3.- References are sorted by alphabetical order of first author and referred to in the text by their order #. Give in order:
Order #, authors name and initial of first names, year, journal, volume, first and last page. Example:
1. Smart, S.G., Woods, F.G., 1990, Eur. J. Physiol., 98, 456-463.

4.- Use 1 or 2 pages for Figures and Tables. You may increase the number of Tables and Figures, but then you must reduce the text accordingly. Illustrations should be numbered and referred to in text and caption as Fig.1, Fig.2, etc. Line drawings are normally reduced by 50%; photographs must be grouped into plates with narrow gutters (1-2mm) between figures, dry-mounted on light weight white card with protective overlays: they will normally be reproduced without reduction. The maximum display area is 115 x 170 mm. Tables should be numbered and headed with short titles. Figures and Tables will be inserted in the section Results, unless the authors specify another location.

5.- Mail two paper copies of the manuscript, with handwritten editing comments (if necessary) and one diskette copy, labeling the manuscript file by name of first author and the graphic files with their identifying format. Mark the name of main author and the type of word and graphic processors used on the paper label of the diskette. If you have not used a computer to write your paper, then mail a third manuscript free of any editor's/author's corrections, taking care that there is no handwriting on it: this manuscript will be read by the computer of the printer. Mail your manuscript as soon as possible. The ultimate deadline is the last day of the Conference, 13 th september 1990. Papers will be examined by order of arrival and the first 80 papers accepted will be published. Papers received afterwards will also be examined, but their publication will depend on negotiations with the Publisher.

6.- Proofs will be checked by the editor; however it may be necessary to consult the author, who must be prepared to respond to faxes within 2 working days between 20 september and 30 december 1990. Photos (Black and White only; 600 B.Fr./photo) will be charged to the authors separately. Orders for offprints will be mailed to authors separately.

7.- The Conference book will be ready by January 1990. You will receive by mail the number of books which you have ordered. Its pre-publication price is 1800.- FB, offered until the last day of the Conference, 13 th september 1990.

FILM, DEMONSTRATIONS and BOOKS.

Colleagues who want to project films, present demonstrations or sell books which they have written or edited are invited to mail their proposals to the local organizer.

DISCUSSIONS.

Colleagues who want to participate in the Discussions following the lectures or in the Round Tables are invited to get in touch with the relevant chairman.

LIST OF ABSTRACTS BY TOPICS (posters)

A. Myogenesis

A1 Lexell J., Taylor C.C. & Downham D.Y.
Growth, development and aging of human muscle : studies of whole muscle cross-sections.

A2 Mascarello F. & Rowlerson A.
Development of muscle fibres in a "pure" fast-twitch muscle.

A3 Stoiber W. & Sänger A.M.
Early differentiation of muscle fibre types in cyprinids

A4 Eppenberger-Eberhardt M.E., Messerli M., Riesinger I., Schwarb P., Wallimann T. & Eppenberger H.M.
Two populations of mitochondria expressing mitochondrial creatine kinase are found in cultured adult rat cardiomyocytes.

A5 Orlov V.S.
Mechanism of cell fusion in myogenesis of skeletal muscle by means of intercellular pinocytosis

A6 Parry D.J., Pilgrim M. & Georganos S.
Embryonic myoblast and satellite cell lineages in mouse.

A7 Koumans J.T.M., Akster H.A., Booms G.H.R., Lemmens C.J.J. & Osse J.W.M.
Myosatellite cells in white axial muscle of growing fish.

A8 Grounds M.D. & McGeachie J.K.
Comparison of muscle precursor cell (MPC) replication in regenerating muscle isografts and crush injured muscle

A9 Morgan J., Pagel C. & Partridge T.
The in vivo behaviour of implanted myogenic cells within degenerating MDX muscles

A10 Brocks L., Jap P.H.K., Ramaekers F.C.S. & Stadhouders A.M.
Cytoskeletal IFP expression during postnatal development of dystrophic mouse muscle using confocal scanning laser microscopy (CSLM).

