

Curriculum vitae for Ian Max Møller

Born - 7 December, 1950

Citizenship - Danish

Marital status – Married. Two daughters of 23 and 19 years.

Professional address:

Dr. Ian Max Møller
Head of Department
Department of Genetics and Biotechnology
Research Centre Foulum
Faculty of Agricultural Sciences
University of Aarhus
P.O. Box 50
Blichers Allé 20
DK-8830 Tjele, Denmark

Tel.: +45-8999 1302
Fax: +45-8999 1300
E-mail: ian.max.moller@agrsci.dk

Academic qualifications

1969	High School Exam, Copenhagen, Denmark
1978	Candidate of Science in biochemistry at University of Copenhagen, Copenhagen, Denmark
1981	Ph.D. in plant biochemistry at Imperial College of Science and Technology, University of London, London, UK
1983	Docent (≈ associate professor) in biochemical plant physiology at Department of Plant Physiology, University of Lund, Lund, Sweden
2000	Full professor at Department of Plant Physiology, Lund University

Positions

1981-1987	Managing editor of the international journal <i>Physiologia Plantarum</i> (50% of full time) Research associate financed by the Swedish Natural Science Research Council (NFR) (50% of full time)
1987-1993	Associate professor (special research position under the NFR "Rådsforskartjänst")
1991 (4 months)	Visiting scientist with Prof. Roland Douce, CENG, Grenoble, France
1993-2000	Lecturer, Lund University
2000-2001	Professor in Plant Physiology, Lund University
2000-2004	Professor in Plant Biochemistry, Risø National Laboratory

2005-2006	Professor in Plant Biochemistry, Department of Agricultural Sciences, Royal Veterinary and Agricultural University, Copenhagen
2007-	Head of Department, Department of Genetics and Biotechnology, Research Centre Foulum, Faculty of Agricultural Sciences, University of Aarhus

Present research interests

- Protein oxidation as a way to monitor oxidative stress in plant cells
- Monitoring the temporal and spatial distribution of Reactive Oxygen Species (ROS) using confocal laser microscopy
- Protein phosphorylation in mitochondrial signal transduction
- Free and bound NAD(P)H in cellular homeostasis

Publications

In total 154 publications published including 86 primary papers in peer-reviewed journals, 25 reviews mostly in peer-reviewed journals, 2 methods papers, 3 textbook chapter and 5 edited books or special journal issues. **These publications have been cited a total of more than 3000 times (Web of Science, February 2007)**
(For further details see separate List of Publications)

Editor/reviewer for journals, publishers and research councils

- Editor for Physiologia Plantarum since 1981 (about 1000 edited manuscripts)
- Reviewer for about 45 international journals, research councils and publishers including all of the leading plant physiology journals and some leading biochemistry journals.
- Member of plant biology committee under FORMAS (Swedish Council for Environment, Agricultural Sciences and Spatial Planning) (2006-)

International meetings

Participated in a total of more than 90 meetings

Invited speaker, chairman and/or organizer of more than 50 meetings

Major contributions 2004-2007:

Plant Stress Network, Research Centre Flakkebjerg, Denmark, 30 January, 2004

Invited lecture (20 min)

Møller, I.M. Oxidised proteins as stress indicators

Nordic Meeting on Plant Respiration and Plant Mitochondria, 4-6 June, 2004, Umeå, Sweden

Invited lecture (30 min)

Marina R. Kasimova, Klaas Krab, Jurga Grigiene, Peter E. Andersen, Peter Hagedorn, H. Flyvbjerg, Ian M. Møller "Estimating free and bound NAD(P)H in isolated mitochondria"

Invited lectures (20 min)

- Brian K. Kristensen and Ian M. Møller "The proteomics of plant mitochondria"
- Izabela M. Juszczuk, Brian K. Kristensen and Ian M. Møller "Protein phosphorylation in plant mitochondria"
- Cecilie K. Ytting, Brian K. Kristensen, Ana R. Matos, Francois Moreau and Ian M. Møller "The influence of polyunsaturated fatty acids in the membrane phospholipids on mitochondrial protein oxidation"
- Agnieszka M. Michalecka, Å. Staffan Svensson, Fredrik I. Johansson, Stephanie C Agius, Axel Brennicke, Stefan Binder, Ian M. Møller and Allan G. Rasmusson - Localisation and catalytic functions of alternative NAD(P)H dehydrogenases in plant mitochondria.
- Fredrik I. Johansson, Agnieszka M. Michalecka, Ian M. Møller and Allan G. Rasmusson - Permeabilisation of isolated plant mitochondria.
- Sandra Matic, Ian M. Møller, Allan Rasmusson and Susanne Widell - Selective permeabilisation of plasma membrane and mitochondria in tobacco suspension cells.

