

Methods in Enzymology

Volume 187

ARACHIDONATE RELATED LIPID MEDIATORS

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*Arachidonate Related
Lipid Mediators*

EDITED BY

Robert C. Murphy

DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER
DENVER, COLORADO

Frank A. Fitzpatrick

DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF COLORADO HEALTH SCIENCES CENTER
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Contributors to Volume 187

Article numbers are in parentheses following the names of contributors.
Affiliations listed are current.

- NADER G. ABRAHAM (42), *Department of Medicine, New York Medical College, Valhalla, New York 10595*
- DAVID AHARONY (46), *Department of Pharmacology, ICI Pharmaceuticals Group, Wilmington, Delaware 19897*
- CATHERINE ANTOINE (10), *Section de Pharmacologie et d'Immunologie, Commissariat à l'Energie Atomique, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- GREGORY A. BALA (25), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- J. P. BEAUCOURT (8), *Service des Molécules Marquées, Département de Biologie, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- CHRISTOPHER W. BENJAMIN (58), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- DONELLE M. BENSON (57), *Department of Medicine, Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah, Salt Lake City, Utah 84112*
- JACQUES BENVENISTE (14), *INSERM U 200, 92140 Clamart, France*
- MICHAEL J. BIENKOWSKI (58), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- IAN A. BLAIR (2), *Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- JOHN E. BLEASDALE (25), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- PIERRE BORGEAT (1, 12), *Centre de Recherche du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- MARIE-JEANNE BOSSANT (14), *INSERM U 200, 92140 Clamart, France*
- SYLVAIN BOURGOIN (12), *Centre de Recherches du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- P. BRAQUET (48), *Institut Henri Beaufour, F-92350 Le Plessis-Robinson, France*
- ALAN R. BRASH (22), *Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- JORGE CAPDEVILA (40, 43), *Division of Nephrology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- MAIREAD A. CARROLL (41), *Department of Pharmacology, New York Medical College, Valhalla, New York 10595*
- JORGE CASALS-STENZEL (50), *Department of Pharmacology, Boehringer Ingelheim KG, D-6507 Ingelheim am Rhein, Federal Republic of Germany*
- FRANCESCA CATELLA (5), *Division of Clinical Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- P. E. CHABRIER (48), *Department of Biochemical Pharmacology, Institut Henri Beaufour, F-92350 Le Plessis-Robinson, France*
- SHIN-WEN CHANG (65), *Pulmonary Section, Northwestern University Medical School, Chicago, Illinois 60611*
- YING-NAN PAN CHEN (52), *Center for Biochemical and Biophysical Sciences and Medicine, Harvard Medical School, Boston, Massachusetts 02115*
- FLOYD H. CHILTON (19), *Department of Medicine, The Johns Hopkins University, Baltimore, Maryland 21224*

