

Table of Contents

Opening Address.....	IX
Workshop I	
<u>Lipoproteins and Lipoprotein Receptors</u>	1
LDL Receptor Mutations in Patients with Familial Hypercholesterolemia M.A. Lehrman, H.H. Hobbs, M.S. Brown, J.L. Goldstein, D.W. Russel.....	2
Lipoprotein Receptors and Their Ligands: Structure and Function of Apoproteins E and B R.W. Mahley.....	5
The Role of HDL in Cholesterol Homeostasis of Macrophages and Reversed Cholesterol Transport G. Schmitz, H. Robenek.....	8
Lipoproteins, Macrophages and Atherosclerosis D. Steinberg.....	10
Arterial Lipoprotein Metabolism: Site-Specific Differences Related to Susceptibility to Atherosclerotic Lesions T.E. Carew, D.C. Schwenke.....	13
Lipoprotein Disposition by the Liver: A Concerted Action of Various Cell Types T.J.C. van Berkel, L. Harkes, J. F. Nagelkerke, J.K. Kruijt.....	17
The Macrophage and Endothelial Cell Scavenger Receptor D.P. Via, A. Fanslow, W.E. Koff, H.A. Dresel.....	19
Characterization of the Hepatic Scavenger Receptor H.A. Dresel, E. Friedrich, H.J. Sinn, G. Schettler, D.P. Via.....	22
Workshop II	
<u>Growth Factors</u>	25
The Role of PDGF in Health and Disease R. Ross.....	26
Role of PDGF-like Growth Factors in Autocrine Stimulation of Cell Growth C.-H. Heldin.....	30
The PDGF Receptor as a Mediator of Mitogenesis L.T. Williams, J.A. Escobedo, M.T. Keating, T.O. Daniel, S.R. Coughlin..	32

Alpha- and Beta-Heparin Binding Growth Factors: Chemistry and Biology of Acidic and Basic Fibroblast Growth Factors	
A. Baird, P. Cuevas, N. Ueno, F. Esch, N. Ling.....	36
Structure, Homologies and Activities of Acidic Fibroblast Growth Factor	
K.A. Thomas, G. Gimenez-Gallego, J. DiSalvo, D. Linemeyer, L. Kelly, J. Menke.....	41
Endothelial Cell Growth Factor and its Receptor	
T. Maciag, W.H. Burgess.....	44
Workshop III	
<u>Endocytosis and Exocytosis</u>	47
Intracellular Transport of Human Class I Antigens and an Adenoviral Glycoprotein	
P.A. Peterson, M. Andersson, I. Martens, S. Pääbo, L. Severinsson.....	48
Molecular Mechanisms of Endocytic Sorting	
I. Mellman, S. Schmid, R. Fuchs, M. Marsh, V. Lewis, T. Koch, S. Green, H. Plutner, A. Helenius.....	51
Characterisation of a Fusion Event from the Endocytic Pathway	
J. Davey, G. Warren.....	56
Membrane Boundaries Involved in the Selective Trafficking of Cell Surface Receptors	
C.R. Hopkins.....	59
The Molecular Basis of Human Cellular Iron Metabolism	
R.D. Klausner, J.B. Harford.....	61
Workshop IV	
<u>ONC Genes and Proliferative Disease</u>	65
Molecular Features Involved in Cell Surface Receptor Function and Their Role in Oncogenesis	
H. Riedel, Y. Yarden, A. Gray, L. Coussens, T. Dull, J. Schlessinger, A. Ullrich.....	66
Transforming Activity of the <i>fms</i> Oncogene (CSF-1 Receptor)	
C.J. Sherr, M.F. Roussel, E.F. Wheeler, C.W. Rettenmier.....	69
Functional and Structural Analysis of the <i>v-src</i> and <i>c-src</i> Genes	
H. Hanafusa.....	71
Ras Oncogenes and Cell Transformation	
C.J. Marshall.....	73
Cis Regulatory Control of <i>mos</i> Oncogene Expression	
M.L. McGeady, T.G. Wood, D.G. Blair, A. Seth, F. Propst, M. Oskarsson, M. Schmidt, G. Vande Woude.....	76
Analysis of the Function of the <i>fos</i> Oncogene Product	
R. Müller, T. Jenuwein, M. Renz.....	81

