SCIENTIFIC PROGRAM



SUNDAY, SEPTEMBER 12, 1999

Registration opens, America South Foyer, 12 noon Poster Session I mount, Staffordshire Room and America South, 12 noon to 1:30 p.m.

OPENING REMARKS

1:30 p.m.

Dr. Charles N. Serhan, Professor
Center for Experimental Therapeutics and
Reperfusion Injury
Brigham & Women's Hospital
and Harvard Medical School



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PLENARY LECTURE I -- BENGT SAMUELSSON

America South Introduction by Dr. Lawrence J. Marnett, Professor,

Vanderbilt University School of Medicine

1:45 - 2:30 p.m. Plenary Presentation

PLENARY LECTURE II -- E.J. COREY

America South Introduction by Dr. Edward A. Dennis, Professor,

Chemistry, University of California at San Diego

2:30 - 3:15 p.m. Plenary Presentation

SESSION 1 INFLAMMATION (Leukotrienes & Lipoxins)

America South Chairperson: Dr. Leslie J. Crofford

Co-Chair: Dr. K. Frank Austen

Invited Talks (25 min. plus 5 min. discussion)

3:30 p.m. Prostaglandin Production and Actions in Synovial Tissues - 1

L. Crofford

4:00 p.m. Salicylates, But Not Glucocorticoids, Inhibit Leukocyte 2

Accumulation by an Adenosine-Dependent Mechanism that is Independent of Inhibition of Prostaglandin Synthesis and

p105 (p50) of Nuclear Factor Kb - G. Weissmann

Selected Talks (15 min. plus 5 min. discussion)

4:30 p.m. Anti-Inflammatory Actions of Lipoxin-A₄ Stable Analogs 3

in Human Whole Blood: Modulation of Leukocyte Adhesion Molecule Expression and Inhibition of Neutrophil-Endothelial

Interactions - J. Filep

4:50 p.m. Leukotriene B₄ Receptor: Structure, Transcriptional 4

Regulation, and Intracellular Signaling - T. Yokomizo

5:10 p.m. Endotoxin Induction of Luciferase Activity in Mice

Transgenic for a COX-2 Promoter-Luciferase Reporter

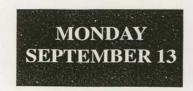
Construct - A. Freeman

5:30 p.m. Interactions Between 5-oxo-ETE and Eotaxin in

Stimulating Eosinophil Chemotaxis - W.S. Powell

SESSION 2	CANCER & SYNTHESIS OF NOVEL INHIBITORS	
Essex East	Chair: Dr. Lawrence J. Marnett	
	Co-Chair: Dr. Yusuf A. Hannun	
	Invited Talks (25 mins. plus 5 min. discussion)	
3:30 p.m.	Novel COX-2 inhibitors as Cancer Chemopreventive and Antiangiogenic Agents - L. Marnett	7
4:00 p.m.	Update on Eicosanoids in Prostate Cancer - K. Honn	8
4:30 p.m.	Lysolipid Phosphate Receptors and Effects in Ovarian and Breast Cancer Cells - E. Goetzl	9
	Selected Talks (15 mins. plus 5 min. discussion)	
5:00 p.m.	Growth Stimulation and Epidermal Growth Factor Receptor Induction in Cyclooxygenase-overexpressing Human Colon Carcinoma Cells - T. Yoshimoto	10
5:20 p.m.	Cox-2 Inhibitor Enhances Tumor Radioresponse in vitro and in vivo - S. Petersen	11
5:40 p.m.	Chemopreventive Properties of Nimesulide, a Selective Cyclooxygenase-2 Inhibitor, against PhIP- induced Mammary Carcinogenesis in Rats - T. Kawamori	12
6:00 p.m.	Determination of Cyclooxygenase and Arachidonic Acid Metabolites in Invasive Human Prostate Cancer Cells - K. Nithipatikom	13
6:00-7:30 p.m.	Welcome Reception	
	Westin Hotel	
	(America North and Center)	

