## **INDEX OF ORAL ABSTRACTS BY CATEGORY**

## Session I: Structure and Biosynthesis of N- and O-Glycans

No.	PRIMARY AUTHOR	ABSTRACT TITLE
O-1	Vliegenthart, Johannes FG	STRUCTURE DETERMINATION OF GLYCOPROTEIN DE- RIVED CARBOHYDRATES
O-2	Reinhold, VN	DEVELOPMENTS IN THE ANALYSIS OF GLYCOLIPIDS AND OLIGOSACCHARIDES; LINKAGE, SEQUENCE AND BRANCHING (SFC-NCI-MS)
O-3	Baenziger, Jacques U	THE ROLE OF GLYCOSYLATION IN GLYCOPROTEIN HORMONE FUNCTION
O-4	Sarkar, Mohan	RABBIT LIVER UDP- <i>N</i> -ACETYLGLUCOSAMINE: $\alpha$ -3-D-MANNOSIDE $\beta$ (1-2)- <i>N</i> -ACETYLGLUCOSAMINYLTRANS-FERASE I: CHARACTERIZATION OF A 2.5 KILOBASE cDNA CLONE
O-5	Rice, Kevin G	DETERMINING DISTANCE AND FLEXIBILITY WITHIN TRIANTENNARY GLYCOPEPTIDE BY FLUORESCENCE ENERGY TRANSFER
O-6	Warren, Charles	REFINED CHEMICAL TECHNIQUES FOR THE QUANTITA- TIVE RECOVERY OF INTACT N- AND O-LINKED OLIGO- SACCHARIDES FROM GLYCOPROTEINS
O-7	Troy, Frederic A	TOPOLOGY OF THE POLY- $\alpha$ (2-8)-SIALYLTRANSERASE IN E. COLIK1 AND ENERGETICS OF POLYSIALIC ACID CHAIN TRANSLOCATION ACROSS THE INNER MEMBRANE
O-8	Kean, Edward L	MICROSOMAL TOPOGRAPHY OF THE GlcNAc-TRANS- FERASES WHICH CATALYZE THE BIOSYNTHESIS OF GlcNAc-P-P-DOLICHOL AND (GlcNAc) <sub>2</sub> -P-P-DOLICHOL
O-9	West, Chris M	CHARACTERIZATION OF A NOVEL FUCOSYLTRANSFE- RASE ACTIVITY IN DICTYOSTELIUM
O-23	Lotan, Reuben	MODULATION OF LACTOSIDE-BINDING LECTINS DURING DIFFERENTIATION OF EMBRYONAL CARCINOMA CELLS

## Session II: Cellular and Molecular Biology of Mucins

O-10	Hill, Robert L	PORCINE SUBMAXILLARY MUCIN
O-11	Davidson, Eugene A	CLONING STUDIES ON BSM AND CANINE TRACHEAL MUCIN

No.	PRIMARY AUTHOR	ABSTRACT TITLE		
O-12	Kim, Young S	HUMAN INTESTINAL MUCIN CORE PROTEINS		
O-13	Rose, Mary C	UTILIZATION OF A UNIQUE NUCLEOTIDE PROBE TO IDENTIFY CDNA ENCODING HUMAN TRACHEOBRON-CHIAL MUCIN GLYCOPROTEIN		
O-14	Irimura, Tatsuro	REGULATION OF COLON CARCINOMA SIALOMUCIN EXPRESSION		
Session III: Glycosphingolipid Modulating Cell Growth and Transmembrane Signalling				
O-15	Chan, K-F Jesse	GANGLIOSIDE-MODULATED PROTEIN PHOSPHORYLA- TION SYSTEMS		
O-16	Spiegel, Sarah	THE ROLE OF GANGLIOSIDE GM1 IN CELL GROWTH AND SIGNAL TRANSDUCTION PATHWAYS		
O-17	Hakomori, Sen-itiroh	ROLE OF GANGLIOSIDE AND ITS CATABOLITE IN THE MODULATION OF TRANSMEMBRANE SIGNAL TRANSDUCTION		
Sessio	on IV: Molecular Biology of Glye	cosyltransferase and Carbohydrate Processing Enzymes		
O-18	Yamamoto, F-i	MOLECULAR GENETIC BASIS OF THE HISTO-BLOOD GROUP ABO SYSTEM		
O-19	Lehrman, Mark A	CLONING, SEQUENCE AND EXPRESSION OF HAMSTER UDP-GICNAC:DOLICHOL PHOSPHATE GICNAC-1-P TRANSFERASE		
O-20	Rajput, Bhanu	CLONING AND CHARACTERIZATION OF GlcNac-1-P-TRANSFERASE CDNA FROM MOUSE MAMMARY GLANDS		
O-21	Zapata, Gerardo	SITE DIRECTED MUTAGENESIS OF <i>ESCHERICHIA COLI</i> CMP- <i>N</i> -ACETYLNEURAMINIC ACID SYNTHETASE		
O-24	Lowe, John B	THE MOLECULAR NATURE OF NULL ALLELE OF THE H $\alpha(12)\text{-FUCOSYLTRANSFERASE}$ GENE IN A BOMBAY $(O_h)$ INDIVIDUAL		
O-25	Moremen, Kelley W	MOLECULAR BIOLOGY OF MAMMALIAN PROCESSING MANNOSIDASES		
O-30	Lau, Joseph T Y	MOLECULAR PATHWAYS THAT DICTATE Gal $\beta$ 1-4GIcNAc $\alpha$ (2-6)-SIALYLTRANSFERASE GENE EXPRESSION		
O-31	Heffernan, Michael	EXPRESSION-CLONING OF CDNAs THAT RESCUE GENETIC DEFECTS IN CHINESE HAMSTER OVARY CELL GLY-COSYLATION MUTANTS		

