Editors-in-Chief
H.-W. Denker, Essen A.W. English, Atlanta, Ga.
Editorial Board
J.D. Aplin, Manchester
G. Aumüller, Marburg
R. Balling, Oberschleißheim
F. Beck, Melbourne
A.A. Biewener, Chicago, 111.
F. Bojesen-Möller, Copenhagen
B. Christ, Freiburg i.Br.
G.R. Cunha, San Francisco, Calif.
P. Ekblom, Uppsala
A.C. Enders, Davis, Calif.
M.W.J. Ferguson, Manchester
M. Frotscher, Freiburg i.Br.
P. Groscurth, Zurich
B.K. Hall, Halifax
J.W. Hermanson, Ithaca, N.Y.
S.W. Herring, Seattle, Wash. A. Jacobson, Austin, Tex. P. Kaufmann, Aachen P. Köpf-Maier,
D. Newgreen, Melbourne
O. Ohtani, Toyama
R. Putz, Munich R. Roy, Los Angeles, Calif. D.W. Scheuermann, Antwerpen J. Trotter,
Albuquerque, N. Mex.
E. van der Zypen, Berne
KAHGER
S. Karger
Medical and Scientific Publishers Basel · Freiburg · Paris · London New York · New Delhi ·
Bangkok Singapore · Tokyo · Sydney
Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage
set forth in this text are in accord with current recommendations and practice at the time of
publication. However, in view of ongoing research, changes in government regulations, and the
constant flow of information relating to drug therapy and drug reactions, the reader is urged to
check the package insert for each drug for any change in indications and dosage and for added
warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.

No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see 'Information for Readers and Subscribers').

© Copyright 1996 by S. Karger AG, P.O. Box, CH-4009 Basel (Switzerland) Printed in Switzerland on acid-free paper by Reinhardt Druck Basel

Contents Vol. 154,1995
No.1
No. 2

Epithelial-Mesenchymal Transitions. Part I Guest Editor: D. Newgreen, Melbourne

Editor’s Note  5

Preface 7

An Overview of Epithelio-Mesenchymal Transformation  8

Hay, E.D.

Cell-Cell Adhesion Molecules in Epithelial-Mesenchymal  21

Transformations

Prieto, A.L.; Crossin, K.L.

Recent Insights into Ligand Binding, Activation and Signalling 34 by Integrin Adhesion

Receptors Garratt, A.N.; Humphries, M.J.

Molecular Interactions in the Submembrane Plaque of Cell- 46

Cell and Cell-Matrix Adhesions

Geiger, B.; Yehuda-Levenberg, S.; Bershadsky, A.D.

Epithelium-Mesenchyme Transition during Neural Crest  63

Development

Duband, J.L.; Monier, F.; Delannet, M.; Newgreen, D.

Epithelio-Mesenchymal Transformation during Formation of 79 the Mesoderm in the

Mammalian Embryo Viebahn, C.

Announcement  97

Author Index  98

Subject Index  98

Original Paper

Morphology of Incipient Mesoderm Formation in the Rabbit 99

Embryo: A Light- and Retrospective Electron-Microscopic

Study

Viebahn, C; Mayer, B.; Miething, A.

A Subset of SBA Lectin-Binding Proteins Isolated from Myo- 111 cardial-Conditioned Media

Transforms Cardiac Endothelium into Mesenchyme Sinning, A.R.; Hewitt, C.C; Markwald, R.R.

Immunofluorescent Analysis of the Spinal Cord in Dysraphic 120

Mice

Wilson, D.B.; Wyatt, D.P.

An Anatomical and Embryological Study of the Clavicle in 128
Cats (Felis domesticus) and Sheep (Ovis aries) during the Prenatal Period Rojas, M.A.; Montenegro, M.A.

Stereological Analysis of the Urethra in Sexually Intact and Spayed Female Dogs Augsburger, H.R.; Cruz-Orive, L.M.

Electron-Microscopic Study of Gamma-Aminobutyric Acid Immunoreactivity in the Chief Cells of the Mouse Carotid Body Oomori, Y.; Ishikawa, K.; Satoh, Y.; Ono, K.

Adaptations of Diaphragm Neuromuscular Junction following Inactivity Prakash, Y.S.; Zhan, W.Z.; Miyata, H.; Sieck, GC.

Locational Relationship of the Supraorbital Notch or Foramen and Infraorbital and Mental Foramina in Koreans Chung, M.S.; Kim, H.J.; Kang, H.S.; Chung, I.H.

Editorial

One Hundred Years of Anatomical Terminology O’Rahilly, R.

No. 3

Original Paper

In vitro Chick Pre-Cardiac Explant Tissue Differentiation during Spaceflight on SpaceHab-02 van Twest, J.S.; Paulsen, A.; Spooner, B.S.

Micromorphometric Characteristics of Osteons in Compact Bone of Growing Tibiae of Human Fetuses Baltadjiev, G.

Abnormal Spermatozoa in the Cauda epididymidis of Adult and Aged Hamsters (Mesocricetus auratus): A Study by Electron Microscopy Calvo, A.; Pastor, L.M.; Gallego-Huidobro, J.; Horn, R.; Pallares, J.

A Scanning Electron-Microscopic Analysis of the Morphology of Equine Lower Lip Sinus Hair von Rotz, A.; Friess, A.E.

Use of a Bite-Opening Appliance in the Miniature Pig: Modification of Craniofacial Growth Ferrari, C.S.; Herring, S.W.

Fiber Type Composition of Morphologic Regions in the Macaque Multitendoned Finger Muscles Maurer, J.J.; Singer, M.A.; Schieber, M.H.

Three-Dimensional Structure of the Sarcoplasmic Reticulum at the Neuromuscular Junctions of the Rat Diaphragm Segretain, D.

Presence of Calmodulin and NADPH-Diaphorase Activity but not of Neuronal Nitric Oxide Synthase in the Subcommissural Organ of the Mongolian Gerbil Krstic, R.; Nicolas, D.

Biphalangeal and Triphalangeal Toes in the Evolution of the Human Foot Le Minor, J.M.

Original Paper


Stereology of the Myocardium in Embryos, Fetuses and Neonates of the Rat Mandarim-de-Lacerda, C.A.; Gomes Pessanha, M.

Gap Junctions between Mast Cells and Fibroblasts in the
Developing Avian Eye
Oliani, S.M.; Girol, A.R.; Smith, R.L.
Distribution Patterns of Neoglycoprotein-Binding Sites 272
(Endogenous Lectins) and Lectin-Reactive Glycoconjugates during Cartilage and Bone
Formation in Human Finger Zschäbitz, A.; Gabius, H.-J.; Krahn, V.; Michiels, I.; Schmidt, W.;
Koepp, H.; Stofft, E.
The Microanatomy, Cell Replication, and Keratin Gene 283
Expression of Hair Follicles During a Photoperiod-Induced Growth Cycle in Sheep Parry, A.L.;
Nixon, A.J.; Craven, A.J.; Pearson, AJ.
Glial-Schwann Cell Specialisations at the Central-Peripheral 300 Nervous System Transition of a
Cyclostome: An Ultrastructural Study Fraher, J.; Cheong, E.
Author Index 315
Subject Index 316
IV
Contents