A11 Round J.M., Sewry C.A. & Jones D.A.
Regeneration in normal and dystrophic human muscle.

A12 Moens P.D., Partridge T.A., Morgan J.E., Beckers-Bleukx G. & Maréchal G.
Mechanical and biochemical modifications induced by an inherited myopathy in orthotopic free grafting of mouse soleus muscle.

A13 Takagi M., Nakamura T., Tsuzuki N. & Kohama K.
Changes in the muscle fiber types of rat skeletal muscles during growth as examined by anti-neurofilament antibody and myosin ATPase reactions.

A14 Düsterhöft S., Yablonka-Reuveni Z. & Pette D.
Myosin expression in satellite cell cultures from fast and slow twitch muscles of the rat.

A15 Wessels A., Soffers C.A.S., Bredman J.J. & Moorman A.F.M.
Expression of a "cardiac-specific" myosin hevay chain in intrafusal fibres of the developing human muscle spindle.

A16 Navez, M. & Colson-Van Schoor M.
Post-natal isomyosins in masticatory muscles of growing rats

A17 Soussi-Yanicostas N., Barbet J.P., Laurent-Winter C., Barton P., Butler-Browne G.S.
Transition of myosin isozymes during development of human masseter muscle. Persistence of developmental isoforms during postnatal stage.

A18 Kunze I., Gaunitz U. & Asmussen G.
Developmental changes in the water and fat content of shank- and chew- muscles of the rat.

A19 Martinez I., Ofstad R. & Olsen R.L.
Developmental transitions of myosin heavy chains in the skeletal muscle of the teleost, Salvelinus alpinus alpinus

A20 Williams K., Zak R. & Dhoot G.
The distribution of slow skeletal and cardiac muscle type myosin heavy chains in embryonic chicken skeletal muscle

A21 Hasselbaink H., Labruyère W., Moorman A. & Lamers W.
Creatine kinase isozyme expression in prenatal rat heart.

A22 Ausoni S., De Nardi C., Schiaffino S.
Characterization and developmental expression of cardiac troponin I mRNA

A23 van Kempen M.J.A., Gros D., Moorman A.F.M. & Lamers W.H.,
Distribution of the gap-junction protein, connexin 43 in the adult and developing rat heart.

A24 Parys J.B., De Smedt H., Himpens B., Missiaen L. & Borghraef R.
Mechanisms of calcium mobilization during differentiation of BC3H1 myoblasts.

A25 Lamers W.H., Wessels A. & Moorman A.F.M.
Neural tissue antigens that reveal tissue remodelling during cardiac septation.

A26 Coulic, V.
Influence of small bowel transplantation on structure and function of its muscular layer.

B. Factors controlling muscle differenciation and long-term regulation

B1 Dahl H.A. & Roald L.
How unequivocal is the muscle fibre type concept ?

B2 Hatfaludy S., Apor P., Shansky J. & Vandenburgh H.H.
Metabolic adaptations of skeletal muscle in elite athletes and in vitro skeletal muscle cells

B3 Pousson M. & Goubel F.
Effect of two kinds of training on elastic properties of rat soleus muscle.

B4 Sanger A.M., Lackner R.
Training effects of the fine structure of fish axial muscle

B5 Fikkan T. & Dahl H.A.
Training-induced fibre type transformation in human m. triceps brachii.

B6 Loughna P. & Morgan M.J.
Contractile protein gene expression in muscle undergoing hypertrophy and atrophy.

B7 Lu D.-X. & Müntener M.
Ipsi-and contralateral effects after surgical overloading of self- and foreign-reinnervated muscles.

B8 Stevens L. & Mounier Y.
Biochemical and contractile properties of rat muscle proteins after spaceflight

B9 Asmussen G. & Soukup T.
Suspension hypokinesia performed in young growing rats results in retardation of differentiation of the adult histochemical pattern in the soleus muscle

B10 Vogtman M. & Asmussen G.
Recovery of mechanical properties of the soleus muscle after suspension hypokinesia of young rats

B11 Goldspink G., Scutt A., Gerlach G.F., Dhoot G.K., Turay L., Jaenicke Th. & Bicik V.
Mammalian muscle fibres express slow and repress fast myosin genes in response to active and/or passive tension

B12 Jaenicke Th., Martindale J., Loughna P.T., Chang K.C., Williams P. & Goldspink G.
Mechanical signals involved in the expression of the slow type genes and the determination of muscle fibre-phenotype in the mammalian soleus

B13 Sohar I., Rohan J. & Guba F.
Effect of fiber size on proteinase activity in the stretched skeletal muscles.

