

Curriculum vitae for Ian Max Møller

Born - 7 December, 1950

Citizenship - Danish

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

Professional address:

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Academic qualifications

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| 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

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| 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 |

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| 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 Grigienė, 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., Grigienė, 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., Grigienė, 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

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| 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

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| 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

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| 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. Rasmusson 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) |

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