Cooperative Interactions Involving Cellular and Viral Oncogenes in the Development of Malignant Tumors	
E. Mougneau, C. Cerni, F. Cuzin.....	84
Workshop V	
<u>White Blood Cells</u>	85
The Motor of Leukocytes and Platelets: 1986	
T.P. Stossel, J.H. Hartwig, P.A. Janmey, H.L. Yin, K.S. Zaner.....	86
Heterogeneity of Murine and Human Fc_γ Receptors	
J.C. Unkeless.....	88
Complement Receptors	
D.T. Fearon	91
Cachectin: A Macrophage Protein that Induces a Catabolic State in Infected Animals	
A. Cerami.....	94
The Role of Cytosolic Free Calcium, (Ca²⁺)_i, and Phosphoinositides as Intracellular Signals	
P.D. Lew.....	95
The Macrophage-Blood Interface: Cell Localisation and Recruitment in Bone Marrow, Liver and Brain	
S. Gordon, P.R. Crocker, L. Morris, H.V. Perry.....	97
Normal and Neoplastic Early Lymphocyte Maturation	
I. Weissman, C. Muller, G. Tidmarsh, C. Okada, C. Whitlock.....	101
Molecular Regulation of Complement Gene Expression	
H.R. Colten.....	102
Workshop VI	
<u>Prostaglandins and Leukotrienes</u>	105
The Role of GTP-Binding Proteins in Coupling Prostaglandin and Leukotriene Receptors to Intracellular Second Messenger Systems	
P. Gierschik, K.H. Jakobs.....	106
Regulation of Vascular Tone by Prostaglandins and Endothelium-Derived Relaxing Factor	
U. Förstermann.....	110
Endogenous Cysteinyl Leukotrienes as Mediators in Endotoxin Shock and Tissue Trauma	
D. Keppler, W. Hagmann, C. Denzlinger, S. Rapp, M. Huber, A. Guhlmann, S. Kästner.....	115
Source and Mechanism of Release of Arachidonic Acid in Blood Platelets	
J.B. Smith.....	117
Eicosanoids and the Pulmonary Circulation	
W. Seeger, N. Suttorp, H. Neuhof.....	119

Regulation of the Production (Leukotriene A₄ Hydrolase) and the Action (Leukotriene B₄ Receptor Sites) of Leukotriene B₄ A.W. Ford-Hutchinson.....	123
Enzymic Synthesis and Degradation of Prostaglandin D₂ O. Hayaishi, Y. Urade, K. Watanabe.....	126
Receptor-Dependent Regulation of Human Polymorphonuclear Leukocyte Responses to Leukotrienes C.H. Koo, L. Baud, T. Marotti, M. Cheung, J.P. Harvey, E.J. Goetzl.....	129
Leukotriene C₄-Binding Proteins K.F. Austen.....	132
Leukotriene C Metabolizing Enzymes L. Örnning, K. Bernström, M. Söderström, B. Mannervik, S. Hammarström.....	134
Workshop VII <u>Biology of Smooth Muscle and Endothelium</u>	139
The Fibrinolytic System of Cultured Bovine Aortic Endothelial Cells D.J. Loskutoff.....	140
Tumor Necrosis Factor/Cachectin and the Modulation of Endothelial Cell Coagulant Properties D.M. Stern, P.P. Nawroth.....	145
Membrane Glycoproteins of Endothelial Cells and Platelets J.A. van Mourik, J.C. Giltay, O.C. Leeksa, J. Zandbergen-Spaargaren..	148
The Molecular Biology of Endothelial Cell von Willebrand Factor D.C. Lynch.....	151
Induction and Regulation of Endothelial Gene Expression T. Collins, J.S. Pober.....	155
Endothelium-Vascular Smooth Muscle Interactions in Culture R.W. Alexander, J. Leopold, K. Griendling, P. Ganz.....	159
Endothelial Morphogenesis S.M. Schwartz, R.L. Heimark.....	163
Closing Remarks S.C. Silverstein.....	166
Final Word G. Schettler.....	167
List of Participants	168
List of Sponsors	169