

**Prof. Paolo Stanzone**  
nato a Roma il 14 marzo 1951

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**RELAZIONE SU ATTIVITA' DIDATTICA E SCIENTIFICA  
PROFESSORE ORDINARIO  
UNIVERSITA' DEGLI STUDI DI ROMA "TOR VERGATA"**

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- 1970** degree High School: in Roma, Liceo Giulio Cesare
- 1976** degree School of Medicine University of Roma La Sapienza
- 1976-81** Assistant Professor in the Nervous and Mental Disease Clinic, University of Roma La Sapienza
- 1978-81** Resident in Neurology in the Nervous and Mental Dis. Clinic, University of Roma La Sapienza
- 1988** Researcher in the Nervous and Mental Disease Clinic, University of Roma La Sapienza
- 1988-92** Researcher in the Neurological Clinic University of Roma Tor Vergata
- 1992-99** Associated Professor in the Neurological Clinic University of Roma Tor Vergata
- 2000** Full Professor of Neurology in the University of Roma Tor Vergata

**Stages**

- 1981** (12 months) Max Planck Institute fur Psychiatrie. Munchen DFR. Director: Prof. A. Hartz; Laboratory Chief: Prof. W. Ziegelgansberger. Research field: electrophysiological effects of peptides in the spinal cord of rat.
- 1986** (two months) Laboratory of Electrophysiology INSERM U29 Paris. Director: Dr. Y. Ben Hari, in collaboration with Dr. E. Cherubini and Dr. P. Herlling. Receptorial nature of the cortico-striatal excitatory transmission in rat slice.
- 1987** (two months) ) Laboratory of Electrophysiology INSERM U29 Paris. Director: Dr. Y. Ben Hari, in collaboration with Dr. E. Cherubini and Dr. P. Herlling. Receptorial nature of the cortico-striatal excitatory transmission in rat slice.
- 1992** (two months) Mont Sinai School of Medicine- Dpt. of Neurology Chairman: Prof. M. Yhar. In collaboration with Prof. I. Bodis-Wollner. Effect of anti-dopaminergic drug on the electroretinographic response to pattern stimuli in monkey.
- 1993** (two months) Brooklyn State University – Dpt. of Neurology Chairman Prof. Cracco. In collaboration with Prof. I. Bodis-Wollner. Effect of anti-dopaminergic drug on the electroretinographic response to pattern stimuli in monkey.

**1996** Visiting scientist in Functional neurosurgery section of Grenoble University Prof. A.L. Ben Abid

### Research experience

Dr. Stanzione began his research experience in the 1973 when he was a student in the School of Medicine. Under the supervision of Prof. Giorgio Bernardi, he was involved in studies of experimental electrophysiology in rat in vivo. The used technique was that of intracellular recording and iontophoretic application of putative neuro-transmitters or drugs. The anatomical target was the caudate nucleus and the scientific field was the investigation of the action mechanism of putative neurotransmitters in physiological conditions but with the aim of explaining the physiopathogenesis of nervous diseases of the basal ganglia like Parkinson's disease and Huntington Corea. The study he performed for his thesis was also published in Brain Res. 1976 (Publication n° 1). The following studies were focused on dopamine and other aminoacids effects in the caudate nucleus and in the cerebral cortex projecting to the caudate. In the '80s his attention moved to the field of opioid effect in the cortex and in the caudate nucleus.

From 1985 Dr. Stanzione began to study clinical electrophysiology in Parkinson's disease patients. The original field was the study of electroretinogram alteration specifically related to the dopaminergic deficit in Parkinson's disease. The first publication was 1986 and in the following years he attempted to characterise the pharmacological nature of this visual alteration utilising pharmacological tools in humans and monkey. He also studied the relationship of the visual alteration with the stimulus parameter and the stage of the disease.

His studies of clinical electrophysiology in Parkinson's disease involved quantitative EEG, somatosensory evoked potentials and cognitive potentials. The studies were focused on the dopaminergic origin of the electrophysiological alterations.

He was also involved in the field of experimental and clinical epilepsy in collaboration with Prof. M.G. Marciani and in the field of leukocyte aggregation in stroke patients in collaboration with Prof. A. Galante.

In 1996 he began electrophysiological and microdialysis research in humans during stereotaxic surgery in advanced Parkinson's disease patients. In this research field dr. Stanzione is selecting clinically the patients for surgery, is performing the pre- and post-operative drug studies and the

extracellular recordings during surgery to identify the nuclei where to implant the permanent stimulating electrodes. Intra-operative microdialysis procedure and the following analysis is performed in collaboration with the group of Prof. M. Raiteri of Genova. Pre and post operative PET studies have been also performed.

In the last years Dr. Stanzione started three different field of interest: i) L-dopa absorption problems due to interference with helicobacter pylori infection in collaboration with A. Galante and A. Pietroiusti from Cl. Medica Tor Vergata; ii) pharmacokinetics of L-dopa in co-administration or delayed administration with entacapone in collaboration with E. Fedele from Genova; iii) Perfusion weighted MRI imaging of basal ganglia in Parkinson's disease patients before and after apomorphine acute challenge in collaboration with R. Floris from Radiologia Tor Vergata; iv) dopamine and its metabolites concentration in the CSF of parkinsonian patients of different disease stage in order to address possible changes of dopamine metabolism related with disease progression.

From 2005 he is involved in the field of stroke and he is performing research on the predictive value of MRI on the evolution of stroke.

### *Clinical experience*

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- Since 1976 he was a resident in neurology in the University of Roma La Sapienza.
- From 1981 he had the responsibility of managing in-patients of the Neurological Clinic.
- From 1981 he also began to be responsible for the out patients service for Parkinson's disease and movement disorders of the same institution.
- In the 1988 he moved to the University of Roma Tor Vergata where he continued to have responsibilities for in and out patients with the same modalities than before.
- From 1992 he had the responsibility of one of the two sections of the in patients of the clinic.
- From 1996 he was responsible for the program of deep brain stimulation in Parkinson's disease patients of the Neurological Clinic of the Univ of Roma Tor Vergata.
- From 2003 he is responsible of the Stroke Unit of the Neurological Clinic of the Univ. of Roma Tor Vergata.

### Clinical Trials

SP515 – SP 516 – CENA – CELC – F1JIT-HMFQ – NW-1015/016/III2006 – SIRIO – INITIA – MOTION

For each of these protocols a training in GCP has been performed during the relative investigators meetings.

### Teaching experience

He is teaching Neurology in the University of Roma Tor Vergata Medical School.