- GIOVANNI CIABATTONI (4), *Department of Pharmacology, Catholic University School of Medicine, 00168 Rome, Italy*
- KEITH L. CLAY (16), *National Jewish Center for Immunology and Respiratory Medicine, Denver, Colorado 80206*
- WENDY CONRAD-KESSEL (21), *Department of Pathology, Division of Laboratory Medicine, Washington University School of Medicine, St. Louis, Missouri 63110*
- E. J. COREY (1), *Department of Chemistry, Harvard University, Cambridge, Massachusetts 02138*
- JEFFREY W. COX (7), *Department of Pharmacological Sciences, Genentech Inc., South San Francisco, California 94080*
- M. T. CRIVELLARI (67), *Institute of Pharmacological Sciences, University of Milan, 20133 Milan, Italy*
- CLEMENS A. DAHINDEN (62), *Institute of Clinical Immunology, Inselspital University Hospital, CH-3010 Bern, Switzerland*
- DANIÈLE DELAUTIER (14), *INSERM U 200, 92140 Clamart, France*
- DAVID L. DEWITT (51), *Department of Biochemistry, Michigan State University, East Lansing, Michigan 48824*
- ELIZABETH DISHMAN (43), *Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee 37232*
- M. T. DOMINGO (48), *Department of Biochemical Pharmacology, Institut Henri Beaufour, F-92350 Le Plessis-Robinson, France*
- ELIZABETH D. DRUGGE (41), *Department of Pharmacology, New York Medical College, Valhalla, New York 10595*
- CATHERINE E. DUNN (41), *Department of Pharmacology, New York Medical College, Valhalla, New York 10595*
- MICHAEL J. DUNN (59), *Department of Medicine and Physiology and Biophysics, Case Western Reserve University, Cleveland, Ohio 44106*
- THOMAS D. ELLER (7), *Department of Pharmacology, Medical University of South Carolina, Charleston, South Carolina 29425*
- J. R. FALCK (40, 43), *Departments of Molecular Genetics and Pharmacology, University of Texas Southwestern Medical Center, Dallas, Texas 75235*
- STEVEN J. FEINMARK (61), *Department of Pharmacology, Columbia University College of Physicians and Surgeons, New York, New York 10032*
- GARRET A. FITZGERALD (5), *Division of Clinical Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- FRANK A. FITZPATRICK (60), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- G. C. FOLCO (67), *Institute of Pharmacological Sciences, University of Milan, 20133 Milan, Italy*
- JI YI FU (53), *Department of Physiology, Norman Bethune Medical University, Chingchun, Jilin, People's Republic of China*
- COLIN FUNK (53, 54), *Department of Pharmacology, Vanderbilt University, Nashville, Tennessee 37232*
- JOHN G. GERBER (55), *Division of Clinical Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- ROBERT R. GORMAN (58), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- JACQUES GRASSI (3), *Section de Pharmacologie et d'Immunologie, Département de Biologie, Commissariat à l'Energie Atomique, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- JESPER Z. HAEGGSTRÖM (36), *Department of Physiological Chemistry, Karolinska Institutet, S-104 01 Stockholm, Sweden*
- ELIZABETH HALL (27), *Hematology Division, University of Texas Medical School, Houston, Texas 77030*
- PERRY V. HALUSHKA (44), *Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, South Carolina 29425*

- MATS HAMBERG (1), *Department of Chemistry, Karolinska Institutet, S-104 01 Stockholm, Sweden*
- SVEN HAMMARSTRÖM (33), *Department of Cell Biology, Faculty of Health Sciences, University of Linköping, S-581 85 Linköping, Sweden*
- DONALD J. HANAHAN (18), *Department of Biochemistry, University of Texas Health Science Center, San Antonio, Texas 78284*
- DAN J. HAWKINS (22), *Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- EDWARD C. HAYES (13), *Department of Biochemical Parasitology, Merck Sharp & Dohme Research Laboratories, Merck & Co. Inc., Rahway, New Jersey 07065*
- PETER M. HENSON (15), *National Jewish Center for Immunology and Respiratory Medicine, Denver, Colorado 80206*
- HUBERT O. HEUER (50), *Department of Pharmacology, Boehringer Ingelheim KG, D-6507 Ingelheim am Rhein, Federal Republic of Germany*
- ZEN-ICHIRO HONDA (32), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- D. J. HOSFORD (48), *Institut Henri Beaufour, F-92350 Le Plessis-Robinson, France*
- I. M. HUSSAINI (49), *Department of Chemistry, University of Virginia, Charlottesville, Virginia 22901*
- TAKASHI IZUMI (31, 32), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- DAVID A. JONES (60), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- HANS JÖRNVALL (53), *Department of Physiological Chemistry, Karolinska Institutet, S-104 01 Stockholm, Sweden*
- ARMANDO KARARA (43), *Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee 37232*
- HIROSHI KAWASAKI (53), *Department of Molecular Biology, Tokyo Metropolitan Institute of Medical Science, Tokyo 113, Japan*
- DANIEL R. KNAPP (7), *Department of Pharmacology, Medical University of South Carolina, Charleston, South Carolina 29425*
- MICHAEL LAPOSATA (26), *Department of Pathology, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts 02114*
- GUY C. LE BRETON (27, 45), *Department of Pharmacology, University of Illinois at Chicago, Chicago, Illinois 60680*
- J. P. LELLOUCHE (8, 10), *Service des Molécules Marquées, Département de Biologie, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- CHRISTINA C. LESLIE (24), *Department of Pediatrics, National Jewish Center for Immunology and Respiratory Medicine, Denver, Colorado 80206*
- ROBERTO LEVI (66), *Department of Pharmacology, Cornell University Medical College, New York, New York 10021*
- CHANG T. LIM (45), *Department of Pharmacology, University of Illinois at Chicago, Chicago, Illinois 60612*
- JACQUES MACLOUF (3, 10), *Unité 150 INSERM, UA 334 CNRS, Hôpital Lariboisière, 75475 Paris, France*
- K. R. MADDIPATI (29), *Cayman Chemical Company, Ann Arbor, Michigan 48105*
- DALE E. MAIS (44), *Cardiovascular Division, Eli Lilly Pharmaceutical Co., Indianapolis, Indiana 46285*
- BENGT MANNERVIK (33), *Department of Biochemistry, Biomedical Center, University of Uppsala, S-751 23 Uppsala, Sweden*
- AARON J. MARCUS (64), *Hematology/Oncology Section, New York VA Medical Center, New York, New York 10010*
- LAWRENCE J. MARNETT (52), *Department of Biochemistry, Center in Molecular Toxicology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*