SESSION 3	ENZYMES-LIPOXYGENASES/	
	CYCLOOXYGENASES & INHIBITORS	5
E Wash	Chair: Dr. William L. Smith	
Essex West		
	Co-Chair: Dr. Jesper Haeggstrom	
	Invited Talks (25 mins. plus 5 min. discussion)	
3:30 p.m.	Molecular Interactions of Arachidonic Acid with Prostaglandin Endoperoxide H Synthase-1 - W. Smith	14
4:00 p.m.	Structure and Function of Leukotriene A ₄ Hydrolase - J. Haeggstrom	15
4:30 p.m.	Prostaglandin E Synthase: A Microsomal,	16
	Glutathione Dependent, Inducible Member	
	of the MAPEG Superfamily - PJ. Jakobsson	
	Selected Talks (15 mins. plus 5 min. discussion)	
5:00 p.m.	Crystal Structures of Cyclooxygenase-2 Variants	17
	with Diarylheterocycle Inhibitors: Contribution	
	of the Side Pocket for Selectivity - R.G. Kurumbail	
5:20 p.m.	Peroxidase Kinetic Differences and Cyclo-	18
	oxygenase Catalytic Control in PGH Synthase-1 and -2 -	
	R.J. Kulmacz	
5:40 p.m.	Manganese-Lipoxygenase: A Novel Model of	19
	Lipoxygenation - C. Su	
6:00 p.m.	The Mechanistic Reasons for the Positional	20
	Specificity of Lipoxygenase Effective Conversion	
	of 5-Lipoxygenases to a 15-Lipoxygenating Species - H. Kuhn	
	n. Kumi	
6:00-7:30 p.m.	Welcome Reception	
	Westin Hotel	
	(America North and Center)	



PLENARY LECTURE -- DR. L. JACKSON ROBERTS

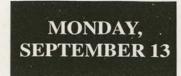
American South	Introduction by Dr. Santosh Nigam,
	Eicosanoid Research Division,
	Free University Berlin

8:00-8:45 a.m. Plenary Presentation

SESSION 4	VASCULAR BIOLOGY	
America South	Chair: Dr. Garrett A. FitzGerald Co-Chair: Dr. Michael A. Gimbrone, Jr.	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Eicosanoids and Isoeicosanoids and the Cardiovascular System - G. FitzGerald	21
9:30 a.m.	Vascular Endothelium: An Integrator of Biomechanical Stimuli in the Cardiovascular System - M. Gimbrone	22
10:00 a.m.	Coffee Break	
	Selected Talks (15 mins. plus 5 min. discussion)	
10:30 a.m.	Vasodilation Produced by Prostaglandin $F_{2\alpha}$ is FP Receptor Mediated and Nitric Oxide and Endothelium Dependent - J. Chen	23
10:50 a.m.	Modification of Low Density Lipoproteins with Phospholipase A ₂ Forms Small, High Density Particles with Increased Affinity for Proteoglycans & Glycosaminoglycans - P. Sartipy	24
11:10 a.m.	Lipoxins: Anti-inflammatory Actions - H. Brady	25
11:30 a.m.	Leukotrienes and the Pulmonary Vascular Bed - C. Brink	26
12:00-1:00 p.m.	LUNCH BREAK	
POSTER SESSION I	SEE NEXT PAGE	



SESSION 6	INTRACELLULAR LM & TARGETING	
Essex West	Chair: Dr. John D. Scott Co-Chair: Dr. Roy Soberman	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	The Molecular Architecture of Kinase/Phosphatase Signaling Complexes - J. Scott	27
9:30 a.m.	A Novel Ca++ -Independent Transduction Mechanism for LTD ₄ - Induced Contraction of Human Bronchi - S. Nicosia	28
10:00 a.m.	COFFEE BREAK	
	Selected Talks (15 mins. plus 5 min. discussion)	
10:30 a.m.	Localization and Translocation of Enzymes Involved in the Synthesis of Leukotrienes - T. Izumi	29
10:50 a.m.	Regulation of the p21-Activated Protein Kinases in Neutrophils by Phosphoinositides and Sphingolipids - J. Badwey	30
11:10 a.m.	Role of Phosphatidylethanomamines in G Protein Receptor- Associated Signal Transduction - P. Escriba	31
11:30 a.m.	Do Leukotrienes Reduce Apoptosis? - J. Ohd	32
11:50 a.m.	Beneficial Effects of 5-Lipoxygenase Activating Protein Inhibition in Accelerated Nephrotoxic Serum Nephritis and Passive Heymann's Nephritis in Rats - K. Munger	33
12:10 p.m.	Inhibition of 5-LO Activating Protein Activity Decreases Proteinuria in Streptozotocin-Induced Diabetic Rats - J. Valdivielso	34
12:00-1:00 p.m.	LUNCH BREAK	
POSTER SESSION I	Staffordshire and America South	
	Chair: Dr. Kenneth V. Honn Co-Chair: Dr. Charles N. Serhan	
1:00 - 2:30 p.m.	Presentations and poster tour	

