Curriculum Prof. Eugenio Scarnati

- Laurea in Scienze Biologiche (1972) e studi medici Università La Sapienza - Roma.

- Posizione attuale: Professore Ordinario di Fisiologia – Dipartimento di Scienze Cliniche Applicate e Biotecnologiche di Medicina e Chirurgia Università dell'Aquila (dal 1994).

- Coordinatore del Dottorato di Ricerca in Neurobiologia delle Malattie Neurodegenerative dell'Università dell'Aquila (2007-2015).

- Direttore del Dipartimento di Scienze e Tecnologie Biomediche dell'Università dell'Aquila (2004-2011).

- Professore Associato di Fisiologia Umana – Facoltà di Medicina e Chirurgia Università dell'Aquila (1985-1993).

- Assistente Ordinario di Fisiologia Umana – Facoltà di Medicina e Chirurgia Università dell'Aquila (1974-1985).

- Professore Incaricato dal Ministero degli Affari Esteri presso la Facoltà di Medicina dell'Università Nazionale della Somalia in Mogadiscio per l'insegnamento di Fisiologia Umana, quadrimestri invernali 1979 e 1980.

- Assistente Incaricato di Fisiologia Umana – Facoltà di Medicina e Chirurgia Università dell'Aquila 1972-1974).

- Borsista CNR-CNRS (decreto 132.03.02 del 21.1.1981) e European Science Foundation (decreto del 6.11.1981) presso il Laboratoire de Physiologie des Centres Nerveux, Université Paris VI, Prof. J.Féger e Prof.D.Albe-Fessard (1980-1981).

- Chercheur Contractuel INSERM Francia (decreti INSERM 81/887/BPC/FDD/NA 5.10. 1981, 82/278/BPC/DK/GM 19.4.1982 e 83/504/ BPC/HR/NA 26/5/1983) dapprima presso il Laboratoire de Physiologie des Centres Nerveux e successivamente presso il Laboratoire de Physiologie de la Faculté de Medicine Pitié-Salpétrière, Paris, Prof. J.Féger.

- Borsista del Schweizerischer Nationalfonds zur Förderung (Decreto FNS nr. 893.295.85 del 3.6.1985) presso l'Institut de Physiologie de l'Université de Fribourg, Svizzera, Prof. W.Schultz (1985-1986).

- Visiting Professor 1989 (contratto nr.893.295.85 del Schweizerischer Nationalfonds zur Förderung), presso l'Institut de Physiologie de l'Université de Fribourg, Prof. W.Schultz.

- Interessi Scientifici: Neurofisiologia Funzionale e Comportamentale dei Nuclei della Base

- Affiliazioni: European Brain and Behavioral Society, International Basal Ganglia Society, Italian Neuroscience Society, Federation of European Neuroscience Associations.

- E' coautore di 105 lavori su riviste internazionali con peer review, di 10 capitoli di libri internazionali, di 18 abstracts a congressi internazionali e di 14 partecipazioni a simposi su invito.

- Indici bibliometrici al 29.1.2019: Scopus H-index 28, citazioni 3744; Google Scholar H-index 34, citazioni 6464

- Svolge correntemente attività di Peer Rewiever per le principali riviste internazionali di Neuroscienze comprese: The Journal of Neurophysiology, Neuroscience, European Journal of Neuroscience, Behavioural Brain Research, Brain Research, Journal of Neural Transmission, Neuroimage, Experimental Brain Research, Clinical Neurology and Neurosurgery, etc.

- Guest Editor: The Journal of Neural Transmission, Springer-Verlag (Berlin).

- E' stato finanziato dal CNR e dal Murst dal 1994 al 1997, dal MIUR (Cofin 2008),dall'Unione Europea progetti Human Capital and Mobility (in collaborazione con 7 istituzioni europee) e Biomed 2 (in collaborazione con 4 istituzioni europee),dalla Fondazione Telethon, dal Ministero della Salute-Regione Lazio e da enti privati.

Prof. E.Scarnati: Main Pubblications

- G.De Caro, L.G.Micossi, F.Venturi, A.Brancati, **E.Scarnati** : Behavioural and electrocortical modifications induced in the rat by intraventricular injection of physalemin and eledoisin. Psychopharmacol. 38,211-218,1974

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control on motor activity arising from dopaminergic hyperfunction in the striatum. Acta Neurol. 33,304-313,1978

- **E.Scarnati**,C.Forchetti,C.De Angelis,G.Leonardis: Modifications of penicillin-induced paroxystic hippocampal activity caused by ethrane and fluothane. Acta Neurol.34,278-287,1979.

