



**CORNELIS JOHANNES  
FORRENDINIS VAN NOORDEN,  
PH.D.**

*Full Professor,  
Cell Biology & Histology,  
Academic Medical Center,  
Amsterdam The Netherlands*

# BIOGRAPHY

- **1964-1971** High school education gymnasium- $\beta$  at the Koningin Wilhelmina Lyceum, Oostburg
- **1971-1978** Medical Biology at the Univ. of Amsterdam, University study (cum laude)
- **1978-1986** Lecturer of the Dept. of Cell Biology & Histology, Faculty of Medicine, Univ. of Amsterdam
- **1983** Thesis, promotor: Prof. Dr. J. James, co-promotor: Dr. J. Tas

## *Quantitative cytochemistry of glucose-6-phosphate dehydrogenase activity*

- **1986-1997** Assoc. Professor of the Dept. of Cell Biology & Histology, Faculty of Medicine, Univ. of Amsterdam
- **1993-present** Chairman of the Department of Cell Biology & Histology, Faculty of Medicine, University of Amsterdam
- **1997-present** Full Professor of the Dept. of Cell Biology & Histology, Faculty of Medicine, Univ. of Amsterdam
- **2010-present** Co-chairman of van Leeuwenhoek Center for Advanced Microscopy

# ORGANIZATION AND OTHER FUNCTIONS

- ◉ **1983, 1986- present** Member of the executive committee of the Dept. of Cell Biology and Histology
- ◉ **1986-1993 and 1995** Vice-chairman of the Department
- ◉ **1993-1995 and 1996** Acting chairman of the Department
- ◉ **1997-present** Chairman of the Department
- ◉ **1980-1997** Member of the research committee of the Department
- ◉ **1991-1992** Chairman of the research committee of the Department
- ◉ **1986-2000** Member of the education committee of the Department
- ◉ **1983-1990** Vice-member of the Faculty committee
- ◉ **1990-1999** Member of the education committee of the curriculum Health Informatics
- ◉ **1990-1999** Member of the executive education committee Health Informatics

- ◉ **1992-1994** Member of the committee for the guidance of PhD students of the Faculty of Medicine
- ◉ **1993-1994** Member of the committee for restructuring the curriculum Health Informatics
- ◉ **1998-2000** Member of the education committee of the curriculum Medicine
- ◉ **1999-2004** Vice chairman of the Division Laboratory Specialisms of the Academic Medical Center
- ◉ **2004-2005** Member of the Teaching Institute of Medicine of the Faculty of Medicine, University of Amsterdam
- ◉ **2004-2005** Chairman of the implementation committee of the new curriculum Medicine, University of Amsterdam
- ◉ **2005-present** Supervisor of the honours bachelors and honours masters of the curriculum medicine, University of Amsterdam
- ◉ **1994-present** Chairman or member of 20 selection committees for professorships at the AMC

- ◉ **1987-present** Member of promotion (PhD) committees of 130 PhD students
- ◉ **1989-1994** Secretary of the Section “Fundamental Cytochemistry and Cytometry” of the Dutch Organisation of Research
- ◉ **1995-1999** Chairman of the Section “Fundamental Cytochemistry and Cytometry” of the Dutch Organisation of Research
- ◉ **1987-1992** Member of the Histochemistry Section Committee, Royal Microscopical Society, England
- ◉ **1989-1990** Honorary Secretary of the Histochemistry Section, Royal Microscopical Society, England
- ◉ **1990-1991** Chairman of the Histochemistry Section, Royal Microscopical Society, England
- ◉ **1992-1993** Vice-chairman of the Histochemistry Section, Royal Microscopical Society, England
- ◉ **1989-1998** Member of Council, Education Committee and Science Advisory Committee, Royal Microscopical Society, England

- ◉ **1991-1996** Honorary Secretary of Science, Royal Microscopical Society, England
- ◉ **1995-2008** Member of the board of the Society for the Advancement of Physics, Medicine and Surgery, Amsterdam
- ◉ **1996-1998** Vice-president, Royal Microscopical Society, England
- ◉ **1996-2000** Member of the Executive Com. of the Federation of Histochemical and Cytochemical Societies
- ◉ **1998-2008** Member of Council of the Histochemical Society
- ◉ **1998-2005** Member of the Spinoza Committee of the Amsterdam University Society
- ◉ **1999-present** Member of Council of the Society for Histochemistry
- ◉ **2000-2004** President of the Federation of Histochemical and Cytochemical Societies
- ◉ **2003-2004** President of the Society for Histochemistry