No.	PRIMARY AUTHOR	ABSTRACT TITLE		
O-32	Camirand, Anne	ISOLATION OF A SPECIFIC PROCESSING α-MANNOSI- DASE GENE FROM SACCHAROMYCES CEREVISIAE		
O-33	Colley, Karen	THE GOLGI APPARATUS LOCALIZATION/RETENTION SIGNAL IS LOCATED IN THE STEM REGION OF THE $\beta$ -GALACTOSIDE $\alpha(2\text{-}6)\text{-}SIALYLTRANSFERASE}$		
O-34	Aoki, Daisuke	SUBCELLULAR LOCALIZATION OF $\beta(14)GALACTOSYLTRANSFERASE (GT)$		
Session V: Pathobiology of Glycosylation				
O-27	Fukuda, Michiko N	HEMPAS, GENETIC DEFECT IN GLYCOPROTEIN GLYCO- SYLATION		
O-28	Roberts, David D	ROLE OF SULFATED GLYCOCONJUGATES IN TUMOR CELL INTERACTIONS WITH THROMBOSPONDIN AND LAMININ		
O-29	Kobata, Akira	ALTERED GLYCOSYLATION OF SURFACE GLYCOPROTEINS IN TUMOR CELLS AND ITS CLINICAL APPLICATION		
Sessio	n VI: Synthetic Chemistry in Gly	ycobiology		
O-22	Sabesan, S	MODIFICATIONS OF BIOLOGICAL ACTIVITIES OF INTER- LEUKIN-2 BY CHEMICAL GLYCOSYLATION		
O-35	Bundle, David R	SYNTHETIC OLIGOSACCHARIDES AND THE ANTIBODY BINDING SITE FOR THE SALMONELLA SEROGROUP B POLYSACCHARIDE: A COMPARISON OF LIGAND MAPPING STUDIES WITH A HIGH RESOLUTION CRYSTAL STRUCTURE		
O-36	Wong, Chi-Huey	ENZYMES IN CARBOHYDRATE SYNTHESIS		
O-37	Matta, Khushi L	SYNTHETIC CHEMISTRY AND GLYCOBIOLOGY OF L-FUCOSE		
O-38	Hindsgaul, Ole	APPLICATIONS OF SYNTHETIC CARBOHYDRATE CHEMISTRY TO THE STUDY OF GLYCOSYLTRANSFERASES		
Sessio	n VII: Glycoprotein Processing a	nd Targeting		
O-39	Hart, Gerald W	BIOSYNTHESIS OF GLYCOPHOSPHATIDYL INOSITOL MEMBRANE ANCHORS		
O-40	Parodi, Armando J	GLUCOSYLATION OF GLYCOPROTEINS IN THE ENDOP- LASMIC RETICULUM		

No.	PRIMARY AUTHOR	ABSTRACT TITLE
O-41	Cummings, Richard D	CONTROL OF GLYCOPROTEIN PROCESSING AND TERMINAL GLYCOSYLATION
O-42	Fukuda, Minoru	BIOSYNTHESIS AND TARGETING OF POLYLACTOSAMI- NOGLYCAN CONTAINING GLYCOPROTEINS
O-43	Elbein, Alan D	TWO NEW INHIBITORS OF THE GLYCOPROTEIN PRO- CESSING MANNOSIDASES, MANNOSIDASE I AND MANNOSIDASE II
O-44	Dickinson, Craig D	ENGINEERED GLYCANS TO IDENTIFY A VACUOLAR SORTING DETERMINANT IN PHYTOHEMAGGLUTININ-L
O-45	Fliesler, Steven J	EFFECT OF INHIBITORS OF N-LINKED OLIGOSACCHARIDE PROCESSING ON OPSIN GLYCOSYLATION AND ROD OUTER SEGMENT DISC MEMBRANE MORPHOGENESIS
Sessio	n VIII: Proteoglycans	
	n VIII: Proteoglycans St. John, Tom	THE ADHESIVE PHENOTYPE OF TRANSFECTED CELLS INDICATES THAT CD44 MAY BE A HYALURONIC ACID RECEPTOR
O-46	<i>,</i>	INDICATES THAT CD44 MAY BE A HYALURONIC ACID
O-46 O-47	St. John, Tom	INDICATES THAT CD44 MAY BE A HYALURONIC ACID RECEPTOR  BIGLYCAN (BGN) AND DECORIN (DCN): SEQUENCE AND
O-46 O-47 O-48	St. John, Tom Fisher, Larry W	INDICATES THAT CD44 MAY BE A HYALURONIC ACID RECEPTOR  BIGLYCAN (BGN) AND DECORIN (DCN): SEQUENCE AND TISSUE DISTRIBUTION