

Curriculum vitae

PERSONAL INFORMATION

Rizzolatti Giacomo

Nationality: Italian

Date of birth: 28/04/1937

URL for web site: www.unipr.it

EDUCATION

Degree in Medicine, University of Padua, 1961;

Degree in Neurology, University of Padua, 1964;

Libera Docenza in Fisiologia Umana, Rome 1969.

CURRENT POSITION

Professor Emeritus of Human Physiology, Faculty of Medicine, University of Parma, Italy.

Director of the URT Parma of CNR Neuroscience Institute

FELLOWSHIPS AND AWARDS

Fullbright scholarship 1980;

Golgi Award for Studies in Neurophysiology, Accademia Nazionale dei Lincei 1982;

Member of Accademia Europaea, 1989

Laurea *Honoris Causa*, University Claude Bernard Lyon, France 1999

Prize "Feltrinelli" for Medicine, Accademia Nazionale dei Lincei 2000

Member of the American Academy of Arts and Sciences 2002

Member of Accademia Nazionale dei Lincei 2002

Foreign member of the Académie Française des Sciences 2005

Herlitzka Prize for Physiology, Accademia delle Scienze Torino 2005

Laurea *Honoris Causa*, University St. Petersburg, Russia 2006

Grawemeyer Prize for Psychology, University of Louisville, USA 2007

Prix IPSEN, Neuroplasticity, Fondation IPSEN Paris 2007

Laurea *Honoris Causa*, Katholieke Universiteit Leuven 2009

Prix Signoret, Neuropsychology, Fondation IPSEN 2010

Prince de Asturias Prize for Science and Technology, Spain 2011

Foreign Member National Academy of Sciences, USA 2012

Brain Prize Lundbeck Foundation 2014

Laurea *Honoris Causa* University of Sassari, 2015

Laurea *Honoris Causa* University of Buenos Aires 2016

TEACHING ACTIVITIES

Affiliate Professor University of Malta

ORGANISATION OF SCIENTIFIC MEETINGS

Annual Meeting of Brain and Behavior Society 1985;

Annual Meeting of the Accademia Europaea 1995;

International meeting "20 years from the discovery of mirror neurons", Erice, September 2012;

FENS meeting "The Social Brain", Copenhagen, 5-9 October 2014;

INSTITUTIONAL RESPONSIBILITIES

President Italian Neuropsychological Society 1982-1984;

President European Brain and Behaviour Society 1984-1986;

President of the International Scientific Committee of the European Training Program in Brain and Behaviour Research, European Science Foundation, Strasbourg 1988-1991

Council Member of Accademia Europaea 1990-1996

President Italian Neuroscience Association 1997-1999

Member European Medical Research Council 1998-2000

ERC Panel Member Life Sciences 2011, 2013, 2015

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Società Italiana di Neuroscienze, Honorary member

Società Italiana di Fisiologia

Federation of European National Society

Society for Neuroscience

Publications ten years track-record

The total number of publications of GR in international peer-reviewed journals in the period 2004-2015 is 81. The total number of citations is 82.389. H index is 113. The citations 2004-2015 are 39408. H index for these five years is 86. The most cited paper is the article Rizzolatti Craighero with 5620 citations.

Some of the most recent publications are listed below:

- 1: Rizzolatti G, Craighero L. The mirror-neuron system. **Annu Rev Neurosci.**2004; 27:169-92.
- 2: Iacoboni M, Molnar-Szakacs I, Gallese V, Buccino G, Mazziotta JC, Rizzolatti G. Grasping the intentions of others with one's own mirror neuron system. **PLoS Biol.** 2005 Mar;3(3):e79. 22.
- 3: Fogassi L, Ferrari PF, Gesierich B, Rozzi S, Chersi F, Rizzolatti G. Parietal lobe: from action organization to intention understanding. **Science.** 2005 Apr 29;308(5722):662-7.
- 4: Aziz-Zadeh L, Cattaneo L, Rochat M, Rizzolatti G. Covert speech arrest induced by rTMS over both motor and nonmotor left hemisphere frontal sites. **J Cogn Neurosci.** 2005 Jun;17(6):928-38.
- 5: Cattaneo L, Fabbri-Destro M, Boria S, Pieraccini C, Monti A, Cossu G, Rizzolatti G. Impairment of actions chains in autism and its possible role in intention understanding. **Proc Natl Acad Sci U S A.** 2007 Nov 6; 104(45):17825-30.
- 7: Cattaneo L, Caruana F, Jezzini A, Rizzolatti G. Representation of goal and movements without overt motor behavior in the human motor cortex: a transcranial magnetic stimulation study. **J Neurosci.** 2009 Sep 9; 29(36):11134-8.
- 8: Rizzolatti G, Sinigaglia C. The functional role of the parieto-frontal mirror circuit: interpretations and misinterpretations. **Nat Rev Neurosci.** 2010 Apr; 11(4):264-74.
- 9: Avanzini P, Fabbri-Destro M, Campi C, Pascarella A, Barchiesi G, Cattaneo L, Rizzolatti G. Spatiotemporal dynamics in understanding hand-object interactions. **Proc Natl Acad Sci U S A.** 2013 Oct 1;110(40):15878-85.
- 10: Bonini L, Maranesi M, Livi A, Fogassi L, Rizzolatti G. Space-dependent representation of objects and other's action in monkey ventral premotor grasping neurons. **J Neurosci.** 2014 Mar 12; 34(11):4108-19.
- 11: Maranesi M, Livi A, Fogassi L, Rizzolatti G, Bonini L. Mirror neuron activation prior to action observation in a predictable context. **J Neurosci.** 2014 Nov 5;34(45):14827-32.
- 12: Bonini L, Maranesi M, Livi A, Fogassi L, Rizzolatti G. Ventral premotor neurons encoding representations of action during self and others' inaction. **Curr Biol.** 2014 Jul 21;24(14):1611-4.
- 13: Rizzolatti G, Fogassi L. The mirror mechanism: recent findings and perspectives. **Philos Trans R Soc Lond B Biol Sci.** 2014 Apr 28;369(1644):20130420.
- 14: Giese MA, Rizzolatti G. Neural and Computational Mechanisms of Action Processing: Interaction between Visual and Motor Representations. **Neuron.** 2015 Oct 7;88(1):167-80.
- 15: Caruana F, Avanzini P, Gozzo F, Francione S, Cardinale F, Rizzolatti G. Mirth and laughter elicited by electrical stimulation of the human anterior cingulate cortex. **Cortex.** 2015 Oct;71:323-31.
- 16: Di Cesare G, Di Dio C, Marchi M, Rizzolatti G. Expressing our internal states and understanding those of others. **Proc Natl Acad Sci U S A.** 2015 Aug 18;112(33):10331-5.
- 17: Ferri S, Rizzolatti G, Orban GA. The organization of the posterior parietal cortex devoted to upper limb actions: An fMRI study. **Hum Brain Mapp.** 2015 Oct;36(10):3845-66.
- 18: Gizzonio V, Avanzini P, Campi C, Orivoli S, Piccolo B, Cantalupo G, Tassinari CA, Rizzolatti G, Fabbri-Destro M. Failure in Pantomime Action Execution Correlates with the Severity of Social Behavior Deficits in Children with Autism: A Praxis Study. **J Autism Dev Disord.** 2015 Oct;45(10):3085-97.
- 19: Ferri S, Peeters R, Nelissen K, Vanduffel W, Rizzolatti G, Orban GA. A human homologue of monkey F5c. **Neuroimage.** 2015 May 1;111:251-66.