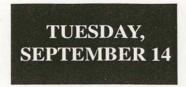


SESSION 8	PHOSPHOLIPASES	- 190 1 101
Essex East	Chair: Dr. Edward Dennis Co-Chair: Dr. Joseph Bonventre	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Distinct Function of Each Type of Phospholipase A_2 and Cyclooxygenase in Eicosanoid Production - E. Dennis	35
9:30 a.m.	Insights from Cytosolic PLA ₂ Knockout Mouse - J. Bonventre	36
10:00 a.m.	COFFEE BREAK	
10:30 a.m.	Role of Cytosolic Phospholipase A_2 in vivo and in vitro - T. Shimizu	37
	Selected Talks (15 mins. plus 5 min. discussion)	
11:00 a.m.	Functional Coupling Among Phospholipase A ₂ s, Cyclo-oxygenases, and Terminal Prostaglandin Synthases in Immediate and Delayed Prostanoid Biosynthetic Pathways - M. Murakami	38
11:20 a.m.	Cytosolic Phospholipase A ₂ is Essential for Both the Immediate and the Delayed Phases of Eicosanoid Generation in Mouse Bone Marrow-Derived Mast Cells - B. Diaz	39
11:40 a.m.	Investigation into the Involvement of Phospholipases A ₂ and MAP Kinases in Modulation of AA Release Cell Growth in A549 Cells Q.G. Choudhury	40
12:00-1:00 p.m.	LUNCH BREAK	
POSTER SESSION I	Staffordshire and America South	
	Chair: Dr. Kenneth V. Honn Co-Chair: Dr. Charles N. Serhan	
1:00 - 2:30 p.m.	Presentations and poster tour	

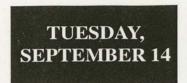
SESSION 5	ENZYMES II (PHARMACOLOGY)	
America South	Chair: Dr. Sven-Erik Dahlen Co-Chair: Dr. Jeffrey M. Drazen	
	Invited Talks (25 mins. plus 5 min. discussion)	
2:30 p.m.	Discovery and Development of COX-2 Specific Inhibitors - J. Talley	n/a
3:00 p.m.	Leukotrienes in Asthma - J. Drazen	41
3:30 p.m.	Antileukotrienes in Aspirin-Intolerant Asthma - SE. Dahlen	n/a
	Selected Talks (15 mins. plus 5 min. discussion)	
4:00 p.m.	Sp1 and Sp3 Function as Key Regulators of Leukotriene C4 Synthase Gene Expression in the Monocyte-Like Cell Line, THP-1 - K. Serio	42
4:20 p.m.	Down-Regulation of 5-Lipoxygenase Activity and Leukotriene Production by Prolonged Exposure to Lipo- polysaccharide - T. Brock	43
4:40 p.m.	Characterization of a Distinctive Pharmacological Profile for LTC ₄ Binding Sites in Human Lung Parenchyma Using a Kinetic Approach - G.E. Rovati	44
5:00 p.m.	The Constriction of the Human Pulmonary Artery by LTC ₄ is Mediated Via a CysLT ₂ Receptor and Counteracted by Prostacyclin Release - M. Back	45
5:20 p.m.	Analysis of Cyclooxygenase-Substrate Interactions Using Stereospecifically-Labeled Ararchidonic Acids - C. Schneider	46
5:40 p.m.	Localization and Nature of a 5LO Calcium Binding Site - T. Hammarberg	47
7:30 - 10:00 p.m.	RECEPTION AT FOGG MUSEUM, CAMBRIDGE (OPEN TO ALL REGISTRANT)	S)

