

INTRODUCTION

With the event of his official retirement after more than 40 years of research and teaching at Medical Biophysics, Karolinska Institute, we decided to commemorate this with a symposium of Bo Forslind's own choice. This became the "The Frontiers of skin barrier research", the lectures of which appear between these covers. Within the restrictions of a one-day symposium we invited seven young scientists representing the new generation of dermatologically oriented researchers with a biophysical approach to the analysis of the skin barrier structure and function as the common denominator. With this approach we feel that we have acted in the spirit of Bo's attitude to science – to look for the young and creative minds, to tackle areas which are not found in the main stream of dermatological research.

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Bo Forslind received his MD in 1965, defended his thesis for a PhD – Biophysical studies on hard keratinized tissues – in 1970 at the Karolinska Institute. He was appointed Lecturer/Associate Professor at the department of Medical Biophysics in 1971 and professor of Medical Biophysics in 1999. He has served Karolinska Institutet as educator and researcher for more than 40 years on his official retirement.



Philip Wertz received his PhD in biochemistry from the University of Wisconsin in 1976. During subsequent postdoctoral training at McArdle Laboratory for Cancer Research, he began to study skin lipids. He continued skin lipid research in the Dermatology Department at the University of Iowa beginning in 1981. In 1990, he moved to the Dows Institute at the University of Iowa and is presently appointed as Professor of Oral Pathology, Radiology and Medicine.



Jenifer Thewalt received her Ph.D., an examination of fatty alcohols in membranes, in Chemistry at Simon Fraser University, B.C., Canada, in 1986. After several years of post-doctoral work with Myer Bloom in the Physics Dept. of the University of British Columbia studying lipid/cholesterol interactions, her interest in stratum corneum membranes was sparked by Neil Kitson. She is presently an Assistant Professor jointly appointed in Physics and Molecular Biology and Biochemistry at SFU, and an Adjunct Professor of Medicine at UBC.



Neil Kitson is a dermatologist. He completed his medical training at McMaster University in Canada, and received subsequent clinical and research training in Britain, Australia, and Canada. He is an Associate Professor in the Department of Medicine, University of British Columbia.



David Moore is a native of Edinburgh, Scotland and has a B.A. in Philosophy, a B.S. in Chemistry, and a Ph.D. in Biophysical Chemistry. His research interests are in the molecular organization of lipids in biological membranes. He is currently a research scientist at International Specialty Products in New Jersey where his research is concerned with lipid organization in the skin barrier.



Joke Bouwstra received her PhD in Chemistry from the University of Utrecht in 1985, after which she was appointed as an Assistant Professor at the Leiden/Amsterdam Centre for Drug Research. In 1989 she began to study the skin lipid organisation. First she studied the lipid organisation in intact stratum corneum. Later she started to isolate the various lipid classes from the stratum corneum and studied the phase behaviour of these isolated mixtures. Simultaneously she started to study the influence of drug delivery systems on the ultrastructure of the skin using visualization methods and biophysical methods. In 1998, she was appointed as an Associate Professor.



Sven Engström finished his M Sc education in 1975, and defended his thesis *On the Interpretation of NMR Spectra of Quadrupolar Nuclei – Quantum Chemical and Statistical Mechanical Calculations* in 1981 at Lund University. He was appointed professor/lecturer of Physical Chemistry at Umeå University in 1987. He is presently Professor of Physical Chemistry at the Faculty of Pharmacy at Uppsala University.



Jan Neelissen finished his biology education in 1989 at the University of Nijmegen. He defended his thesis *‘Visualization of percutaneous steroid transport’* in 1996 at the Leiden/Amsterdam Centre for Drug Research. Currently he is Senior Research Scientist at AstraZeneca.



Torbjörn Egelrud finished his medical education in 1978. He defended his thesis *“Studies on the enzyme lipoprotein lipase”* in 1973 at Umeå University. He was appointed Professor of Dermatology and Venereology at Umeå University in 1993.