INFORMAZIONI PERSONALI

Giuseppe Pagnoni

POSIZIONE RICOPERTA

Professore Associato

TITOLO DI STUDIO

PhD (Neuroscienze), Laurea (Fisica)

ESPERIENZA PROFESSIONALE

2015–presente Professore Associato presso il Dip. di Scienze Biomediche, Metaboliche e Neuroscienze, Universit`a di Modena e Reggio Emilia.

2008–2015 Ricercatore presso il Dip. di Scienze Biomediche, Metaboliche e Neuroscienze, Università di Modena e Reggio Emilia.

2002–2008 Assistant Professor presso il Dept. of Psychiatry and Behavioral Sciences, Emory University, Atlanta, GA.

2000–2002 Postdoc Fellowship negli Stati Uniti presso il Dept. of Psychiatry and Behavioral Sciences, Emory University, Atlanta,GA.

1998–1999 Borsa di Ricerca del Dipartimento di Scienze e Tecnologie Biomediche, Università di Udine (Tutor: Prof. Carlo A. Porro).

ISTRUZIONE E FORMAZIONE

1994–1998 Dottorato in Neuroscienze, Università di Parma (Direttori: Prof. Giacomo Rizzolatti e Ruggero Corazza). Tesi: Percezione ‘semantica’ e percezione ‘esplorativa’: uno studio di imaging funzionale sul riconoscimento implicito di stimoli visivi.

1992 Laurea in Fisica, Università di Modena.

COMPETENZE PERSONALI

Lingua madre: Iraliano

Altre lingue

	COMPRENSIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
Inglese	C2	C2	C2	C2	C2
	Sostituire con il nome del certificato di lingua acquisito. Inserire il livello, se conosciuto				
Francese	C1	C1	C1	C1	B2
	Sostituire con il nome del certificato di lingua acquisito. Inserire il livello, se conosciuto				
Spagnolo	C1				

Competenze professionali

Neuroimaging funzionale sull'uomo. Applicazione della teoria dell'inferenza attiva e della elaborazione predittiva (Bayesiana) alla modellizzazione dell'attività di circuiti neurali e processi cognitivi. Attività cerebrale intrinseca e sua rilevazione mediante tecniche di neuroimaging funzionale guidate dai dati. Studio dei correlati neurofisiologici delle pratiche meditative. Basi neurali dello sforzo mentale in individui sani e nella sindrome di affaticamento cronico. Ruolo dei gangli della base nei meccanismi di ricompensa e previsione. Meccanismi centrali della percezione del dolore. Interazione di funzione immunitaria, processi cognitivi e umore nel modello dell'interferone-alfa. Imaging funzionale di modelli di cognizione sociale.

Ha contribuito alla creazione del gruppo di ricerca interdisciplinare di neuroscienze computazionali"Neuromorphic Intelligence Laboratory (NILAB)" (https://www.nilab.unimore.it/neuromodeling-research/)

Competenze digitali

AUTOVALUTAZIONE				
Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
avanzato	avanzato	medio	medio	medio

Livelli: Utente base - Utente intermedio - Utente avanzato
Competenze digitali - Scheda per l'autovalutazione

Patente di guida

B

ULTERIORI INFORMAZIONI

Pubblicazioni
Presentazioni
Progetti
Conferenze
Seminari
Riconoscimenti e premi
Appartenenza a gruppi / associazioni
Referenze
Menzioni
Corsi
Certificazioni

1. Lukemire J,Pagnoni G, Guo Y. Sparse Bayesian Modeling of Hierarchical Independent Component Analysis: Reliable Estimation of Individual Differences in Brain Networks.Biometrics,in press.

2. Ballotta D, Maramotti R, Borelli E, Lui F, Pagnoni G. Neural correlates of emotional valence for faces and words. Frontiers in Psychology, 2023,14:1055054.

3. Timmermann C, Bauer PR, Gosseries O, Vanhaudenhuyse A, Vollenweider F, Laureys S, Singer T, Mind and Life Europe (MLE) ENCECON Research Group (incl. Pagnoni G), Antonova E, Lutz A. A neurophenomenological approach to non-ordinary states of consciousness: hypnosis, meditation, and psychedelics. Trends in Cognitive Sciences, 2023,27:139–159.

4. Gandolfi D, Puglisi FM, Boiani GM, Pagnoni G, Friston KJ, D'Angelo E, Mapelli J. Emergence of associative learning in a neuromorphic inferential network, J Neural Eng, 2022, 19(3):036022.