SESSION 7	ANANDAMIDES	
Essex West	Chair: Dr. Shozo Yamamoto Co-Chair: Dr. Vincenzo Di Marzo	
	Invited Talks (25 mins. plus 5 min. discussion)	
2:30 p.m.	Cannabimimetic Eicosanoids: an Overview of Their Metabolic Pathways and Potential Role in Cancer and Inflammation - V. Di Marzo	48
3:00 p.m.	Catalytic Properties of Purified Recombinant Anandamide - Amidohydrolase - N. Ueda	49
	Selected Talks (15 mins. plus 5 min. discussion)	
3:30 p.m.	Putative Metabolites of Anandamide: Activities and Occurrence - S. Burstein	50
3:50 p.m.	Dopamine Activation of Endogenous Cannabinoid Signaling in Dorsal Striatum - D. Piomelli	51
4:10 p.m.	Ananadamide Induces Nitric Oxide-Independent Mesenteric Vasodilation Via a Novel Endothelial Site of Action - G. Kunos	52
7:30 - 10:00 p.m.	RECEPTION AT FOGG MUSEUM, CAMBRIDGE (OPEN TO ALL REGISTRANTS)	

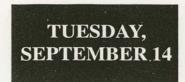
SESSION 9	NEW APPROACHES TO CANCER AND GENE THERAPY	
Essex East	Chair: Dr. Kenneth K. Wu Co-Chair: Dr. Thomas E. Eling	
	Invited Talks (25 mins. plus 5 min. discussion)	
2:30 p.m.	Enhancement of Vascular Prostacyclin and Nitric Oxide Synthesis by Gene Transfer: Therapeutic Implications - K. Wu	53
3:00 p.m.	Lipoxygenase and Colorectal Cancer - T. Eling	n/a
	Selected Talks (15 mins. plus 5 min. discussion)	
3:30 p.m.	15-Lipoxygenase-1 Expression in Prostate Cancer: Correlation with Mutant p53 Expression and Histologic Grade - U. Kelavkar	54
3:50 p.m.	COX-2 as a Target for Chemoprevention of Squamous Cell Carcinomas - K. Muller-Decker	55
4:10 p.m.	Cyclooxygenase-2 Protein Varies with Tumor Progression in Experimental Colon Cancer - C. Compher	56
4:30 p.m.	Inhibition of Translation Initiation Mediates the Anticancer Effect of Eicosapentaenoic Acid - J. Halperin	57
4:50 p.m.	13(S)-HpODE Modulates Mitogenic Signal Transduction Through Enhancing the Phosphorylation and Association of EGF Receptor with the Tyrosine Phosphatase SHP-2 - W. Glasgow	58
7:30 - 10:00 p.m.	RECEPTION AT FOGG MUSEUM,	2)



PLENARY LECT	TURE DR. JUDAH FOLKMAN	
America South	Introduction by Dr. Kenneth V. Honn , Professor, Department of Radiation Oncology and Pathology Wayne State University	
8:00-8:45 a.m.	Cryptic Fragments Within the Hemostatic System a Regulators of Angiogenesis	S
SESSION 10	ANGIOGENESIS: CANCER TREATME AND PREVENTION	ENT
America South	Chair: Dr. Raymond N. DuBois Co-Chair: Dr. Makoto M. Taketo	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Cyclooxygenase and Cancer - R. DuBois	59
9:30 a.m.	Role of COX-2 in Colon Tumorigenesis - M. Taketo	60
10:00 a.m.	COFFEE BREAK	
	Selected Talks (15 mins. plus 5 min. discussion)	
10:30 a.m.	Relationship Between Apoptosis, Angiogenesis and Colon-26 Tumor Growth After Oral NSAID-Treatment - J. Brown	61
10:50 a.m.	Antitumor Effects of Piroxicam in Spontaneous Canine Invasive Urinary Bladder Cancer, a Relevant Model of Human Invasive Bladder Cancer - D. Knapp	62
11:10 a.m.	15-Lipoxygenase-2 in Human Epithelial Cells and Its Reduced Expression in Cancer - A. Brash	63
11:30 a.m.	Arachidonate 12-Lipoxygenase Stimulates Tumor Angiogenesis by Up-Regulation of Vascular Endothelial Growth Factor Expression - D. Nie	64
11:50 a.m.	Thromboxane A2 is a Mediator of COX-2 Dependent Endothelial Migration & Angiogenesis - T. Daniel	65
12:00-1:00 p.m.	LUNCH BREAK	



