

- Rory John Bufacchi (Oct 2016-present)
- Yifei Guo (Jun 2016-present)
- Cesare Magri (Feb 2018-present)

PhD and MSc and Undergraduate students

>6 (PhD) >25 (MSc and UG) successfully supervised at Oxford/UCL.

Other aspects of mentorship

I act as mentor in a number of schemes, both within and outside the UK (e.g. mentor for Royal Society University Research Fellows of the Royal Society: royalsociety.org/grants-schemes-awards/mentoring-scheme/). I am also regularly invited as external examiner for PhD vivas both in the UK and abroad (see full-length CV for details).

For further details see www.iannettilab.net

Full list of publications (in reverse chronological order: 2000-2018)

2019

1. Hu L, Iannetti GD. Neural indicators of perceptual variability of pain across species. *PNAS* 2019 Jan 29;116(5):1782-1791
2. Bufacchi RJ, Iannetti GD. The value of actions, in time and space. *Trends in Cognitive Sciences* 2019 Apr 23(4):270-271
3. Liang M, Su Q, Mouraux A, Iannetti GD. Spatial patterns of brain activity preferentially reflecting transient pain and stimulus intensity. *Cerebral Cortex* 2019 *in press*
4. Iannetti GD, Vallortigara G. Cognitive Gadgets and Cognitive Priors. *Behavioral and Brain Sciences* 2019 *in press*
5. Somervail R, Bufacchi RJ, Kilintari M, Novembre G, Guo Y, Swapp D, Steed A, Iannetti GD. Direction-specific movement of environmental threats modifies the peripersonal space-related defensive actions. *Scientific Reports* 2019 Mar 6;9(1):3661.
6. Novembre G, Pawar VM, Kilintari M, Bufacchi RJ, Guo Y, Rothwell JC, Iannetti GD. The effect of salient stimuli on neural oscillations, isometric force, and their coupling. *NeuroImage* 2019 Sep;198:221-230.
7. Bufacchi RJ, Ponticelli S, Novembre G, Kilintari M, Guo Y, Iannetti GD. Muscular effort increases hand-blink reflex magnitude. *Neuroscience Letters* 2019 *in press*
8. Su Q, Qin W, Yang QQ, Yu CS, Qian TY, Mouraux A, Iannetti GD, Liang M. Brain regions preferentially responding to transient and iso-intense painful or tactile stimuli. *NeuroImage* 2019 May 15;192:52-65
9. Peng WW, Tang ZY, Zhang FR, Li H, Kong YZ, Iannetti GD, Hu. Neurobiological mechanisms of TENS-induced analgesia. *NeuroImage* 2019 Apr 1;195:396-408 (*shared senior authorship)
10. Beck B, Gnanasampanthan S, Iannetti GD, Haggard P. No temporal contrast enhancement of simple decreases in noxious heat. *Journal of Neurophysiology* 2019 May 1;121(5):1778-1786

