

BIOSTRUCTURAL CHEMISTRY

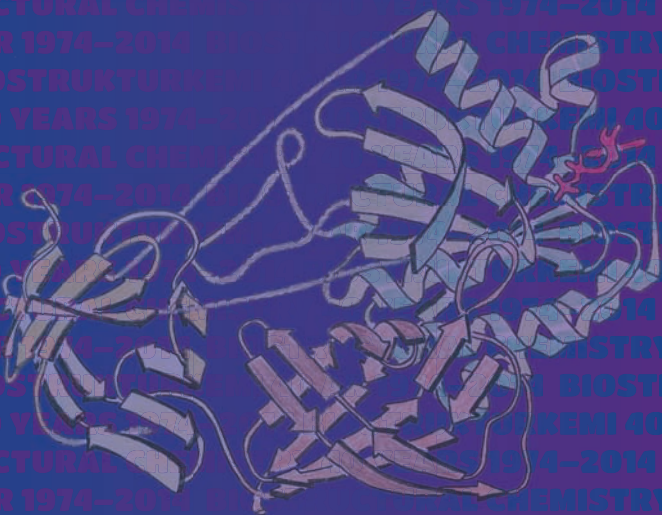
40 YEARS

1974-2014

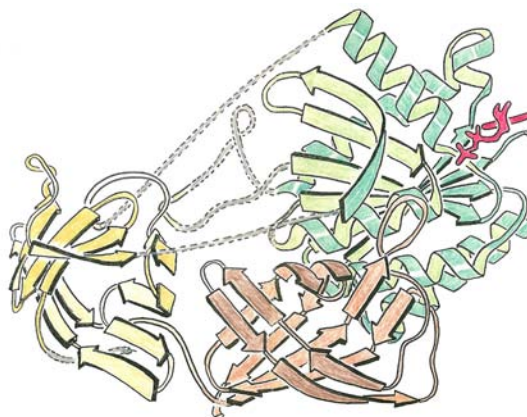


FRIDAY 21 MARCH 2014

Aarhus University, iNANO auditorium



AARHUS UNIVERSITET



Front page:
Cartoon of Elongation Factor
EF-Tu, hand drawn by
Jens Nyborg around 1983

In 1974, Professor **Brian F.C. Clark** came to Aarhus from Cambridge to form the Biostructural Chemistry Division of the Department of Chemistry. In the following years, he greatly expanded the research activities, and after starting the first protein crystallography group in Denmark he recruited two crystallographers, **Troels la Cour** and **Jens Nyborg**, to strengthen protein structure and function research. The cell and molecular biology research in the group was strongly established by the employment of **Julio Celis** and **Roger Garrett**. In 1996, the Biostructural Chemistry Division, consisting now of about 50 people, merged with the Department of Molecular Biology.

Today the group - now called Structural Biology - is the largest group of the Department of Molecular Biology and Genetics with 94 staff and students (34 scientific staff, 16 technical and administrative staff, 32 PhD students and 12 MSc students), and the research group has eight group leaders covering the following areas: structure determination of large macromolecules and macromolecular complexes; membrane proteins; RNA metabolism and decay; the protein synthesis; cellular receptors and bioinformatics; virus infection and innate immunity; macromolecular interactions of translation elongation factors; structural studies of the ribosomal regulation; biological microcables, bacterial pathogenesis, neurotransmitter transport and molecular mechanism of ageing.

Workshop organisers: **Charlotte Rohde Knudsen & Lasse Bohl Jenner**

Design of anniversary logo (and front page): **Morten Kjeldgaard**.

The logo shows the GDP-binding site, inspired by Fig. 2 from McCormick's Science article from 1985. Logo design programme: inlustro.eu.

Workshop programme: **Lisbeth Heilesen**

BIOSTRUCTURAL CHEMISTRY

1974-2014



Programme

- 09:00-09:20 Welcome and introduction to keynote speaker by Professor Emeritus **Brian F.C. Clark**
- 09:20-09:30 iNANO staff and students enter to attend the keynote lecture
- 09:30-10:15 Keynote lecture by Sterling Professor Emeritus **Peter Moore**, Yale University, Department of Chemistry, USA: *The history of Biostructural Chemistry*
- 10:15-10:45 Coffee break