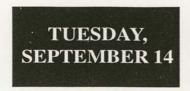
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SESSION 12	INFLAMMATION (2)	
	Cl.: D. Diama Bassast	
Essex West	Chair: Dr. Pierre Borgeat	
	Co-Chair: Dr. Santosh Nigam	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Down-Regulation of Arachidonic Acid Release and Leukotriene Synthesis in Ligand-Activated Human Neutrophils by Autacoids - P. Borgeat	66
9:30 a.m.	Studies on 3-Hydroxy-Oxylipins, a Group of Novel Eicosanoids Produced by Fungi - S. Nigam	67
10:00 a.m.	COFFEE BREAK	
	Selected Talks (15 mins. plus 5 min. discussion)	
10:30 a.m.	EX-FABP, Extracellular Fatty Acid Binding Protein, is Modulated in Culture by Inflammatory-Antiinflammatory Agents and is Expressed in vivo During Chicken Embryo Development and in Inflammation - F. Descalzi Cancedda	68
10:50 a.m.	Selective Inhibition of Cyclooxygenase-2 Attenuates Expression of Inflammation-Related Genes in CNS Injury Models - M.K. O'Banion	69
11:10 a.m.	Endothelial COX-2 Induction by Hypoxia Liberates 6-keto-PGF $_{1\alpha}$, a Potent Epithelial Secretagogue - S. Colgan	70
11:30 a.m.	Hepatocytes are a Rich Source of Novel Aspirin- Triggered 15-epi-Lipoxin A ₄ - J. Claria	71
12:00-1:00 p.m.	LUNCH BREAK	



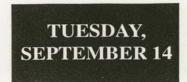
SESSION 14	NOVEL SIGNALING PATHWAYS & NETWORKS	
Essex East	Chair: Dr. Per Hedqvist Co-Chair: Dr. Aaron J. Marcus	
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Roles of Ceramide in TNF Action - Y. Hannun	72
9:30 a.m.	CD39/ecto-ADPase Blocks and Reverses Human Platelet Reactivity. Significance from Thrombosis - A. Marcus	73
10:00	COFFEE BREAK	
10:30 a.m.	Biology of Neutrophil-Epithelial Interactions - J. Madara	74
	Selected Talks (15 mins. plus 5 min. discussion)	
11:00 a.m.	Regulation of Cell-Substrate Adhesion by Lipid and Kinase Second Messengers Activated by the Lipoxygenase and Cyclooxygenase Branches of Arachidonic Acid Metabolism - B.S. Jacobson	75
11:20 a.m.	Lipopolysaccharide-Induced Formation of Prostanoids in Macrophages: Role of Phospholipase A ₂ and Cyclooxygenases - P. Dieter	76
11:40 a.m.	MK 886 Functions as a Radiomimetic Agent: Genomic Responses Related to Oxidative Stress the Cell Cycle, Proliferation and Programmed Cell Death in Panc-1 Cells - K. Anderson	77
12:00-1:00 p.m.	LUNCH BREAK	
POSTER SESSION II	Staffordshire and America South	
	Chair: Dr. S. Nigam Co-Chair: Dr. L. Marnett	
1:00-2:30 p.m.	Presentations and poster tour	



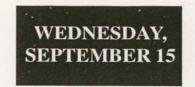
SESSION 11	NITRIC OXIDE, COX-2 & APOPTOSIS	
Essex East	Chair: Dr. Patrick Wong	
	Co-Chair: Cecil R. Pace-Asciak	
	Invited Talks (25 mins. plus 5 min. discussion)	
2:30 p.m.	Live or Let-Die with Peroxynitrite: Evidence for Peroxynitrite Mediates Mucosal Cell Apoptosis - P. Wong	78
3:00 p.m.	Novel Eicosanoid Activators of Peroxisome Proliferator- Activated Receptor in Macrophages - S. Hammarstrom	79
	Selected Talks (15 mins. plus 5 min. discussion)	
3:30 p.m.	Prostaglandin Production is Significantly Decreased <i>in vivo</i> in Mice Deficient in Inducible Nitric Oxide Synthase - J.D. Morrow	80
3:50 p.m.	Inhibition of F2-Isoprostane Synthesis Reduces Proteinuria and Improves Renal Function in Streptozotocin-Induced Diabetic Rats - A. Montero	81
4:10 p.m.	Physical Interaction with $\beta 4$ Integrin Regulates Arachidonate - 12-lipoxygenase Activity - K. Tang	82
4:30 p.m.	Molecular Mechanisms of Prostate Cancer Cell Death Upon Inhibition of Arachidonate 5-Lipoxygenase: Involvement of Fas/APO1-Mediated Signals - J. Ghosh	83
7:30-10:00 p.m.	DINNER AT WESTIN HOTEL MUSIC	
	PRESENTATION OF THE YOUNG INVESTIGA AWARDS - SPONSORED WITH BIOMOL RESEARCH LABORATORIES.	TOR