- **E.Scarnati**,C.Forchetti,C.Pacitti,A.Agnoli: Electrophysiological and behavioural correlations during manipulations of GABA functions in the substantia nigra by n-dipropylacetate and picrotoxin. Pharmacol.Res.Comm. 11,817-824,1979.

- G.P.Mereu,**E.Scarnati**,E.Paglietti,G.Di Chiara,G.L.Gessa: Sleep induced by low doses of apomorphine in rats.
  Electroenc.Clin.Neurophysiol. 46,214-219,1979.

- **E.Scarnati**,C.Forchetti,S.Ruggieri,A.Agnoli: Dopamine and dementia. An animal model with destruction of the mesocortical dopaminergic pathway. Aging 13,139-145,1980.

- **E.Scarnati**,C.Forchetti,G.Ciancarelli,C.Pacitti,A.Agnoli: Responsiveness of nigral neurons to the stimulation of striatal dopaminergic receptors in the rat. Life Sci. 26,1203-1209,1980.

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- C.Forchetti,**E.Scarnati**,C.Pacitti,A.Agnoli: Striatal cholinergic receptors and dyskinetic motor activity in the rat.
  Neurosci.Lett.20,363-367,1980.

- **E.Scarnati**,C.Pacitti: Neuronal responses to iontophoretically applied dopamine,glutamate and GABA of identified dopaminergic cells in the rat substantia nigra after kainic acid-induced destruction of the striatum. Exp.Brain Res. 46,377-382,1982.

- C.Pacitti,G.Fiadone,D.Civitelli,A.Gasbarri,**E.Scarnati**: Electrophysiological evidence for an inhibitory accumbens- entopeduncular pathway in the rat. Neurosci.Lett. 33,35-40,1982.

- **E.Scarnati**,E.Campana,C.Pacitti: The functional role of the nucleus accumbens in the control of the substantia nigra: electrophysiological investigations in intact and striatum-globus pallidus lesioned rats. Brain Res. 265,249- 257,1982.

- B.Rouzaire-Dubois,**E.Scarnati**,C.Hammond,A.Crossman,T.Shibazaki: Microiontophoretic studies on the nature of the transmitter in the subthalamo-entopeduncular pathway in the rat. Brain Res. 271,11-20,1983.

- **E.Scarnati**,E.Campana,C.Pacitti: Pedunculopontine-evoked excitations of substantia nigra neurons in the rat. Brain Res. 304,351-361,1984.

- B.Rouzaire-Dubois,**E.Scarnati**: Bilateral cortico-subthalamic nucleus projections: an electrophysiological study in the rat. Neuroscience 15,69-79,1985.

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- W.Schultz,**E.Scarnati**,E.Sundstrom,G.Jonsson: The catecholamine uptake inhibitor nomifensine protects against MPTP-induced parkinsonism in monkeys. Exp.Brain Res. 63,216-220,1986.

- B.Rouzaire-Dubois,**E.Scarnati**: Bilateral cortico-subthalamic nucleus projections: electrophysiological and micropharmacoogical studies in the rat. Biog.Amin. 4,85-91,1987

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- **E.Scarnati**,A.Gasbarri,E.Campana,C.Pacitti: The organization of nucleus tegmenti pedunculopontinus projections to basal ganglia and thalamus: a retrograde transport study. Neurosci. Lett. 79,11-16,1987

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- **E.Scarnati**,F.Haydu,C.Pacitti,T.Tömbol: An EM and Golgi study of the connection between the nucleus tegmenti pedunculopontinus and the pars compacta of the substantia nigra in the rat. J.Hirnforschung 29,95-105,1988

- **E.Scarnati**,S.DiLoreto,A.Proia,G.Galliè: The functional role of the pedunculopontine nucleus in the regulation of the electrical activity of entopeduncular neurons in the rat. Arch.Ital.Biol. 126,145-163,1988

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- T.Florio,A.Capozzo,R.Cellini,G.Pizzuti,**E.Scarnati**: Unilateral lesions of the pedunculopontine nucleus do not alleviate subthalamic nucleus-mediated anticipatory responding in a delayed sensorimotor task in the rat. Behav.Brain Res. 125, 1-13, 2001.

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- P.Mazzone,A.M.Lozano,P.Stanzione,S.Galati,**E.Scarnati**, A.Peppe, A.Stefani: Implantation of human pedunculopontine nucleus: a safe and clinically relevant target in Parkinson's disease.Neuroreport. 2005 16:1877-81.