- ◉ **2004-2005** President of the Histochemical Society
- ◉ **2004-2011** Secretary of the Society for Histochemistry
- ◉ **2005-present** Secretary of the Spinoza committee of the Amsterdam University Society
- ◉ **2008-present** Chairman of the Society for the Advancement of Physics, Medicine and Surgery. Amsterdam





- ◉ **1991-1997** Reviews-editor Histochemical Journal
- ◉ **1992-1998** Editor Acta Histochemica
- ◉ **1999-2004** Managing editor Acta Histochemica
- ◉ **1999-present** Associate editor of the Journal of Histochemistry and Cytochemistry
- ◉ **1986-2004** Member Editorial Board The Histochemical Journal
- ◉ **1990-1997** Member Editorial Board Progress in Cell Research
- ◉ **1990-1999** Member Editorial Board Micron
- ◉ **1993-1999** Member Editorial Board European Journal of Laboratory Medicine
- ◉ **1993-1999** Member Editorial Board Folia Histochemica et Cytobiologia
- ◉ **1997-1999** Member Editorial Board Journal of Histochemistry and Cytochemistry



- ◎ **1982-present**

Reviewer of over 100 peer-reviewed scientific journals

# ORGANISATION OF CONGRESSES AND SYMPOSIA

- ◉ **Symposium “Cytophotometry”** at the 29e congress of the Gesellschaft für Histochemie, Basel, Switzerland, 23 September 1987; 40 participants
- ◉ **Symposium “Microdensitometry of enzyme kinetics”** organized for The Royal Microscopical Society, York, England, 13-14 September 1988; 40 participants
- ◉ **Symposium “Image analysis and quantification in histochemistry”** at MICRO “90 of the Royal Microscopical Society, London, England, 2 July 1990 jointly with Dr. G.M. Lawrence; 60 participants
- ◉ **Symposium “Enzyme histochemistry including cerium methods”** at MICRO “90 of the Royal Microscopical Society, London, England, 2 July 1990 jointly with Prof. Dr. R. Gossrau; 100 participants
- ◉ **Scientific programme of the Congress “MICRO 92”**, London, England, 6-9 July 1992; 300 participants
- ◉ **Member of the organization committee of the “9th International Congress of Histochemistry and Cytochemistry”**, Maastricht, 30 August - 5 September 1992; 700 participants



# ORGANISATION OF CONGRESSES AND SYMPOSIA

- ◉ **Symposium “Enzyme Histochemistry: in situ study of cell metabolism”** at the 9th International Congress of Histochemistry and Cytochemistry”, Maastricht, 2 September 1992; 200 participants
- ◉ **Scientific programme of the Congress “MICRO 94”**, London, England, 12-15 September 1994; 350 participants
- ◉ **Workshop “Detection of reactive oxygen species”**, jointly with Dr. W.M. Frederiks, at the 36th Symposium of the Society for Histochemistry, Heidelberg, Duitsland, 22 September 1994; 80 participants
- ◉ **Workshop “4D-Imaging: 3D-imaging of liver cells”**, jointly with Prof.Dr. R. van Driel, Amsterdam, 24 October 1994; 100 participants
- ◉ **Workshops of the NWO Section “Fundamental Cytochemistry and Cytometry”**, jointly with the section “Automatische Herkenning van Weefsels, Cellen en Celorganellen”, Groesbeek or Venray, 1989 - 1994; 60-100 participants



# ORGANISATION OF CONGRESSES AND SYMPOSIA

- ◉ **Workshop “CC531 colon cancer metastasis model”**, Groesbeek, 19-20 May 1995; 30 participants
- ◉ **Scientific programme of the Congress “CYTO 95”**, Southampton, England, 3-7 July 1995; 200 participants
- ◉ **Workshop “CC531 colon cancer metastasis model”**, Amsterdam, 22 May 1996; 25 participants
- ◉ **Scientific programme of the Congress “MICRO 96”**, London, England, 2-4 July 1996; 200 participants
- ◉ **Scientific programme of the Congress “CYTO 97”**, York, England, 7-9 July 1997; 100 participants
- ◉ **Scientific programme of the Congress “MICRO 98”**, London, England, 7-9 July 1998; 300 participants
- ◉ **Scientific programme of the Congress “CYTO 99”**, York, England, 3-8 September; 100 participants



