

(5th ICSM) Preface (Part-1 of 7th ICSM proceedings): Sailing the ICSM boat for the 7th time

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Perhaps regulations of more than 3000 enzyme-catalyzed reactions cause the total regulation of a eukaryotic cell to function in a biological system. Glycoconjugates (more than 600 published structures) being present on the cell surfaces are expected to have some specific roles in this cell regulation process. In recent years we have learned of cell-signaling pathways that influence a broad range of biological processes, from the proliferation of stem cells through cellular destruction by apoptosis. The detailed information on the components making up of these pathways, and their relations with one another, can be viewed in the STKE (Science's Signal Transduction Knowledge Environment Connections Maps Data Base). However, no such database is available for the roles of structurally known glycoconjugates in the Cell Regulations. Perhaps the field needs a little more input of the interested researchers and a cascade of experiments with plenty of discussion under different roofs to understand the data.

In 1983 in the Ronneby's 7th International Glycoconjugate meeting, a handful of internationally known Glycoconjugates and Glycobiology researchers made the decision that the field needs a separate Symposium to discuss more biology and cell-regulation oriented papers devoted to glycoconjugate research. As a result of that in 1987 under the deep interest and kind care of late Professor Bimal K. Bachhawat; the 1st ICSM (International Cell Surface Macromolecules) meeting took place in New Delhi at the International Center. Professor Bachhawat and his co-workers contributed in different aspects of glycoconjugate research, starting from the "muscular dystrophy" to specificity of carbohydrate recog-

nition by different Lectins such as "Ricin". Professor Bachhawat gracefully hosted the 1st to 4th ICSM every 3 years (1987, 1990, 1993, and 1996). All these meetings were held in New Delhi: 1st and 2nd ICSM (in 1987 and 1990) at the University of Delhi International Center, the 3rd one was held in the Holiday Inn Hotel (now it is Intercontinental Hotel) in New Delhi in 1990 and the 4th one was held at the National Institute of Immunology NII in January 1996. Professor Bachhawat (who was at that time Head of the Biochemistry Department at Delhi University-South Campus) passed away in September 1996. The next cycle of this meeting (5th ICSM) took place in January 1999 and Professor Avadesha Surolia (ex-graduate student of Professor Bachhawat) arranged it, the 5th, at the Indian Institute of Science, Bangalore. Ex-coworker, Dr. Chitra Mandal, in Kolkata in January 2003, arranged the 6th ICSM. She was also a co-organizer of the 7th ICSM held in Puri, India (January 11–15, 2005).

The important papers presented at the 6th ICSM symposium (in January 2003) have been published last year in two special issues, on "Glycoconjugates and Drug Research" (Vol-20, No. 9 and Vol-21, No. 8/9), of this journal last year. I had the pleasure of editing all 17 papers evolved from the talks at the 6th ICSM held in 2003. Last year at the 7th ICSM meeting held in Puri our editor-in-chief (Professor Vliegthart) approached me to take charge of the editing of the articles to be submitted for the 7th ICSM Proceedings. I agreed to take charge of all those 21 articles submitted before June 30, 2005. A list of all 22 articles (one article of Blumenthal *et al.* is from the 6th ICSM Proceedings) is printed in the first volume of the proceedings. In these two issues all the articles are original papers (based primarily on the talks given at the 7th ICSM meeting) and no review article is printed. Each volume will have 11 articles. The second volume is expected to be published within 2 months after the first volume is published. While reviewing these

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papers carefully, I noticed that subject matter ranged from the interaction of different glycoconjugates (glycoproteins and glycolipids), structure determination, and their roles in cell regulations (cell signaling and apoptosis). Overall, these two issues would be very useful to those working in the field, and teaching also, on the roles of glycoconjugates in the cell regulation.

It is clear in my mind that our spontaneous decision-taking at the 7th IGO meeting held in Ronneby, Sweden (July 17–23, 1983) to start a separate ICSM was not just a dream. It materialized in a series of international meetings (at least seven so far), which helped the Glycobiology field to progress further over last only 18 years. Over that period in all these seven meetings, I found eminent Glycobiologists attended these meetings: Drs. Johannes F.G. Vliegthart (Netherlands), Hans Kamerling (Netherlands), Yositaka Nagai (Japan), Eugene Davidson (USA), Charles Pasternak (*UK), Simon Gatt (Israel), Sailen Mookerjee (Canada), Michel Monsigny (France), Herbert Wiegandt (Germany), Ronald Schauer (Germany), Reinhard Schwartz-Albiez, (Germany), Ralph Schwarz (Germany), Sandro Sonnino (Italy), Guido Tittamanti (Italy), Bruno Venerando (Italy), Nicole Bovin (Russia), H. Leffler (Sweden), Jose C. Fernandez Checa (Spain), Roger Jeanloz (USA), Senitiroh Hakomori (USA), Charles

Sweeley (USA), Ed Hogan (USA), Y-C and Reko Lee (USA), Y-T and Su-Chen Li (USA), V. P. Bhavanandan (USA), Robert Blumenthal (USA), Robert Bell (USA), Michael Pierce (USA), Richard D. Cummings (USA), Ajit Varki (USA), Gerardo Vasta (USA), Sara Spiegel (USA), Subroto Chatterjee (USA), Dipak and Krishna Banerjee (Puerto Rico), Salil Das (USA), Goverdhan P. Sachdev (USA), Manju and Subhash Basu (USA). Not only did these Glycobiologists actively participate once or more than once, they also submitted articles on their new findings in the Proceedings published as special issues in *Indian J. Biochem. Biophys* (1st–4th ICSM's held in New Delhi), *Bioscience Report* (5th ICSM held in Bangalore), and *Glycoconjugate Journal* (6th ICSM held in Kolkata).

Many of these scientists have participated in each and every ICSM meeting held so far. Until now different organizations in India bear the major cost of a 3–4 days long conference with elaborate dinner and excellent lodging (arranged in modern hotels). Almost 100 Indian glycobiologists actively participated in each time. It is nice to see that the Glycobiology research in India is encouraged in this age of Genomics, Proteomics, Lipidomics, and Glycomics, perhaps this was a dream of the great researcher, the late Professor Bimal Bachhawat who passed away on September 23, 1996.



Our thanks to all of his ex-graduate students and co-workers who are the bearer of Glycobiology research in India and are able to continue his dream. The next, the 8th ICSM will take

place at CCMB in Hyderabad, India, in March 2008 and Dr. Amitava Chattopadhyay (Deputy Director) as the convener of that meeting.