- BETTIE SUE SILER MASTERS (28), *Department of Biochemistry, University of Texas Health Science Center at San Antonio, San Antonio, Texas 78284*
- W. RODNEY MATHEWS (9), *Biopolymer Chemistry, The Upjohn Co., Kalamazoo, Michigan 49001*
- TAKASHI MATSUMOTO (53, 54), *Central Research Institute, Japan Tobacco Inc., Midori-ku, Yokohama, Japan*
- JOHN C. MCGIFF (41), *Department of Pharmacology, New York Medical College, Valhalla, New York 10595*
- JAMES C. MCGUIRE (25), *Department of Cell Biology, The Upjohn Company, Kalamazoo, Michigan 49001*
- THOMAS M. MCINTYRE (39, 57), *Departments of Medicine and Biochemistry, Noru Eccles Harrison Cardiovascular Research and Training Institute, University of Utah School of Medicine, Salt Lake City, Utah 84112*
- M. MEZZETTI (67), *IV Clinic of Thoracic Surgery, Policlinico di Milano, 20100 Milan, Italy*
- ICHIRO MIKI (32), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- MICHIKO MINAMI (53), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- SEYMOUR MONG (47), *Department of Immunology, Smith Kline & French Laboratories, King of Prussia, Pennsylvania 19406*
- THOMAS A. MORINELLI (44), *Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, South Carolina 29425*
- JASON D. MORROW (6), *Departments of Pharmacology and Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- A. SCOTT MUERHOFF (28), *Division of Biochemistry, Research Institute of Scripps Clinic, La Jolla, California 92037*
- KEVIN M. MULLANE (66), *Gensia Pharmaceuticals Inc., San Diego, California 92121*
- ROBERT C. MURPHY (11), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- EWA NINIO (14), *INSERM U 200, 92140 Clamart, France*
- ABDULRAHMAN ODEIMAT (12), *Centre de Recherches du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- REBECCA ODENWALLER (52), *Department of Biochemistry, Center in Molecular Toxicology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- NOBUYA OHISHI (31), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- SHIGEO OHNO (53), *Department of Molecular Biology, Tokyo Metropolitan Institute of Medical Science, Tokyo 113, Japan*
- C. R. PACE-ASCIAC (1), *Departments of Pediatrics and Pharmacology, The Hospital for Sick Children, Toronto, Ontario M5G 1X8, Canada*
- AUDREY C. PAPP (63), *Department of Internal Medicine, Hematology and Vascular Disease Research Center, University of Texas Medical School at Houston, Houston, Texas 77030*
- PAOLA PATRIGNANI (4), *Department of Pharmacology, Catholic University School of Medicine, 00168 Rome, Italy*
- CARLO PATRONO (4), *Department of Pharmacology, Catholic University School of Medicine, 00168 Rome, Italy*
- GEORGE M. PATTON (23), *Department of Medicine, Boston Veterans Administration Medical Center, Boston, Massachusetts 02130*
- N. ANN PAYNE (55), *Department of Clinical Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*