# ORGANISATION OF CONGRESSES AND SYMPOSIA

- ◉ Member of the organizing committee of the “11th International Congress of Histochemistry and Cytochemistry” (IHC), York, England, 3-8 September 2000; 600 participants
- ◉ Symposium “Non-invasive microscopical techniques for living cells and tissues”, Amsterdam 22 February 2001; 50 participants
- ◉ Session “Histochemical and Immunohistochemical Advances in Cancer Pathology”, jointly with Prof.Dr. N. Nemoto, at the 6th Joint Meeting of the Japan Society of Histochemistry and Cytochemistry and the Histochemical Society, Seattle, WA, USA, 18-21 July 2002, 150 participants



# ORGANISATION OF CONGRESSES AND SYMPOSIA

- ◉ **44th Symposium of the Society for Histochemistry: “Proteomics in situ: imaging proteins at work”** Vlissingen, 25-29 September 2002; 100 participants
- ◉ Member of the organizing committee of the **“Van Leeuwenhoek Microscopy Lectures”**. Amsterdam, 22 May 2003; 100 participants
- ◉ Member of the organizing committee of the International Medical Summerschool **“Health Informatics: the role of informatics in health care”**. Amsterdam, 11-24 July 2004; 20 participants
- ◉ **Session “Visualizing proteolysis”**, at the 12th International Congress of Histochemistry and Cytochemistry (IHC), San Diego, CA, USA, 24-28 July 2004
- ◉ Joint meeting of the Histochemical Society and the Society for Histochemistry: **“Proteomics in situ: imaging proteins at work, part II”**. Noordwijkerhout, 27-30 April 2005



# PRIZES AND SPECIAL LECTURES

- ◉ **Fonds Reich Prize** of the City of Amsterdam in 1985 for the publication “Histochemistry and cytochemistry of glucose-6-phosphate dehydrogenase” (Progr. Histo-chem. Cytochem. 15/4 (1984) 1-85)
- ◉ **Robert Feulgen Prize of the Gesellschaft für Histochemie (Basel, Zwitterland)** in 1987 together with Dr. R.G. Butcher, Midhurst, England “in recognition of their important methodological contributions towards the validation and quantification of enzyme histochemical reactions”
- ◉ **Royal Microscopical Society Lecture** held at the Scottish Microscopy Symposium on 16 November 1994, entitled “Microscopical analysis of protease activity”.
- ◉ **Piet Van Duijn Prize** of the International Federation of Histochemical and Cytochemical Societies (Kyoto, Japan) in 1996 “in recognition of his contributions in scientific research and education in histochemistry and cytochemistry”.
- ◉ **Winner in 1998 and 1999 of the prize of the student association for the best teacher** in the curriculum Medical Informatics of the University of Amsterdam.
- ◉ **Nominated in 2001, 2002, 2005, 2006 and 2008 for the prize of the student association for the best teacher** in the curriculum Medicine of the University of Amsterdam.
- ◉ **Winner in 2003 and 2004 of the prize of the student association for the best teacher** in the curriculum Medicine of the University of Amsterdam.
- ◉ **2008: Winner of the David Glick Award of the International Federation of Histochemical and Cytochemical Societies** in recognition of his work in histochemistry.