- A.Stefani,A.M.Lozano,A.Peppe,P.Stanzione,S.Galati, D.Tropepi,M.Pierantozzi,L,Brusa,**E.Scarnati**,P.Mazzone: Bilateral deep brain stimulation of the pedunculopontine and subthalamic nuclei in severe Parkinson's disease. Brain 2007 130,15-96-1607

- T.Florio,**E.Scarnati**,G.Confalone,D.Minchella,S.Galati, P.Stanzione,A.Stefani,P.Mazzome: High-frequency stimulation of the

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Eur.J.Neuroscience 2007, 25:1174-1187.

- P.Mazzone,P.Stanzione,A.Lozano,**E.Scarnati**,A.Peppe,S.Galati, A.Stefani: The peripeduncular and pedunculopontine nuclei: a putative dispute not discouraging the effort to define a clinically relevant target. Brain 2007 130,74-75.

- P.Mazzone,A.Insola,A.Lozano,S.Galati,**E.Scarnati**,A.Peppe,P.Stanzione,A.Stefani: Peripeduncular and pedunculopontine nuclei: a dispute on a clinically relevant target. Neuroreport 2007,18, 1407-1408

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- S.Galati,V.D'Angelo,**E.Scarnati**,P.Stanzione, A.Martorana, T,Procopio, G.Sancesario,A.Stefani: In vivo electrophysiology of dopamine-denervated striatum: focus on the nitric oxide/cGMP signalling pathway. Synapse 2008 62,409-420.

- P.Mazzone,G.Della Marca,S.Sposato,V.Di Lazzaro,**E.Scarnati**: Stereotaxic surgery of nucleus tegmenti pedunculopontinus (PPTg). Brit.J.Neurosurg. 22,S1,33-40, 2008

- P.Mazzone,G.Della Marca,S.Sposato,V.Di Lazzaro,**E.Scarnati**: Modelo tridimensional de estructures mesencefalicas y protoberenciales: se propone un abordaje para la identificacion estereotactica del nucleo tegmental pedunculopontino. Neurotarget 3,1-7,2008.

- A.Capozzo,T.Florio,G.Confalone,D.Minchella, P.Mazzone, **E.Scarnati**: Low-frequency stimulation of the pedunculopontine nucleus modulates electrical activity of subthalamic neurons in the rat. J.Neur.Transm. 116,51-56,2009.

- P.Mazzone, **E.Scarnati**: Deep brain stimulation of the medial thalamus for movement disorders: the role of the centromedianum-parafascicular complex. In Neuromodulation Cap. 48. pp. 599-615. (E.Krames, P.Hunter

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- P.Mazzone,A.Insola,S.Sposato,**E.Scarnati**: The deep brain stimulation of the pedunculopontine tegmental nucleus. Neuromodulation 12,191-204,2009
- **E.Scarnati**: The deep brain stimulation of the pedunculopontine tegmental nucleus. The (un)certainty of the stimulating site. Park.Rel.Disord.16,148,2010.

- P.Mazzone,E.Garcia-Rill, **E.Scarnati**. (Guest Editors). Special issue: The pedunculopontine nucleus: from basic Neuroscience to translation applications for Parkinson's Disease. J.Neural Transm. 118,nr.10,1389-1610. Sprimger.

- **E.Scarnati**,T.Florio,A.Capozzo,G.Confalone,P.Mazzone. The pedunculopontine nucleus: implications for a role in modulating spinal cord motoneurons excitability. J. Neural Transm. 118, 1409-1421, 2011

- P.Mazzone,**E.Scarnati**,E-Garcia-Rill. Commentary: the pedunculopontine nucleus: clinical experience, basic questions and fiture directions. J.Neural Transm. 118, 1391-1396, 2011

- P.Mazzone,S.Sposato,A.Insola,**E.Scarnati**. The deep brain stimulation of the pedunculopontine tegmental nucleus: towards a new neurofunctional neurosurgery. J.Neural Transm. 118, 1431-1451, 2011

- A.Insola, L.Padua, **E.Scarnati**, A.M.Valeriani. Where are the somatosensory evoked potentials recorded from DBS leads implanted in the human pedunculopontine tegmental nucleus generated? Mov Disord. 26, 1573-1574, 2011.

- P.Caliandro, A.Insola, **E.Scarnati**, L.Padua, L. Russo, E.Granieri, P.Mazzone. Effects of unilateral pedunculopontine stimulation on electromyographic activation patterns during gait in individual patients with Parkinson's disease. J.Neur.Transm. 118, 1477-1486, 2011.

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