- SERGE PICARD (12), *Centre de Recherches du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- WALTER C. PICKETT (17), *Department of Oncology and Immunology, Lederle Laboratories, Pearl River, New York 10965*
- PATRICE E. POUBELLE (12), *Centre de Recherches du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- PHILIPPE PRADELLES (3, 10), *Section de Pharmacologie et d'Immunologie, Département de Biologie, Commissariat à l'Énergie Atomique, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- STEPHEN M. PRESCOTT (39, 57), *Departments of Medicine and Biochemistry, Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah, Salt Lake City, Utah 84112*
- OLOF RÅDMARK (32, 53), *Department of Physiological Chemistry, Karolinska Institutet, S-104 01 Stockholm, Sweden*
- CHAKKODABYLU S. RAMESHA (17), *Department of Inflammation Biology, Syntex Corporation, Palo Alto, California 94303*
- PETER W. RAMWELL (1), *Department of Physiology and Biophysics, Georgetown University Medical Center, Washington, D.C. 20007*
- EHUD RAZIN (56), *Institute of Biochemistry, The Hebrew University of Hadasah Medical School, Jerusalem 91010, Israel*
- PALLU REDDANNA (29), *Department of Veterinary Science, The Pennsylvania State University, University Park, Pennsylvania 16802*
- C. CHANNA REDDY (29), *Department of Veterinary Science and Environmental Resources Research Institute, The Pennsylvania State University, University Park, Pennsylvania 16802*
- L. JACKSON ROBERTS II (1, 6), *Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- SANDER J. ROBINS (23), *Department of Medicine, Boston Veterans Administration Medical Center, Boston, Massachusetts 02130*
- JOSHUA ROKACH (1), *Merck Frosst Canada Inc., Dorval, Quebec H9R 4P8, Canada*
- CAROL A. ROUZER (34), *Department of Pharmacology, Merck Frosst Centre for Therapeutic Research, Kirkland, Quebec H9R 4P8, Canada*
- ANGELO SALA (11), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- BENGT SAMUELSSON (1, 32, 34, 53, 54), *Department of Physiological Chemistry, Karolinska Institutet, S-104 01 Stockholm, Sweden*
- MICHAEL LANIADO SCHWARTZMAN (42), *Department of Pharmacology, New York Medical College, Valhalla, New York 10595*
- ROBERT R. SEABOLD (21), *Department of Pathology, Division of Laboratory Medicine, Washington University School of Medicine, St. Louis, Missouri 63110*
- CHARLES N. SERHAN (20), *Department of Medicine, Hematology Division, Brigham and Women's Hospital and, Harvard Medical School, Boston, Massachusetts 02115*
- YOUSUKE SEYAMA (31, 32, 53), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- T. Y. SHEN (49), *Department of Chemistry, University of Virginia, Charlottesville, Virginia 22901*
- TAKAO SHIMIZU (31, 32, 53), *Department of Physiological Chemistry and Nutrition, Faculty of Medicine, University of Tokyo, Tokyo 113, Japan*
- MICHAEL A. SHIRLEY (30), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- MICHAEL S. SIMONSON (59), *Department of Medicine, Case Western Reserve University School of Medicine, Cleveland, Ohio 44106*