STRUCTURE-FUNCTION STUDIES OF PROTEIN BIOSYNTHESIS

- 10:45-10:55 Introduction by Chairman, Professor **Gregers Rom Andersen**
- 10:55-11:20 Professor **Daniela Rhodes**, School of Biological Sciences, Nanyang Technological University, Singapore: *From tRNA to Telomerase*
- 11:20-11:45 Professor **William C. Merrick**, Case Western Reserve University, Biochemistry Department, USA: *Celebration of 40 years of structural biology: As seen mostly through the eyes of a translationalist*
- 11:45-12:10 Professor **Jan Barciszewski**, Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznan, Poland: *Catalytic RNAs for all occasions*
- 12:10-12:35 Professor **Stephen Douthwaite**, University of Southern Denmark, Department of Biochemistry and Molecular Biology: *Eukaryotes for manipulating the genomes of intractable prokaryotes*
- 12:35-12:45 Group photo of all participants
- 12:45-13:35 Lunch

STRUCTURAL BIOLOGY

- 13:35-13:45 Introduction by chairman, Associate Professor **Søren Thirup**
- 13:45-14:05 Postdoctoral Scholar **Bjørn Panyella Pedersen**, University of California, San Francisco, School of Medicine, USA: *Phosphate Uptake: Insights from Structural Biology*
- 14:05-14:25 Associate professor **Bente Vestergaard**, Dept. Drug Design and Pharmacology, Copenhagen University: *Structural investigations of the protein fibrillation process, using small angle x-ray scattering as the central tool*
- 14:25-14:45 Associate professor **René Jørgensen**, Statens Serum Institut, Copenhagen: *Hunting for unknown virulence factors in Clostridium difficile*
- 14:45-15:05 EMBL group leader **Jens Preben Morth**, Centre for Molecular Medicine Norway, Oslo, Norway: *Characterization of supramolecular Tankyrase complexes implicated in colorectal cancer, using an intrinsically disordered protein as bait*
- 15:05-15:30 Coffee

CELL BIOLOGY, CANCER AND AGEING

- 15:30-15:40 Introduction by chairman, Associate Professor **Suresh Rattan**
- 15:40-16:05 Associate Scientific Director **Julio Celis**, the Danish Cancer Society Research Center, Copenhagen: *A personal account of the early stages of proteomics at Aarhus University*
- 16:05-16:30 Dr. **Helle Færk Jørgensen**, lecturer in stem cell biology, Department of Medicine, University of Cambridge, UK: *Chromatin regulation and cell plasticity*
- 16:30-16:55 Professor **Richard Faragher**, University of Brighton, School of Pharmacy and Biomolecular Sciences, UK: *40 years of progress: biological chemistry, cellular senescence and organismal ageing*
- 16:55-17:05 Break

THE END OF THE BEGINNING

- 17:05-17:30 Professor **Poul Nissen**, Department of Molecular Biology, Aarhus University: *The end of the beginning*
- 17:30-17:35 Introduction to keynote speaker by Professor **Poul Nissen**
- 17:35-18:20 Keynote lecture by Professor **Venki Ramakrishnan** (Nobel laureate, Chemistry 2009), MRC Laboratory of Molecular Biology, Cambridge, UK: *The use of recent advances in electron microscopy to study ribosome structure.*
- 19:00 **Dinner** at the Department of Chemistry

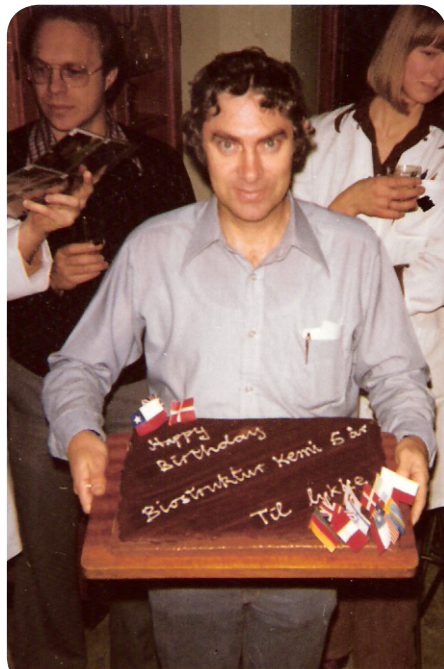
Old photos from the Biostructural Chemistry Group



Ariana Celis, Brian Clark, Francis Crick, Julio Celis, Jens Nyborg, Karen Margrethe Nielsen, Susanne W. Jensen, Gunhild Siboska, Birger Thomsen (1977)