2018

11. Bufacchi RJ, Iannetti GD. An action field theory of peripersonal space. *Trends in Cognitive Sciences* 2018 Dec 22(12):1076-1090
12. Mouraux A, Iannetti GD. The search for pain biomarkers in the human brain. *Brain* 2018 Dec 1;141(12):3290-3307
13. Novembre G, Pawar VM, Bufacchi RJ, Kilintari M, Srinivasan MA, Rothwell JC, Haggard P, Iannetti GD. Saliency detection as a reactive process: unexpected sensory events evoke cortico-muscular coupling. *Journal of Neuroscience* 2018 Feb 28;38(9):2385-2397
14. Kilintari M, Bufacchi RJ, Novembre G, Guo Y, Haggard P, Iannetti GD. High-precision voluntary movements are largely independent from preceding vertex potentials elicited by sudden sensory events. *The Journal of Physiology* 2018 Aug 596(16): 3655-3673.
15. Jin QQ, Wu GQ, Peng WW, Xia XL, Hu L, Iannetti GD. Somatotopic representation of second pain in the primary somatosensory cortex of humans and rodents. *Journal of Neuroscience* 2018 Jun 13;38(24):5538-5550.
16. Mancini F, Pepe A, Bernacchia A, Di Stefano G, Mouraux A, Iannetti GD. Characterising the short-term habituation of event-related evoked potentials. *eNeuro* 2018 Sep 28;5(5). pii: ENEURO.0014-18.2018
17. Novembre G, Iannetti GD. Tagging the musical beat: Neural Entrainment or Event-Related Potentials? *PNAS* 2018 Nov 20;115(47):E11002-E11003
18. Ferre ER, Iannetti GD, Van Dijk J, Haggard P. Pain is in the brain: ineffectiveness of tactile gating shows cortical basis of nociceptive signaling in the Thermal Grill Illusion. *Scientific Reports* 2018 Apr 26;8(1):6584.
19. Algoet M, Duque J, Iannetti GD, Mouraux A. Temporal profile and limb-specificity of phasic pain-evoked changes in motor excitability. *Neuroscience* 2018 Aug 21;386:240-255.

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20. Davis KD, Flor H, Greely HT, Iannetti GD, Mackey S, Ploner M, Pustilnik A, Tracey I, Treede RD, Wager T. Brain imaging tests for chronic pain: medical, legal and ethical issues and recommendations. *Nature Reviews Neurology* 2017 Oct;13(10):624-638.
21. Bufacchi RJ, Sambo CF, Di Stefano G, Cruccu G, Iannetti GD. Pain outside the body: defensive peripersonal space deformation in trigeminal neuralgia. *Nature Scientific Reports* 2017, Oct 2;7(1):12487.
22. Wallwork SB, Bufacchi RJ, Moseley GL, Iannetti GD. Rethinking blinking: No cognitive modulation of reflex eye protection in early onset blindness. *CLINPH* 2017 Jan;128(1):16-17.
23. Peng W, Xia XL, Yi M, Zhang Z, Huang G, Iannetti GD, Hu L. Brain oscillations reflecting pain-related behavior in freely-moving rats. *PAIN* published online 2017 Sep 25. 2018 Jan; 159(1): 106–118.

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24. Hu L, Iannetti GD. Painful issues in pain prediction. *Trends in Neurosciences* 2016 Apr; 39(4):212-20.

74. Mancini F, Haggard P, **Iannetti GD**, Longo MR, Sereno MI. Fine-grained nociceptive maps in primary somatosensory cortex. *Journal of Neuroscience* 32:17155-62.
75. Hatem SM, Hu L, Ragé M, Gierasimowicz A, Plaghki L, Bouhassira D, Attal N, **Iannetti GD**, Mouraux A. Automated single-trial assessment of laser-evoked potentials as an objective functional diagnostic tool for the nociceptive system. *Clinical Neurophysiology*, 123(12):2437-45.
76. Ferrè ER, Bottini G, **Iannetti GD**, Haggard P. The balance of feelings: vestibular modulation of bodily sensations. *Cortex* Mar; 49(3): 748-58.

