# Prof. Pierluigi Nicotera, MD PhD

German Centre for Neurodegenerative Diseases (DZNE)



#### German Centre for Neurodegenrative Diseases (DZNE), Scientific Director and Chairman

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## **Research Expertise**

Prof. Nicotera's main research focus is on molecular mechanisms of cell death and neurodegeneration.

# Education / Training

University of Pavia, Medical School, Italy, Cardiology Consultant, 1987 Karolinska Institute, Stockholm, Biochemical Toxicology PhD, 1986 University of Pavia, Medical School, Italy, Medicine MD, 1982

## Appointments / Positions Held

April 2009 - present

Scientific Director & Chairman of the Executive Board, German Centre for Neurodegenerative Diseases (DZNE), Bonn, Germany

2002 - 2009

Director of the British Medical Research Council Toxicology Unit and Honorary Professor of Neuroscience (Dept. of Cell Physiology & Pharmacology), University of Leicester

2005 - 2008

Teaching Professor of Toxicology, Faculty of Pharmacy University of Siena, Italy

1996 - 2002

Foreign Adjunct Professor in Toxicology, Karolinska Institute, Stockholm, Sweden

#### 1995 - 2000

C4 Professor of Molecular Toxicology, University of Konstanz, Germany

1989 - 1994

Senior University Lecturer, Karolinska Institute, Stockholm, Sweden

## 1992

Docent in Molecular Toxicology, Karolinska Institute, Stockholm, Sweden

#### 1986 - 1989

Research assistant Professor, Department of Karolinska Institute, Stockholm, Toxicology, Sweden

## Honors / Awards

2013

The Chancellor's Award Lecture in Neuroscience at LSU Neuroscience Center of Excellence, New Orleans, USA 2012

Honorary Citizenship and Key to the City of New Orleans 2010

The Cardano Prize University of Pavia and Rotary Club Pavia 2003

The Chancellor's Award Lecture in Neuroscience at LSU Neuroscience Center of Excellence, New Orleans, USA 2002

"Molecular switches in neuronal cell death" Lecture at the 37th Nobel Conference on Apoptosis, Stockholm

1999

The Jacob Hooisma Honorary Lecture at the 7th Meeting of the International Neurotoxicology Association, Leicester 1995

The EUROTOX Award Lecture, 1st G. Zbinden Memorial Lecture Award, Prague

1992

"Nuclear Calcium Signalling" Lecture at the 20th Nobel Conference on Calcium Signalling, Saltsjöbaden, Sweden 1992

The International Life Science Institute Research Foundation U.S.A. (ILSI), award

## 10 Most Relevant Publications for Prof. Pierluigi Nicotera

1. Michod, D., Bartesaghi, S., Khelifi, A., Bellodi, C., Berliocchi, L., **Nicotera P**., and Salomoni, P. (2012) Calcium-Dependent Dephosphorylation of the Histone Chaperone DAXX Regulates H3.3 Loading and Transcription upon Neuronal Activation. Neuron 74(1):122-135

2. Ziviani E, Lippi G, Bano D, Munarriz E, Guiducci S, Zoli M, Young KW, **Nicotera P**. 2011. Ryanodine receptor-2 upregulation and nicotine-mediated plasticity. EMBO J 30(1): 194-204.

3. Regad T, Bellodi C, **Nicotera P**, Salomoni P. 2009. The tumor suppressor Pml regulates cell fate in the developing neocortex. Nat Neurosci 12: 132-40.

4. Berliocchi L, Fava E, Leist M, Horvat V, Dinsdale D, Read D, **Nicotera P**. 2005. Botulinum neurotoxin C initiates two different programs for neurite degeneration and neuronal apoptosis. J Cell Biol 168: 607-18.

5. Bano D, Young KW, Guerin CJ, Lefeuvre R, Rothwell NJ, Naldini L, Rizzuto R, Carafoli E, **Nicotera P**. 2005. Cleavage of the plasma membrane Na+/Ca2+ exchanger in excitotoxicity. Cell 120: 275-85.

6. Orrenius S, Zhivotovsky B, Nicotera P. 2003. Regulation of cell death: the calcium- apoptosis link. Nat Rev Mol Cell Biol 4: 552-6.

7. Schierle GS, Hansson O, Leist M, **Nicotera P**, Widner H, Brundin P. 1999. Caspase inhibition reduces apoptosis and increases survival of nigral transplants. Nat Med 5: 97-100.

8. Leist M, Single B, Castoldi AF, Kuhnle S, **Nicotera P**. 1997. Intracellular adenosine triphosphate (ATP) concentration: a switch in the decision between apoptosis and necrosis. J Exp Med 185: 1481-6.

9. Bonfoco E, Krainc D, Ankarcrona M, **Nicotera P**, Lipton SA. 1995. Apoptosis and necrosis: two distinct events induced, respectively, by mild and intense insults with N-methyl-D- aspartate or nitric oxide/superoxide in cortical cell cultures. Proc Natl Acad Sci U S A 92: 7162-6.

10. Ankarcrona M, Dypbukt JM, Bonfoco E, Zhivotovsky B, Orrenius S, Lipton SA, **Nicotera P**. 1995. Glutamate-induced neuronal death: a succession of necrosis or apoptosis depending on mitochondrial function. Neuron 15: 961-73.