RECEPTORS & AGONISTS/ANTAGONISTS **SESSION 13** America South Chair: Dr. Shuh Narumiya Co-Chair: Dr. Takao Shimizu Invited Talks (25 mins. plus 5 min. discussion) Physiology and Pathophysiology of the Prostanoid Receptors: 2:30 p.m. Lessons from Knockout Mice Studies - S. Narumiya 3:00 p.m. Structure-Activity Relationships of Hepoxilin Actions on 85 Intracellular Calcium Levels in Human Neutrophils -C. Pace-Asciak 3:30 p.m. Targeted Gene Disruption of the Prostaglandin E2 EP2 86 Receptor - R. Breyer Selected Talks (15 mins. plus 5 min. discussion) 4:00 p.m. Activation-Dependent Internalization of the Human 87 Prostacyclin Receptor - E. Smyth 4:20 p.m. The Design and Synthesis of Selective Prostaglandin 88 Analogs as Bone Anabolic Agents for the Potential Treatment of Osteoporosis - J. Wos 4:40 p.m. PPAR Expression and Activity in Murine Skin Tumors -89 S. Fischer 5:00 p.m. Ocular Hypotensive Activity of Prostaglandin F2 Analogs 90 with Neutral Substituents at Position 1 is Predicted by the Isolated Cat Iris Sphincter Smooth Muscle Preparation But Not Ca2+ Signaling in Swiss 3T3 Cells - R. Burk 5:20 p.m. Signaling to Release Lysosomal Enzyme by Leukotriene 91 B₄ and Platelet Activating Factor - N. Ito DINNER AT WESTIN HOTEL 7:30-10:00 p.m. MUSIC PRESENTATION OF THE YOUNG INVESTIGATOR AWARDS - SPONSORED WITH BIOMOL RESEARCH LABORATORIES.

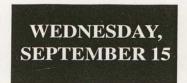


SESSION 15	EETs, LPAs AND ISOEICOSANOIDS	
Essex West	Chair: Dr. Jorge H. Capdevila Co-Chair: Dr. Timothy T. Hla	
	Invited Talks (25 mins. plus 5 min. discussion)	
2:30 p.m.	Biochemical and Functional Properties of the P450 Arachidonic Acid Monooxygenase - J. Capdevila	92
3:00 p.m.	EDG-1 Family of Sphingosine-1-Phosphate Receptors - T. Hla	93
	Selected Talks (15 mins. plus 5 min. discussion)	
3:30 p.m.	Formation of Novel D-Ring and E-Ring Isoprostane-Like Compounds (Neuroprostanes) in vivo from Docosahexaenoic Acid - E. Reich	94
3:50 p.m.	cP450 Epoxygenase Exerts Potent Cytoprotective Effects by a Dual Mechanism in Renal Epithelial Cells - JK. Chen	95
4:10 p.m.	F2 and E2 Isoprostanes are Ligands for Peroxisome Proliferator-Activated Receptors α and γ - P. McNamara	96
4:30 p.m.	Characterization of Epidermal 12(S) and 12(R) Lipoxygenases - M. McDonnell	97
7:30-10:00 p.m.	DINNER AT WESTIN HOTEL - ESSEX NORTH MUSIC	
	PRESENTATION OF THE YOUNG INVESTIGATION OF THE Y	ATOR