- PIERRE SIROIS (12), *Département de Pharmacologie, Faculté de Médecine, Université de Sherbrooke, Sherbrooke, Quebec J1H 5N4, Canada*
- WILLIAM L. SMITH (1, 51), *Department of Biochemistry, Michigan State University, East Lansing, Michigan 48824*
- ROY J. SOBERMAN (35, 37), *Department of Rheumatology, Immunology and Medicine, Harvard Medical School, Boston, Massachusetts 02115*
- MATS SÖDERSTRÖM (33), *Department of Biochemistry, Wallenberg Laboratory, University of Stockholm, S-106 91 Stockholm, Sweden*
- DIANA M. STAFFORINI (39), *Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah, Salt Lake City, Utah 84112*
- DANNY O. STENE (30), *Department of Pharmacology, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- W. THOMAS STUMP (21), *Department of Pathology, Division of Laboratory Medicine, Washington University School of Medicine, St. Louis, Missouri 63110*
- KOICHI SUZUKI (53), *Department of Molecular Biology, Tokyo Metropolitan Institute of Medical Science, Tokyo 113, Japan*
- JOHN TURK (21), *Department of Pathology, Division of Laboratory Medicine, Washington University School of Medicine, St. Louis, Missouri 63110*
- NATSUO UEDA (38), *Department of Biochemistry, Tokushima University School of Medicine, Kuramoto-cho, Tokushima 770, Japan*
- CHITRA M. VAIDYA (45), *Department of Pharmacology, University of Illinois at Chicago, Chicago, Illinois 60612*
- PIERRE VALLERAND (12), *Centre de Recherches du CHUL, Le Centre Hospitalier de l'Université Laval, Sainte-Foy, Quebec G1V 4G2, Canada*
- A. VANHOVE (8), *Service des Molécules Marquées, Département de Biologie, CEN/Saclay, 91191 Gif-sur-Yvette, France*
- DUANE VENTON (27, 45), *Department of Pharmacology, University of Illinois at Chicago, Chicago, Illinois 60612*
- T. VIGANÒ (67), *Institute of Pharmacological Sciences, University of Milan, 20133 Milan, Italy*
- NORBERT F. VOELKEL (65), *Cardiovascular Pulmonary Research Laboratory, University of Colorado Health Sciences Center, Denver, Colorado 80262*
- J. JAMES VRBANAC (7), *Drug Metabolism Research, The Upjohn Co., Kalamazoo, Michigan 49001*
- DANIEL F. WENDELBORN (6), *Departments of Pharmacology and Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee 37232*
- RALPH E. WHATLEY (57), *Department of Medicine, Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah School of Medicine, Salt Lake City, Utah 84112*
- J. WHELAN (29), *Department of Food Science, Cornell University, Ithaca, New York 14850*
- DAVID E. WILLIAMS (28), *Department of Food Science and Technology, Oregon State University, Corvallis, Oregon 97331*
- ANTHONY L. WILLIS (1), *Institute of Experimental Pharmacology, Syntex Research, Palo Alto, California 94303*
- URS WIRTHMUELLER (62), *Institute of Clinical Immunology, Inselspital University Hospital, CH-3010 Bern, Switzerland*
- BRYAN A. WOLF (21), *Department of Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, Pennsylvania 19104*
- KENNETH K. WU (63), *Department of Internal Medicine, Hematology and Vascular Disease Research Center, University of Texas Medical School at Houston, Houston, Texas 77030*

PENDRI YADAGIRI (40), *Basic Research and Development Center, International Flavors and Fragrances, Union Beach, New Jersey 07735*

SHOZO YAMAMOTO (1, 38), *Department of Biochemistry, Tokushima University, Kuramoto-cho, Tokushima 770, Japan*

GUY A. ZIMMERMAN (57), *Department of Medicine, Nora Eccles Harrison Cardiovascular Research and Training Institute, University of Utah School of Medicine, Salt Lake City, Utah 84112*

Preface

Volume 86 of the *Methods in Enzymology*, Prostaglandins and Arachidonate Metabolites, has become an important reference for methods used by individuals interested in the study of arachidonic acid metabolism. The success of that volume was due largely to the efforts of the editors, Dr. William E. M. Lands and Dr. William L. Smith, and to the contributions made by the various authors.

In the intervening years, considerable advances have been made in the field of eicosanoids and lipid mediators. Developments in analytical, biochemical, and molecular biological techniques have had a significant impact on current research. In addition, we know a great deal more about the biological roles that eicosanoids play in health and disease and the complexity with which they are synthesized *in vivo*. Notable advances have also been made in the appreciation of cellular cooperation during eicosanoid biosynthesis, and more specific receptor antagonists have been synthesized and characterized. For these reasons, this volume was designed to supplement the earlier one with the addition of new techniques in the measurement of eicosanoids, of new molecular biological techniques applied to eicosanoid research, and of descriptions of methods used to study the action and formation of eicosanoids in isolated cell and tissue systems.

We have expanded the scope of Volume 86 by including methods for the analysis of platelet-activating factor (PAF) and descriptions of the purification of enzymes involved in PAF biosynthesis and metabolism. In addition, the analysis of phospholipid precursors for both platelet-activating factor and eicosanoids is described and an isolation procedure for phospholipase A₂ specific for the release of arachidonate is presented. It now appears that PAF and eicosanoids are closely linked biochemically and it therefore seemed suitable to include platelet-activating factor methodology in this volume.

We thank Drs. Lands and Smith for providing important suggestions and advice used in the preparation of this volume. The organization and correspondence required in developing this work would not have been possible without the skillful and cheerful assistance of Ms. Deborah Beckworth. We thank her for her exceptional help.

ROBERT C. MURPHY
FRANK A. FITZPATRICK

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VOLUME II. Preparation and Assay of Enzymes

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Preparation and Assay of Substrates

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