5. Ramstead MJD, Seth AK, Hesp C, Sandved-Smith L, Mago J, Lifshitz M, Pagnoni G, Smith R, Dumas G, Lutz A, Friston K, Constant A. From generative models to generative passages: A computational approach to (neuro) phenomenology. Review of Philosophy and Psychology, 2022, 13(4): 829–857.

6. Gandolfi D, Pagnoni G, Filippini T, Goffi A, Vinceti M, D'Angelo E, Mapelli J. Modeling early phases of COVID-19 pandemic in northern Italy and its implication for outbreak diffusion. Frontiers in public health, 2021, 9:724362.
7. Feruglio S, Matiz A, Pagnoni G, Fabbro F, Crescentini C. The impact of mindfulness meditation on the wandering mind: a systematic review. Neurosci Biobehav Rev, 2021, 131:313–330.

8. Lukemire J, Kundu S, Pagnoni G, Guo Y. Bayesian Joint Modeling of Multiple Brain Functional Networks. J Am Stat Assoc, 2020, 0:1–13.

9. Bogdanov VB, Bogdanova OV, Dexpert S, Delgado I, Beyer H, Aubert A, Dilharreguy B, Beau C, Forestier D, Ledaguenel P, Magne E, Aouizerate B, Lay e S, Ferreira G, Felger J, Pagnoni G, Capuron L. Reward-related brain activity and behavior are associated with peripheral ghrelin levels in obesity. Psychoneuroendocrinology, 2020, 112:104520.

10. Kirk U, Pagnoni G, H etu S, Montague R. Short-term mindfulness practice attenuates reward prediction errors signals in the brain. Sci Rep. 2019, 9(1):6964.

11. Pagnoni G. The contemplative exercise through the lenses of predictive processing: A promising approach. Progress in brain research, 2019, 244:299-322.

12. Lutz A, Mattout J, Pagnoni G. The epistemic and pragmatic value of non-action: a predictive coding perspective on meditation. Current opinion in psychology, 2019, 28:166-171.

13. Benuzzi F, Lui F, Ardizzi M, Ambrosecchia M, Ballotta D, Righi S, Pagnoni G, Gallese V, Porro CA. Pain Mirrors: Neural Correlates of Observing Self or Others' Facial Expressions of Pain. Frontiers in psychology, 2018, 9:1825.

14. Pagnoni G, Guareschi FT. Remembrance of things to come: a conversation between Zen and neuroscience on the predictive nature of the mind. Mindfulness, 2017, 8(1):27–37.

15. Khachouf OT, Chen G, Duzzi D, Porro CA, Pagnoni G. Voluntary modulation of mental effort investment: an fMRI study. Scientific Reports, 2017, 7:17191.

16. Chen X, Hackett PD, DeMarco AC, Feng C, Stair S, Haroon E, Ditzen B, Pagnoni G, Rilling JK. Effects of oxytocin and vasopressin on the neural response to unreciprocated cooperation within brain regions involved in stress and anxiety in men and women. Brain Imaging Behav, 2016, 10(2):581–593.

17. Kemmer PB, Guo Y, Wang Y, Pagnoni G. Network-based characterization of brain functional connectivity in Zen practitioners. Frontiers in Psychology, 2015, 6.

18. Feng G, Hackett PD, DeMarco AC, Chen X, Stair S, Haroon E, Ditzen B, Pagnoni G, Rilling J. Oxytocin and vasopressin effects on the neural response to social cooperation are modulated by sex. Brain Imaging Behav, 2015, 9(4):754–764.

19. Pagnoni G, Porro CA. Cognitive modulation of pain and predictive coding: Comment on "Facing the experience of pain: A neuropsychological perspective" by Fabbro and Crescentini. Phys Life Rev, 2014, 11(3):555-7.

20. Miller AH, Jones JF, Drake DF, Tian H, Unger ER, Pagnoni G. Decreased basal ganglia activation in subjects with Chronic Fatigue Syndrome: association with symptoms of fatigue. PLoS One, 2014, 9(5):e98156.

21. Favilla S, Huber A, Pagnoni G, Lui F, Facchin P, Cocchi M, Baraldi P, Porro CA. Ranking brain areas encoding the perceived level of pain from FMRI data. Neuroimage, 2014, 90:153–162.

22. Huber A, Lui F, Duzzi D, Pagnoni G, Porro CA. Structural and functional cerebral correlates of hypnotic suggestibility. PLoS One, 2014, 9(3):e93187.

23. Rilling JK, DeMarco AC, Hackett PD, Chen X, Gautam P, Stair S, Haroon E, Thompson R, Ditzen B, Patel R, Pagnoni G. Sex differences in the neural and behavioral response to intranasal oxytocin and vasopressin during human social interaction. Psychoneuroendocrinology, 2014, 39:237–248.