Monographs

GR has published together with C. Sinigaglia a book on the mirror mechanism and, more generally, on motor cognition "So quello che fai. Il cervello che agisce ed i neuroni specchio. Cortina editore, Milano,

2006, pp 216". The book has been translated into French (Odile Jacob, Paris 2008) and Spanish (Editions Paidos Oberica, Barcellona, 2006). Slightly revised versions of the same book have been published in English (Mirrors in the brain. Oxford University Press 2008, pp 242) and German (Empathie und Spiegelneurone. Die biologische Basis des Mitgefuehls, edition Unseld, Suhrkamp Verlag Frankfurt 2008). Recently the book has been translated also into Russian, Japanese, Turkish and Persian.

He is also the author of the following chapters in collective volumes:

- Mirror neurons and social cognition The Oxford Handbook of Evolutionary Psychology. 2007
- The mirror neuron system and imitation. Perspective on Imitation, MIT Press, . 2005
- Mirror Neuron: A Neurological Approach to Empathy. "Neurobiology of Human Values. " Springer-Verlag 2005
- Cortical Mechanisms Subserving Object Grasping,.. The Cognitive Neuroscience III. MIT Press, 2004

He is the author of the two chapter on the Cortical Motor Organization in the *Principles of Neural Science* Fifth Edition (2013) - E.R. Kandel et al (Eds).

Invited Presentations

GR gave a large number of presentations in International Established Conferences.

Among them:

- Plenary Lectures at Society for Neurosciences (Washington 2008),
- FENS Forum Plenary Lecture (Vienna 2006),
- Presidential Lecture, American Academy of Neurology (Chicago 2008),
- Plenary Lecture Japanese Psychological Association (Tokyo 2012),
- EBBS Plenary Lecture (Dublin 2005),
- Key Lecture Congresso Brasileiro de Neuropsiquiatria (Gramado 2013).

In addition he gave invited lecture in many prestigious Universities (Columbia, Princeton, USC, New York University, MIT, Tokyo University, University College London, Tuebingen, Nijmegen and others.

International Prizes

The international Prizes are listed in the CV. Among them, in the last 10 years GR received:

- Herlitzka Prize for Physiology, Accademia delle Scienze Torino 2005
- Laurea Honoris Causa, University St. Petersburg, Russia 2006
- Grawemeyer Prize for Psychology, University of Louisville, USA 2007
- Prix IPSEN, Neuroplasticity, Fondation IPSEN Paris 2007
- Laurea Honoris Causa, Katholieke Universiteit Leuven 2009
- Prix Signoret, Neuropsychology, Fondation IPSEN 2010
- Prince de Asturias Prize for Science and Technology, Spain 2011
- Brain Prize Lundbeck Foundation 2014

Academy memberships

Among them, the most important are:

- Member of Academia Europaea, 1989
- Member of Accademia Nazionale dei Lincei 2002
- Member of the American Academy of Arts and Sciences 2002
- Foreign member of the Académie Française des Sciences 2005
- Foreign Member National Academy of Sciences, USA 2012

Contribution to the early careers of excellent researchers

Maurizio Gentilucci (at present Professor of Physiology University of Parma)

Giuseppe Luppino (at present Professor of Physiology University of Parma)

Luciano Fadiga (at present Professor of Physiology University of Ferrara)

Akira Murata (at present Professor of Physiology University of Osaka)

Vittorio Gallese (at present Professor of Physiology University of Parma)

Carlo Adolfo Porro (at present Professor of Physiology University of Modena)

Anna Berti (at present Professor of Psychology University of Turin)

Christian Keysers Head of the Social Brain Lab of the Netherlands Institute for Neurosciences of the Royal Netherlands Academy of Arts and Sciences.
Giovanni Buccino (at present Professor of Physiology University of Magna Grecia- Catanzaro)