Troels la Cour, Torben Kruse, Kosuke Morikawa, Richard Læntver, Brian Clark (1977)



1979 - 5th Anniversary



1984 - 10th Anniversary





1980



1981



1981



1982



1991

List of participants

Some of the participants only participate in the day event, while others only participate in the dinner

Emil	Agerschou	bukser.med.slips@gmail.com
Camilla	Andersen	cbandersen20@gmail.com
Carsten	Andersen	cara@novozymes.com
Gregers	Andersen	gra@mb.au.dk
Jacob Lauwring	Andersen	jla@mb.au.dk
Birte	Andkjær	b.and@stofanet.dk
Henriette Elisabeth	Autzen	henriette@mb.au.dk
Jan	Barciszewski	Jan.Barciszewski@ibch.poznan.pl
Johannes	Bauer	jbauer@mb.au.dk
Karen	Bech	karenb@mb.au.dk
Mick	Blaise	mick@mb.au.dk
Lise	Bollen	lise.bollen@rsyd.dk
Andreas	Bøggild	abp@mb.au.dk
Julio	Celis	jec@CANCER.DK
Jeryl	Cheng	cheng@mb.au.dk
Anni	Christensen	anc@mb.au.dk
Brian F.C.	Clark	bfcc@oncable.dk
Margaret	Clark	margaret.clark603@gmail.com
Troels	la Cour	tlacour@mail.dk
Angela	De Poli	angela.depoli@inano.au.dk
Birte	Degn	birtedeg@rm.dk
Børge	Diderichsen	bqd@novonordisk.com
Stephen	Douthwaite	srd@bmb.sdu.dk
Michael	Etzerodt	etzerodt@mb.au.dk
Richard	Faragher	R.G.A.Faragher@brighton.ac.uk
Rasmus	Flygaard	rasmuskf@mb.au.dk
Dorota	Focht	dof@mb.au.dk
Folmer	Fredslund	folmerf@gmail.com
Roger	Garrett	garrett@bio.ku.dk
Ceren	Gezer	c.gezer@mb.au.dk
Marianne	Glenting	mgl@tradium.dk
Manuela	Gorgel	manuela@mb.au.dk
Jonas Lindholdt	Gregersen	jlg06@inano.au.dk
Christina	Grønberg	chgroenberg@gmail.com
Michael	Gulev	crk@mb.au.dk
Kira	Gysel	kgysel@mb.au.dk
Frederik Teilfeldt	Hansen	fth@mb.au.dk
Martin	Hansen	martinhansen60@gmail.com
Harly	Hansen	harly_ash@webspeed.dk
Martin	Hansen	martinhansen60@gmail.com
Harly	Hansen	harly_ash@webspeed.dk
Nils Jakob	Hansen	nha@vipergen.com

Peter Kamp	Hansen	pkh@novozymes.com
Rune	Hartmann	rh@mb.au.dk
Lisbeth	Heilesen	lh@mb.au.dk
Florian	Hilbers	hilbers@mb.au.dk
Tine	Hjorth	rattan@mb.au.dk
Susanne	Hohn	ho@rosborg-gym.dk
Maja	Holch Nielsen	mhn0904@mb.au.dk
Mikkel	Ibsen	msi05@mb.au.dk
Helle	Jakobsen	helle.jakobsen@fi.au.dk
Dovile	Januliene	dovile@mb.au.dk
Lasse	Jenner	ljenner@mb.au.dk
Janni Mosgaard	Jensen	jmj@sport.au.dk
Erik Østergaard	Jensen	ej@mb.au.dk
Mads Gravers	Jeppesen	mads_gravers_jeppesen@hotmail.com
Claire	Jones	claire.jones2@nhs.net
Michael	Jones	m.d.jones@imperial.ac.uk
Anders	Jørgensen	anders.laegaard.joergensen@gmail.com
Helle Færk	Jørgensen	hfj22@cam.ac.uk
René	Jørgensen	RENJ@ssi.dk
Sanne	Jørgensen	sanne.jorgensen@hotmail.com
Gitte Kaiser	Hartvigsen	gkh@sport.au.dk
Jesper Lykkegaard	Karlsen	jlk@mb.au.dk
Rune	Kidmose	rtkidmose@gmail.com
Jørgen	Kjems	jk@mb.au.dk
Tetyana	Klymchuk	tetyanak@mb.au.dk
Charlotte	Knudsen	crk@mb.au.dk
Ulla Breth	Knudsen	bis@adm.au.dk
Sanne Møller	Knudsen	smkn@novonordisk.com
Diana	Kowalik	diana.zina1@gmail.com
Antoni	Kowalski	antoni.kowalski@umed.lodz.pl
Peter	Kristensen	pk@mb.au.dk
Torben	Kruse	torben.kruse@rsyd.dk
Marie	Kveiborg	marie.kveiborg@sund.ku.dk
Sigrid Thirup	Larsen	sigrid89@inano.au.dk
Charlotte	Lauridsen	silotte75@gmail.com
Nick	Laursen	nsl@mb.au.dk
Ann	Lund	al@viauc.dk
Joseph	Lyons	lyons@mb.au.dk
Kirsten	Malmos	kirsteng@inano.au.dk
Francisco	Mansilla	fmca@ucsyd.dk
Kjeld	Marcker	km@mb.au.dk
Peter	Markvardsen	pmarkvardsen@zbm-patents.eu
Karen	Marx	kam@mb.au.dk
Anne-Merete	Mathiesen	anne-merete@sol.dk
Gabriele	Meloni	gmeloni@mb.au.dk
William C.	Merrick	wcm2@case.edu