24. Khachouf OT, Poletti S, Pagnoni G. The embodied transcendental: a Kantian perspective on neurophenomenology. Front Hum Neurosci, 2013, 7, 611.

25. Agnati LF, Guidolin D, Battistin L, Pagnoni G, Fuxe K. The neurobiology of imagination: possible role of interaction-dominant dynamics and default mode network. Front Psychol, 2013, 4, 296.

26. Molinari E, Baraldi P, Campanella M, Duzzi D, Nocetti L, Pagnoni P, Porro CA. Human parieto-frontal networks related to action observation detected at rest. Cereb Cortex, 2013, 23:178–186.

27. Capuron L, Pagnoni G, Drake DF, Woolwine BJ, Spivey JR, Crowe RJ, Votaw JR, Goodman MM, Miller AH. Dopaminergic mechanisms of reduced basal ganglia responses to hedonic reward during

interferon-alpha administration. Arch Gen Psychiatry, 2012, 69:1044–1053.

28. Confalonieri L, Pagnoni G, Barsalou LW, Rajendra J, Eickhoff SB, Butler AJ. Brain Activation in Primary Motor and Somatosensory Cortices during Motor Imagery Correlates with Motor Imagery Ability in Stroke Patients. ISRN Neurol, 2012, 613595.

29. Inman CS, James GA, Hamann S, Rajendra JK, Pagnoni G, Butler AJ. Altered resting-state effective connectivity of fronto-parietal motor control systems on the primary motor network following stroke. Neuroimage, 2012, 59:227–237.

30. Pagnoni G. Dynamical properties of BOLD activity from the ventral posteromedial cortex associated with meditation and attentional skills. J Neurosci, 2012, 32(15):5242–5249.

31. Rilling J, DeMarco A, Hackett P, Thompson R, Ditzen B, Patel R, Pagnoni G. Effects of intranasal oxytocin and vasopressin on cooperative behavior and associated brain activity in men. Psychoneuroendocrinology, 2012, 37:447–461.

32. Inman CS, James GA, Hamann S, Rajendra JK, Pagnoni G, Butler AJ. Altered resting-state effective connectivity of fronto-parietal motor control systems on the primary motor network following stroke. Neuroimage, 2012, 59:227–237.

33. Raison CL, Borisov AS, Majer M, Drake DF, Pagnoni G, Woolwine BJ, Vogt GJ, Massung B, Miller AH. Activation of central nervous system inflammatory pathways by interferon-alpha: relationship to monoamines and depression. Biol Psychiatry, 2008, 65(4):296–303.

34. Pagnoni G, Cekic M, Guo Y. “Thinking about non-thinking”: neural correlates of conceptual processing during Zen meditation. PLoS ONE, 2008, 3(9):e3083.

35. Guo Y, Pagnoni G. A unified framework for group independent component analysis for multi-subject fMRI data. Neuroimage, 2008, 42(3):1078–93.

36. Majer M, Welberg LA, Capuron L, Miller AH, Pagnoni G, Reeves WC. Neuropsychological performance in persons with chronic fatigue syndrome: results from a population-based study. Psychosomatic Medicine, 2008,70(7):829–36.

37. Rilling JK, Dagenais JE, Goldsmith DR, Glenn AL, Pagnoni G. Social cognitive neural networks during in-group and out-group interactions. Neuroimage, 2008, 41(4):1447–61.

38. Rilling JK, Lacreus A, Barks SK, Elfenbein HA, Pagnoni G, Votaw JR, Herndon JG. Effect of the menstrual cycle on resting brain glucose metabolism in female rhesus monkeys, Neuroreport, 2008, 19(5):537–41.

39. Majer M, Welberg LA, Capuron L, Pagnoni G, Raison CL, Miller AH. IFN-alpha-induced motor slowing is associated with increased depression and fatigue in patients with chronic hepatitis C. Brain Behav Immun, 2008, 22(6):870–80.

40. Rilling JK, Goldsmith DR, Glenn AL, Jairam MR, Elfenbein HA, Dagenais JE, Murdock CD, Pagnoni G. The neural correlates of the affective response to unreciprocated cooperation. Neuropsychologia, 2007, 46(5):1256–66.

41. Rilling JK, Barks SK, Parr LA, Preuss TM, Faber TL, Pagnoni G, Bremner JD, Votaw JR. A Comparison of Resting State Brain Activity in Humans and Chimpanzees. Proc Natl Acad Sci U S A, 2007, 104(43):17146–51.

42. Pagnoni G, Cekic M. Age effects on gray matter volume and attentional performance in Zen meditation. Neurobiology of Aging, 2007, 28(10):1623–7.