B14 Ortner Ch. & Sänger A.
Histochemical, ultrastructural and morphometrical analysis of rat soleus muscle.

B15 Jarvis J.C., Sutherland H. & Salmons S.
The effect of chronic electrical stimulation on the speed, power output and fatigue resistance of fast twitch skeletal muscle.

B16 Szczepanowska J., Borovikov Yu S. & Jakubiec-Puka A.
Influence of innervation on the acto-myosin interaction.

B17 Dhoot G.K. & Vrbova G.
Conversion of cat and rabbit soleus muscle fibres by alien nerves

B18 Soukup T., Nordlund A.K., Bednar J. & Thornell L.E.
Regenerated intrafusal fibres not innervated by sensory axons do not restore their morphological, histochemical and immunocytochemical characteristics in autotransplanted rat EDL muscle

B19 Danieli-Betto D., Megighian A., Catani C., Midrio M. & Carraro U.
Muscle regeneration after chronic lidocaine application in innervated and denervated rat soleus muscle.

B20 Rosenblatt J.D.
Increase in the relative number of fibres exhibiting a slow phenotype in rat extensor digitorum longus muscle following bupivacaine injection.

B21 Romanenko, A.V.
A new way of muscle activity regulation: thiamine participation in neuromuscular transmission.

B22 Parr T., Bardsley R.G., Buttery P.J.
Changes in calpain proteinase mRNA associated with muscle growth stimulated via *-adrenergic receptors

B23 Morano, I.
Variability of cardiac and smooth muscle myosin heavy chain (SM-MHC) isoenzyme expression

B24 Yüksel D. & Maréchal G.
Post-natal changes of myosin heavy chains in rat uterus.

B25 Scapolo P.A., Vegetti A. & Mascarello F.
Mandibular muscles of some birds: a histochemical and immunochemical study.

B26 Morano I., Adler K., Agostini B., Mommaerts W.F.H.M. & Ruegg J.C.
Cardiac myosin during hibernation: different expression of isoenzymes as a strategy to survive at low temperature

B27 Adler K., Morano I., Ganten U., Ganten D. & Ruegg J.C.
Effects of cold adaptation on the expression of cardiac myosin heavy chain isoenzymes (MHC) of normotensive (WKY) and sponaneously hypertensive rats (SHRSP)

B28 Lucas M., Keller A., Goblet C., Lamande N. & Lazar M.
Regulation of the expression of the gene encoding the striated muscle-specific BB isoform of enolase.

B29 Li Z., Lilienbaum A., Butler-Browne G. & Paulin D.
The structure and regulation of expression of the human desmin gene.

B30 Cossu G., De Angelis L., Cusella-De Angelis M.G. & Molinaro M.
A role for neuropeptides in the proliferation of different classes of myogenic cells during muscle histogenesis.

C. Cardiac assistance; cardiovascular dysfunction

C1 Focant B., Radermecker M. & Huriaux F.
Cardiomyoplasty: Evolution of myosin and LDH isoforms in the chronically stimulated latissimus dorsi flap of goat

C2 O'Brien G., Cumming D.V.E., Williamson H.A., Pattison C.W. & Yacoub M.H.
Analysis of gene expression (at protein and RNA level) in skeletal muscle used for cardiac assistance

C3 Scelsi R., Poggi P. & Azan G.
Morphometric Analysis of Human Latissimus Dorsi Muscle in Middle Aged Subjects. An Autopsy Study.

C4 Milting H., Jockusch H., Thies W.-R., Meyer H., Breymann T., Körfer R., Léger J. & Léger J.J.
Myosin heavy chain isoforms in overloaded and non-overloaded atria of neonates and infants.

