



**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-β 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**” (ICHC), 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.