43. Capuron L, Pagnoni G, Demetrashvili M, Lawson DH, Fornwalt F, Woolwine BJ, Berns GS, Nemeroff CB, Miller AH. Basal Ganglia Hypermetabolism and Symptoms of Fatigue during Interferon-alpha Therapy. Neuropsychopharmacology, 2007, 32(11):2384–92.

44. Rilling JK, Glenn AL , Jairam MR, Pagnoni G, Goldsmith DR, Elfenbein HA, Lilienfeld SO. Neural correlates of social cooperation and non-cooperation as a function of psychopathy. Biological Psychiatry, 2007, 61(11): 1260–1271.

45. Berns GS, Chappelow J, Cekic M, Zink CF, Pagnoni G, Martin-Skurski ME. Neurobiologic Substrates of Dread. Science, 2006, 312(5774):754–8.

46. Zink CF, Pagnoni G, Chappelow JC, Martin-Skurski ME, Berns GS. Human striatal activation reflects degree of stimulus saliency. Neuroimage, 2006, 29(3):977–983.

47. Capuron L, Pagnoni G, Demetrashvili M, Woolwine BJ, Nemeroff CB, Berns GS, Miller AH. Anterior cingulate activation and error processing during interferon-alpha treatment. Biol Psychiatry, 2005, 58(3):190–196.

48. Berns GS, Chappelow JC, Zink CF, Pagnoni G, Martin-Skurski ME, Richards J. Neurobiological correlates of social conformity and independence during mental rotation. Biol Psychiatry, 2005, 58(3):245–253.

49. Zink CF, Pagnoni G, Martin-Skurski ME, Chappelow JC, Berns GS. Human striatal responses to monetary reward depend on saliency. Neuron, 2004, 42(3):509–517.

50. Nicoletti R, Porro CA, Brighetti G, Monti D, Pagnoni G, Guido M, Rubichi S, Franceschi C. Long-term effects of vaccination on attentional performance. Vaccine, 2004, 22(29–30):3877–3881.

51. Zink CF, Pagnoni G, Martin ME, Dhamala M, Berns GS. Human striatal response to salient nonrewarding stimuli. J Neurosci, 2003, 23(22):8092–8097.

52. Dhamala M, Pagnoni G, Wiesenfeld K, Zink CF, Martin M, Berns GS. Neural correlates of the complexity of rhythmic finger tapping. Neuroimage, 2003, 20(2):918–926.

53. Rilling JK, Gutman D, Zeh T, Pagnoni G, Berns GS, Kilts C. A neural basis for social cooperation. Neuron, 2002, 35(2):395:405.

54. Porro CA, Baraldi P, Pagnoni G, Serafini M, Facchin P, Maieron M, Nichelli P. Does anticipation of pain affect cortical nociceptive systems? J Neurosci, 2002, 22(8):3206–3214.

55. Pagnoni G, Zink CF, Montague PR, Berns GS. Activity in human ventral striatum locked to errors of reward prediction. Nat Neurosci, 2002, 5(2):97–98.

56. Montague PR, Berns GS Cohen JD, McClure SM, Pagnoni G, Dhamala M, Wiest MC, Karpov I, King RD, Apple N, Fisher RE. Hyperscanning: simultaneous fMRI during linked social interactions. Neuroimage, 2002, 16(4):1159–1164.

57. Dhamala M, Pagnoni G, Wiesenfeld K, Berns GS. Measurements of brain activity complexity for varying mental loads. Phys Rev E Stat Nonlin Soft Matter Phys, 2002, 65(4 Pt 1):041917.

58. Calandra-Buonaura G, Basso G, Gorno-Tempini ML, Serafini M, Pagnoni G, Baraldi P, Porro CA, Nichelli P. Human brain language processing areas identified by functional magnetic resonance imaging using a lexical decision task. Funct Neurol, 2002, 17(4):183–191.

59. Gorno-Tempini ML, Pradelli S, Serafini M, Pagnoni G, Baraldi P, Porro CA, Nicoletti R, Umiltà C, Nichelli P. Explicit and incidental facial expression processing: an fMRI study. Neuroimage, 2001, 14(2):465–473.

60. Berns GS, McClure SM, Pagnoni G, Montague PR. Predictability modulates human brain response to reward. J Neurosci, 2001, 21(8):2793–2798.

61. Baraldi P, Porro CA, Serafini M, Pagnoni G, Murari C, Corazza R, Nichelli P. Bilateral representation of sequential finger movements in human cortical areas. Neurosci Lett, 1999, 269(2):95–98.

Dati personali Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

Il sottoscritto dichiara di essere consapevole che il presente *curriculum vitae* sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Data

18/01/2024 f.to