The 14th FESPB Congress, Cracow, Poland, 23-27 August, 2004

Chairman of Mini-Symposium "Respiration"

Invited lecture (30 min)

Møller, I.M. and Kristensen, B.K. The proteomics of plant mitochondria in response to oxidative stress

Invited lecturer at Xishuangbanna Tropical Botanical Garden, Chinese Academy of Sciences, Mengla, Yunnan, China, 15-30 October, 2004

Six lectures (each 45 min) on plant respiration, plant mitochondria and proteomics

ICPMB 2005, Obernai, France, 28 May – 2 June, 2005

Invited lecture (30 min)

Møller, I.M., Kasimova, M.R., Krab, K., Grigiene, J., Hagedorn, P.H., Andersen, P.E. & Kristensen, B.K. Free and bound NADH in plant mitochondria

Poster

Matic, S., Geisler, D.A., Møller, I.M., Widell, S. and Rasmusson, A.G. Alamethicin permeabilises plasma membrane and mitochondria but not tonoplast in tobacco suspension cells

XXII Congress of the Scandinavian Plant Physiology Society, NorFA Symposium: Low Temperature Stress and Acclimation, Umeå, Sweden, 15 June, 2005

Invited lecture (30 min)

Matic, S., Geisler, D., Møller, I.M., Widell, S. and Rasmusson, A.G. A simple method for measuring biochemical processes inside intact cells

Invited lecture (20 min)

Kristiansen, K.A., Møller, I.M. & Schulz, A. Spatial and temporal resolution of plant stress responses using confocal laser scanning microscopy and two-photon microscopy

New Tools and Techniques for Protein Research organized by The Proteomics Alliance (Sigma-Aldrich), Odense 4 October, 2005 and Copenhagen, Denmark 5 October, 2005

Invited lecture (35 min)

Møller, I.M. Proteomics of (plant) mitochondria

Protein Oxidation Workshop, DTU, Lyngby, Denmark, 29 November, 2005

Invited lecture (45 min)

Møller, I.M. Reactive oxygen species and protein oxidation in (plant) mitochondria

Plant Stress Network, Odense, Denmark, 8-9 February, 2006

Invited lecture (25 min)

Møller, I.M. Protein oxidation in plants – the mitochondrion as a case story

8th International Conference on Membrane Redox Systems, Szeged, Hungary, 4-8 April, 2006

Invited plenary lecture (40 min)

Møller, I.M. "Protein oxidation as a plant stress indicator – The mitochondrion as a model"

12th Meeting of the International Study Group for System's Biology, Trakai, Lithuania, 14-17 September, 2006

Invited lecture (30 min)

Kasimova, M.R., Krab, K., Grigiene, J., Hagedorn, P.H., Andersen, P.E., Kristensen, B.K. & Møller, I.M. The role of free and bound NAD(P)H in metabolic regulation

"Botaniker-Tagung", University of Hamburg, Germany, 3-7 September, 2007

Invited lecture (30 min)

Møller, I.M. Oxidative damage to cellular components

Administrative experience

1981-1987	Managing Editor of the international journal <i>Physiologia Plantarum</i> , full-time for 6 months and half-time for 6 1/2 years. Acting Editor-in-Chief for a total of 5 months
1989-1992	Member of the department board
1990-1996	Chairman, Publications Committee of the FESPP, member of Executive Committee and editor of FESPP Newsletter
1992-1998	Head of Department (ca 40 employees and Ph.D. students)
1994-1998	Director of Studies in Plant Physiology
1998-1999	Head of Section of Plant Physiology (ca 25 employees and Ph.D. students)
2007-	Head of Department (see above) – 160 employees

Teaching

Undergraduate

1981-1993	Lectures equivalent to 1-2 years full-time teaching Responsible for several courses Chapter for a plant physiology textbook published in Spanish (Publication no. 90)
1994-1998	Half-time teaching and responsible for organizing all teaching in Plant Physiology ('Studierektor')
1995-1998	Member of the board of Department of Undergraduate Teaching in Biology, Lund University
1998-2000	Half-time teaching
2002	Chapter for a plant physiology textbook (Taiz & Zeiger) (Publication no. 131)
2000-2004	Approx. 5 lectures/year on plant respiration and proteomics at various universities
2005-2006	Approx 10 lectures/year at KVL
2006	Chapter for a plant physiology textbook (Taiz & Zeiger) (Publication no. 147)

Postgraduate students

1984-1987	Lena E. Körner Thesis: "Uptake of Nickel in Barley (<i>Hordeum vulgare</i> L.) Roots"
1987-1995	Christina Lind-Halldén Thesis: "Characterization of a Plant Mitochondrial Mutant: Cytoplasmic Male Sterility in Sugar Beet"
1989-1994	Allan G. Rasmussen Thesis: "Turnover of Matrix NADPH and NADH in Plant Mitochondria"
1991-1996	Kenneth M. Fredlund Thesis: "NAD(P)H Dehydrogenases in Plant Membranes"
1996-2001	Ana M.P. Melo, Porto, Portugal (co-supervisor) Thesis: "Characterisation of NAD(P)H dehydrogenases from <i>Neurospora</i> mitochondria"
1996-2001	Stephanie C. Agius Thesis "Pyridine Nucleotides in Plant Mitochondria"
1998-2002	Å. Staffan Svensson (assistant supervisor) Thesis: "Respiratory NAD(P)H dehydrogenases of plants - Gene identity and expression in response to light and cold"
1998-2004	Fredrik I. Johansson (main supervisor) Thesis: "Gene characterisation, activity quantification and physiological responses of mitochondrial alternative NAD(P)H dehydrogenases"
1999-2004	Agnieszka Michalecka (main supervisor) Thesis: "Alternative NAD(P)H dehydrogenases in plant mitochondria – localisation, catalytic functions and physiological roles"
2000-2004	Sandra Matic (co-supervisor)

2002-2005	Thesis: "Macromolecular interactions - Consequences on carbohydrate metabolism" Danielle Keller (co-supervisor)
2003-2006	Thesis: "Supported bilayers as models of biological membranes" Peter H. Hagedorn (co-supervisor)
2005-	Thesis: "Approaches to systems biology" Kim A. Kristiansen (co-supervisor) Project: The spatial and temporal distribution of Reactive Oxygen Species studied by confocal laser microscopy