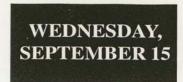


PLENARY LECTURe -- DR. EVA NEER

America South 8:00-8:45 a.m. SESSION 16	Introduction by Dr. Peter Ramwell, Professor, Department of Physiology, Georgetown University Medical Center Plenary Presentation ENZYMES & METABOLIC INACTIVATION					
				America South	Chair: Dr. Robert Murphy Co-Chair: Dr. Hsin-Hsiung Tai	
					Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Free Radical Oxidation of Plasmenyl Glycerophophocholine Containing Esterified Arachidonic Acid as an Alternative Pathway for Leukotriene Biosynthesis - R. Murphy	98				
9:30 a.m.	Structure and Function of Prostaglandin Metabolic Enzymes - HH. Tai	99				
10:00 a.m.	COFFEE BREAK					
	Selected Talks (15 mins. plus 5 min. discussion)					
10:30 a.m.	Purification and Characterization of Membrane-Bound Bound Prostaglandin E Synthase from Bovine Heart - K. Watanabe	100				
10:50 a.m.	cDNA Cloning and Mutagenesis Study of Live-Type Prostaglandin F Synthase, and Identification of the Prostaglandin F Producing Cells in the Liver - T. Suzuki-Yamamoto	101				
11:10 a.m.	Lipoxin A ₄ and Aspirin-Triggered 15-epi-LXA ₄ are Protective in Acute Inflammation and Reperfusion Injury in Leukotriene B ₄ Receptor Transgenic Mice - K. Gronert	102				
11:30 a.m.	Snapshot of the Cylooxygenase Reaction Pathway: Structure of Prostaglandin at the Active Site of COX-2 - J. Keifer	103				
11:50 a.m.	Substrate Down Regulation of the 12-Lipoxygenase in Human Platelets - M. Dadaian	104				



SESSION 17 KNOCK-OUT MODELS & GENE THERAPY **Essex East** Chair: Dr. Colin D. Funk Co-Chair: Dr. Kamal Badr Invited Talks (25 mins. plus 5 min. discussion) 9:00 a.m. Lipoxygenases in Carcinogenesis and Inflammation -105 C. Funk 9:30 a.m. Transfection of Rat Kidney with Human 15-Lipoxygenase 106 Suppresses Inflammation and Preserves Function in Experimental Glomerulonephritis - K.F. Badr 10:00 a.m. COFFEE BREAK Selected Talks (15 mins. plus 5 min. discussion) 10:30 a.m. Involvement of PGI, and PGE, in Acetic Acid-Induced 107 Writhing Reaction of Mice - S. Oh-ishi 10:50 a.m. Osteoclast Formation is Inhibited in Marrow Cultures from 108 COX-2 Knockout Mice - C. Pilbeam 11:10 a.m. The Development of COX-1/COX-2 Double Knockouts -109 C. Loftin Role of Platelet-Activating Factor in Acid-Induced Lung 11:30 a.m. 110 Injury - S. Ishii 11:50 a.m. Effects on the Vascular Wall of Overexpression and 111 Deficiency of Prostacyclin Synthase - C. Yokoyama 12:10 p.m. Dietary EPA Reduces Tumor Load in ApcMin/+ Mice by 112 Altering Arachidonic Acid Metabolism, but Conjugated Linoleic cid, Gamma- and Alpha-Linolenic Acids Have No Effect - J. Whelan 12:30-12:45 p.m. CLOSING REMARKS Charles Serhan and Kenneth Honn Introducing next Local Organizing Chair, Larry Marnett



SESSION 18	LIPID-TARGET INTERACTIONS: STRUCTURE-FUNCTION CHEMISTRY	
Essex West	Chair: Dr. Leslie R. Ballou Co-Chair: Dr. Peter F. Weller	7
	Invited Talks (25 mins. plus 5 min. discussion)	
9:00 a.m.	Cellular Basis for Primed Eicosanoid Function in Leukocytes - P. Weller	113
9:30 a.m.	Regulation of Cyclooxygenase-1 and -2 in Knockout Cells and Mice - L. Ballou	114
10:00 a.m.	COFFEE BREAK	
	Selected Talks (15 mins. plus 5 min. discussion)	
10:30 a.m.	Increased Association of G-beta/gamma Subunits to Phospholipase C-gamma1 in LTD ₄ Stimulated Epithelial Cells - C. Thodeti	115
10:50 a.m.	Leukotriene B4 Evokes the Pre-Nuclear Envelope Breakdown Calcium Signal - R. Silver	116
11:10 a.m.	Essential Role of Mitogen-Activated Protein Kinase Pathway and c-Jun Induction in Epidermal Growth Factor-Induced Gene Expression of Human 12-Lipoxygenase - WC. Chang	117
11:30 a.m.	Acetyl-11-keto-b-boswellic Acid is Cytotoxic for Meningioma Cells and Inhibits Phosphorylation of the Extracellular-Signal Regulated Kinase 1 and 2 - M. Golubic	118
11:50 a.m.	Intracellular Activation and Induction of 12-Lipoxygenase in Mouse Peritoneal Macrophages - H. Kawajiri	119
12:30-12:45 p.m.	CLOSING REMARKS Charles Serhan and Kenneth Honn Introducing next Local Organizing Chair, Larry Marnett	