C5 Brand T., Münkel B., Sharma H.S., Bleese N., Schaper W. & Schaper J.
In situ hybridization study of myosin heavy chain expression in human heart failure

C6 Yeoh T., dos Remedios C.G., Chang V. & Gunning P.
Heterogeneous changes in contractile protein gene expression in human cardiomyopathy

C7 Gabrielescu E., Ciobanu A., Butur G., Nicolau N. & Nutu O.
Proteolytic events in myocardial hypoxia

C8 Jennische E., Isgaard J., Wahlander H. & Friberg P.
Expression of insulin-like growth factor I in rat heart muscle during development of hypertension

C9 Szabó J., Mohácsi A., Fülöp I., Leövey A., Kónya L. & Kövér A.
Studies on the role of Na/Ca exchange in thyrotoxic cardiomyopathy by analyzing calcium compartmentalization in Langendorff-perfused rat hearts.

C10 Fülöp I., Juhász A., Kurta Gy., Kövér A. & Kónya L.
Effect of K+-depolarization, phenylephrine, isoproterenol and noradrenaline on 45Ca compartmentalization in aortas of spontaneously hypertensive rats

C11 Juhász A., Kónya L., Fülöp I., Kurta G. & Kövér A.
Effect of EDRF on 45Ca-compartmentalization in aortas of spontaneously hypertensive rats

C12 Kurta G., Seres I., Juhász A., Fóris G., Kárpáti I. & Lustyik Gy.
Electrolyte concentration in granulocytes of hypertensive patients

C13 Mohácsi A., Csabina S., Csongor J., Kozlovszky B., Kónya L. & Kövér A.
Studies on the lack of stretch-release induced contraction in atherosclerotic human femoral arteries

D. Short-term regulation of muscular function

D1 Hauck R. & Achazi R.K.
The phosphorylation of proteins of a "skinned" molluscan smooth muscle during a contraction-catch-relaxation-cycle

D2 Hellwig G. & Achazi R.K.
ACh and 5-Ht induced accumulation of inositol 1,4,5-triphosphate (INSP3) and inositol 1,4-diphosphate (INSP2) in a catch muscle

D3 Polyák E., Kónya L., Csabina S., Csongor J., Fülöp I., Kövér A., Bíró T. & Tamás G.
Studies on the mechanism of action of uterotonic drugs.

D4 Schot R. & van Mastrigt, R.
Isolation and pharmacological stimulation of smooth muscle cells from pig urinary bladder

D5 van Koeveringe G.A. & van Mastrigt R.
Excitatory pathways and time constants in smooth muscle contraction

D6 Chirvasie R., Mocanu M., Dragomir C.T.
The aortic factors modifying the vascular smooth fibres contractility

D7 Spurway N. & Godfrey R.
Relaxation of vascular smooth muscle by organic bases applied at neutral pH

D8 Csabina S., Csongor J., Kónya L. & Kövér A.
Role of Ca2+ ions in the development and maintenance of stretch-release-induced tension in arterial smooth muscle.

D9 Declerck I., Missiaen L., De Smedt H., Droogmans G. & Casteels R.
Characterization of non-mitochondrial calcium pools in pig aorta. Evidence for the existence of two functionally different InsP3-sensitive Ca-stores.

D10 Missiaen L., Declerck I., De Smedt H., Droogmans G. & Casteels R.
Ca- and Mn-entry dependent on the state of filling of the IP3-sensitive Ca store of A7r5 aortic smooth-muscle cells.

D11 Clement O., Puceat M., Walsh M., Landgraf W. & Vassort G.
Protein kinases change Ca sensitivity of cardiac myofilaments in skinned single rat cells.

D12 Laijendekker W. & Herzig J.
Ca regulation of the rate of cross-bridge cycling in relation to the Ca sensitivity of myocardial force.

D13 Veksler V.I. & Orekhova I.V.
Phenylephrine and lithium modulate calcium sensitivity of saponin-skinned rat ventricular fibers

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