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77. Liang M, Mouraux A, **Iannetti GD**. Parallel processing of nociceptive and non-nociceptive somatosensory information in the human primary and secondary somatosensory cortices: evidence from dynamic causal modelling of fMRI data. *Journal of Neuroscience* 31:8976-85.
78. Mouraux A, Diukova A, Lee MC, Wise RG, **Iannetti GD**. A multisensory investigation of the functional significance of the "pain matrix". *NeuroImage* 54(3):2237-49.
79. Gallace A, Torta DME, Moseley L, **Iannetti GD**. The analgesic effect of crossing the arms. *PAIN* 152: 1418-23.
80. **Iannetti GD**, Mouraux A. Can the functional MRI responses to physical pain really tell us why social rejection "hurts"? *PNAS* 108(30):E343.
81. Valentini E, Torta DME, Mouraux A, **Iannetti GD**. Dishabituation of laser-evoked EEG responses: dissecting the effect of certain and uncertain changes in stimulus modality *Journal of Cognitive Neuroscience*, 23(10):2822-37.
82. Hu L, Liang M, Mouraux A, Wise RG, Hu Y, **Iannetti GD**. Taking into account latency, amplitude and morphology: improved estimation of single-trial ERPs by wavelet filtering and multiple linear regression. *Journal of Neurophysiology*, 106(6):3216-29.
83. Haanpää M, Attal N, Backonja M, Baron R, Bennett M, Bouhassira D, Cruccu G, Hansson P, Haythornthwaite JA, **Iannetti GD**, Jensen TS, Kauppila T, Nurmikko TJ, Rice ASC, Rowbotham M, Serra J, Sommer C, Smith BH, Treede RD. NeuPSIG guidelines on neuropathic pain assessment. *PAIN* 152(1):14-27.
84. Mouraux A, **Iannetti GD**, Colon E, Nozaradan S, Legrain V, Plaghki L. Nociceptive steady-state evoked potentials elicited by rapid periodic thermal stimulation of cutaneous nociceptors. *Journal of Neuroscience* 31:6079-87.
85. Mancini F, Longo MR, **Iannetti GD**, Haggard P. A supramodal representation of the body surface. *Neuropsychologia* 49(5):1194-201.
86. Legrain V, **Iannetti GD**, Plaghki L, Mouraux A. The pain matrix reloaded. A salience detection system for the body. *Progress in Neurobiology* 93(1):111-24.
87. Hu L, Zhang ZG, Hung YS, Luk KD, **Iannetti GD**, Hu Y. Single-trial detection of somatosensory evoked potentials by probabilistic independent component analysis and wavelet filtering. *Clinical Neurophysiology* 122(7):1429-39.

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88. Hu L, Mouraux A, Hu Y, **Iannetti GD**. A novel approach for enhancing the signal-to-noise ratio and detecting automatically event-related potentials (ERPs) in single trials. *NeuroImage* 50:99–111.
89. Wang AL, Mouraux A, Liang M, **Iannetti GD**. Temporal uncertainty and not refractoriness explains the repetition suppression of laser-evoked potentials (LEPs). *Journal of Neurophysiology* 104(4):2116-24.
90. **Iannetti GD**, Mouraux A. From the Neuromatrix to the Pain Matrix (and back). Review. *Experimental Brain Research* 205(1):1-12.
91. Liang M, Mouraux A, Chan V, Blakemore C, **Iannetti GD**. Functional characterisation of sensory event-related potentials (ERPs) using probabilistic independent component analysis (P-ICA): effect of stimulus modality and stimulus location. *Clinical Neurophysiology* 121(4):577-87.
92. Mouraux A, **Iannetti GD**, Plaghki L. Low intensity intra-epidermal electrical stimulation can activate Aδ-nociceptors selectively. *Pain* 150(1):199-207.
93. Summers P, Ferraro D, **Iannetti GD**, Porro CA. A quantitative comparison of fMRI responses to noxious and innocuous stimuli in the human spinal cord. *NeuroImage* 50(4): 1408-15.
94. Baumgärtner U*, **Iannetti GD***, Stoeter P, Tracey I, Treede RD. Multiple somatotopic representations of heat and mechanical pain in the operculo-insular cortex: a high-resolution fMRI study. *Journal of Neurophysiology*, 104(5):2863-72
95. Mayhew SD, Dirckx SG, Niazzy RK, **Iannetti GD**, Wise RG. EEG signatures of auditory activity correlate with simultaneously recorded fMRI responses in humans. *NeuroImage* 2010; 49(1):849-64.
96. Mayhew SD, Macintosh BJ, Dirckx SG, **Iannetti GD**, Wise RG. Coupling of simultaneously acquired electrophysiological and haemodynamic responses during visual stimulation. *Magnetic Resonance Imaging* 28(8):1066-77.