Durita	Mohr	crk@mb.au.dk
Peter	Moore	peter.moore@yale.edu
Jens Preben	Morth	j.p.morth@ncmm.uio.no
Simon Arnold	Mortensen	simon.arnold.mortensen@gmail.com
Wojciech	Paslowski	wojpas@mb.au.dk
Jannik Nedergaard Pedersen		janniknp@msn.com
Pia Møller	Martensen	pmm@mb.au.dk
Jeppe	Nielsen	jnielsen20@gmail.com
Søren Jensby	Nielsen	sjensbynielsen@gmail.com
Rikke C	Nielsen	RKCN@novonordisk.com
Brian Bech	Nielsen	bis@adm.au.dk
Karen Margrethe	Nielsen	kmn@mb.au.dk
Jakob	Nilsson	jakob.nilsson@cpr.ku.dk
Poul	Nissen	pn@mb.au.dk
Hanne	Norsgaard	hanne.norsgaard@gmail.com
Heidi Gytz	Olesen	hgytz@mb.au.dk
Claus	Olesen	Clausol@mb.au.dk
Daniel	Otzen	dao@inano.au.dk
Bjørn Panyella	Pedersen	bjopp@msg.ucsf.edu
Lotte Thue	Pedersen	lottetp@mb.au.dk
Anne	von Philipsborn	avp@mb.au.dk
Rasmus	Pihl	rasmuspihl@msn.com
Joachim	Pold	joachimpolc@hotmail.com
Venki	Ramakrishnan	ramak@mrc-lmb.cam.ac.uk
Louise Baltser	Rasmussen	lbr@mb.au.dk
Suresh	Rattan	rattan@mb.au.dk
Daniela	Rhodes	rhodes@mrc-lmb.cam.ac.uk
Emeline	Ricciuti	fth@mb.au.dk
Cagla	Sahin	caglas_123@hotmail.com
Paulina	Seweryn	crk@mb.au.dk
Gunhild	Siboska	ges@mb.au.dk
Sofiia	Sirotkina	sofiias@mb.au.dk
Nicholas	Sofos	sofos@mb.au.dk
Thomas	Sorensen	thomas.sorensen@diamond.ac.uk
Dorthe	Strandbygård	dst@mb.au.dk
Anne	Strømgård	astg@novonordisk.com
Kristian	Stødkilde-Jørgensen	kst@biokemi.au.dk
Khaled	Taj	kht@mb.au.dk
Søren	Thirup	sth@mb.au.dk
Jakob	Ulstrup	jakob.ulstrup@biokemi.au.dk
Lan Bich	Van	lbv@mb.au.dk
Birte	Vester	b.vester@bmb.sdu.dk
Bente	Vestergaard	bente.vestergaard@sund.ku.dk
Friedrik	Wikman	fpw@ki.au.dk
Jaslyn	Wong	meiwong@mb.au.dk
Laure	Yatime	lay@mb.au.dk

Sponsors

The workshop organisers gratefully acknowledge support from the companies below and the back side of this programme.



1999: The 25th Anniversary of the group - at Sandbjerg



2006: Group workshop at Spetses Island, Greece (Brian's 70th birthday)



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