# PUBLICATIONS

- ◉ Over **300 publications** in peer-reviewed journals among which **Cancer Cell (2010)**, **Nature Biotechnology (2007)**, **Pharmacological Reviewers (2001)** and **39 publications** in the Journal of Histochemistry and Cytochemistry



# TEACHING

## Curriculum medicine

- ◉ **1986-1992** Representative of the Department in module 16: “Biological regulation mechanisms”
- ◉ **1991-1994** Coordinator module 15: “Food and gastroenterological tract”
- ◉ **1991-2004** Representative of the Department in module 12: “Kidney and milieu intérieur”
- ◉ **1993-2004** Representative of the Department in module 1: “Health and disease”
- ◉ **1995-2004** Coordinator module 2: “From molecule to cell”
- ◉ **1995-2010** Representative of the Department in module 16: “Food and gastroenterological tract”
- ◉ Lectures, working groups, practicals in general cell biology and histology, and histology of kidney, lung,



## ◎ Curriculum medical informatics

- ◎ **1990-1993** *Coordinator* module 6: “Structure function of the cell”
- ◎ **1993-1994** *Coordinator* module 1: “Health and disease”, incl. “Structure and function of the cell”
- ◎ **1992-1993** *Coordinator* scientific module
- ◎ **1998-2001** *Representative of the Department* in module 13: “Information in images and signals”
- ◎ Lectures, working groups, and practicals “Structure and function of the cell”, “kidney”, “lung” and “endocrine system”. 7

## ◎ AIO courses for PhD students

- ◎ **1985 - 1987** Organization of the course “**Modern Enzyme and Immunohistochemical Methods**”, in cooperation with Dr. C.D. Dijkstra, Department of Cell Biology and Immunology, Free University Amsterdam. Lectures and practicals
- ◎ **1991, 1992, 1993** Organization of the course “**Experimental Pathobiology**”, in cooperation with Dr. P.K. Das, Department of Pathology, AMC. Lectures and practicals
- ◎ **1988-1996** Organization of the course “**Methods and techniques in cell biology**”. Lectures and practicals
- ◎ **1992** Lectures in “**Quantitative histochemistry**” in the AIO course, organized by the Center of Liver and Intestinal Disease
- ◎ **1999-present** Organization of the course “**Anatomy, histology and pathology of the house mouse**”. Lectures and practicals
- ◎ **2001-2008** Organization of the course “**In the Footsteps of Antoni van Leeuwenhoek**”. Lectures and practicals



## ○ Biomedical sciences

- **1985-1998** Organization of the course “**Enzyme histochemistry**” for students Medical Biology of the Faculty of Biology. Lectures and practicals
- **2011-present** Organization of the course ‘**Clinical Cell Biology**’ for master students Biomedical sciences
- Summerschool
- **1993** Lecture “**Parenchymal and non-parenchymal liver cells**” in the Summerschool on “Liver and intestinal diseases”
- **2004, 2005** Lectures “**Functional histology of the gastrointestinal tract**” and “**Cancer cell-stroma interactions**” in the Summerschool “Gastro-Intestinal Oncology”.
- Amsterdam University College
- **2011-present** Organization of the course ‘**Cell Biology in Human Pathology**’ for bachelor students of the Amsterdam University College

## ○ Honours curriculum for medical students

- **2006-present** Supervisor of the honours curriculum for medical students  
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- **2006-present** Member of the Honours Committee of the University of Amsterdam



# VISITING PROFESSORSHIP

- ◉ **1991** Visiting Professor at the University of Pavia, Italy. Course of two weeks on “Analysis of enzyme reactions in cells and tissues by quantitative histochemistry”
- ◉ **1993** Visiting Professor at the University of Bologna, Italy. Course of one week on “Quantitative enzyme histochemistry in pathology and toxicology”
- ◉ **2004** Visiting Professor at the Akdeniz University of Antalya, Turkey. Lectures and a master class.



## MAIN LINES OF RESEARCH

- ◉ fundamental aspects of quantitative histochemical analysis of enzyme reactions in unfixed tissues and cell preparations.
- ◉ In situ analysis of (early) metabolic changes during carcinogenesis, cholestasis and ischemia in the liver, particularly with respect to glucose metabolism.
- ◉ In situ analysis of metabolic changes in cartilage in experimental animal models of arthritis and especially of lysosomal proteases in chondrocytes.
- ◉ posttranslational regulation mechanisms of metabolism in liver and intestinal cells under physiological and pathophysiological conditions as part of the research program “Metabolism and Nutrition” of the Academic Medical Center.
- ◉ In situ analysis of protease activities, of reactive oxygen species-producing and -consuming enzyme systems is carried out with quantitative histochemical and cytochemical methods using digital microscopy and confocal scanning laser microscopy.