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141. Cruccu G, Leandri M, **Iannetti GD**, Mascia A, Romaniello A, Truini A, Galeotti F, Manfredi M. [Small-fiber dysfunction in trigeminal neuralgia: Carbamazepine effect on laser-evoked potentials.](#) *Neurology* 56(12): 1722-1726.

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142. Cruccu G, **Iannetti GD**, Agostino R, Romaniello A, Truini A, Manfredi M. [Conduction velocity of the human spinothalamic tract as assessed by laser evoked potentials.](#) *NeuroReport* 11(13): 3029-3032.
143. Capozza M, **Iannetti GD**, Cruccu G, Accornero N. [Three-dimensional mapping of brainstem functional lesions.](#) *Medical Biological Engineering Computing* 38: 639-644.
144. Agostino R, Cruccu G, **Iannetti GD**, Innocenti P, Romaniello A, Truini A, Manfredi M. [Trigeminal small-fibre dysfunction in patients with diabetes mellitus: a study with laser evoked potentials and corneal reflex.](#) *Clinical Neurophysiology* 111(12): 2264-2267.
145. Agostino R, Cruccu G, **Iannetti GD**, Romaniello A, Truini A, Manfredi M. [Body distributions of pinprick and warmth thresholds to CO₂ laser stimulation.](#) *Neuroscience Letters* 285(2): 115-118.

BOOK CHAPTERS

1. **Iannetti GD**, Mouraux A. [The use of EEG/fMRI in pain research.](#) In: L Lemieux, C Mulert (Eds): *EEG-fMRI*. Springer Verlag, 2009, pp. 365-384.
2. Tracey I, **Iannetti GD**. [Brainstem Functional Imaging in Humans.](#) In: Cruccu G, Hallett M (Eds): *Brainstem Function and Dysfunction (Supplements to Clinical Neurophysiology, Vol. 58)*. Amsterdam, Elsevier, 2006, pp. 52-67.
3. Marx JJ, **Iannetti GD**, Thömke F, Fitzek S, Urban PP, Stoeter P, Dieterich M, Cruccu G, Hopf HC. [3D brainstem topodiagnosis – a voxel-based model analyzing MR imaging data.](#) In: Cruccu G, Hallett M (Eds): *Brainstem Function and Dysfunction (Supplements to Clinical Neurophysiology, Vol. 58)*. Amsterdam, Elsevier, 2006, pp. 26-37.
4. Cruccu G, **Iannetti GD**, Truini A. [Brainstem reflexes and their relevance to pain.](#) In: Cervero F and Jensen TS (Eds): *Handbook of Clinical Neurology, 3rd series. Pain*. Elsevier, 2006, pp. 411-426.
5. **Iannetti GD**. [Electrocortical responses to nociceptive stimulation in humans.](#) In: Tracey I (Ed): *Pain Refresher Courses, 14th World Congress on Pain*. IASP Press, Seattle, 2012, pp. 431-439.
6. **Iannetti GD**, Mouraux A. [The ‘pain matrix’: myths and \(unpleasant\) truths.](#) In: Apkarian V (Ed): *The brain adapting with pain: contribution of neuroimaging technology to pain mechanisms*. IASP Press, 2015.
7. Mouraux A, **Iannetti GD**, Baumgartner U, Treede RD. [Evoked potentials in relation to pain perception.](#) In: Apkarian V (Ed): *The brain adapting with pain: contribution of neuroimaging technology to pain mechanisms*. IASP Press, 2015.
8. Apkarian AV, **Iannetti GD**. [fMRI and human pain perception.](#) In: Wood JN (Ed): *Oxford Handbook of the Neurobiology of Pain*. Oxford University Press, 2019
9. Bufacchi RJ, **Iannetti GD**. [What is peripersonal space?](#) In: de Vignemont F, Farné A, Serino A, Hu Y (Eds): *Peripersonal Space*. Oxford University Press, 2019