

Ai fini della pubblicazione

PIERPAOLO PANI Curriculum Vitae

Rome, 27/08/2018

Part I – General Information

Full Name	Pierpaolo Pani
Citizenship	Italian
Spoken Languages	Italian, English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University Graduation	2002	Sapienza University of Rome	Summa cum laude (110/110 e lode) in General and Experimental Psychology, Experience in Human Neurophysiology
Pre-doctorate training	2003/2004	Sapienza University of Rome	Experience in Behavioural and Systems Neurophysiology (non-human primates)
PhD	2004/2008	Sapienza University of Rome	Doctorate degree, Experience in Behavioral and Systems Neurophysiology (non-human primates)

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2009	2012	Katholieke Universiteit Leuven	Post-Doctoral fellow
2013	2016	Sapienza University of Rome	Post-Doctoral fellow (Assegnista)
2017	2018	Sapienza University of Rome	Post-Doctoral fellow (Assegnista)

IIIB – Other Appointments

Start	End	Institution	Position
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07/2016	08/2016	Sapienza University of Rome	Collaboration Contract: Set-up of behavioural data collection system, behavioural data collection and analysis
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Part IV – Teaching experience

Year	Institution	Lecture/Course
2009	European University of Rome	Behavioural Neurophysiology/ Physiological Psychology
2011/12	Katholieke Universiteit Leuven	Behavioural Neurophysiology mentoring /PhD program in Neurophysiology
2014/16	European University of Rome	Behavioural Neurophysiology / Physiological Psychology
2013/ today	Dept of Physiology and Pharmacology “Erspamer”, Sapienza University of Rome	Student tutoring /Master Degree in Psychology, Neurobiology and Medicine
2013/ today	Dept of Physiology and Pharmacology “Erspamer”, Sapienza University of Rome	Student tutoring /PhD program in Behavioral Neurophysiology

Part V - Society memberships, Awards and Honors

Year	Title
2008	Society for Neuroscience (SfN) (membership)
2011	FENS-IBRO HERTIE Winter School (selected)
2014	Society for the Neural Control of Movement (NCM) (membership)
2018	Italian Society for Neuroscience (SINS) (membership)

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2010/2012	Brainshape (I)	EC-ERC-StG (PI: Peter Janssen)	EUR 1.499.200
2013/2016	BrainLeap (I)	EC-FP7-ICT (PI: Stefano Ferraina)	EUR 496.000

2018/20	BioMorph (I)	Regione Lazio (PI: Stefano Ferraina)	EUR 59.460
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Part VII – Research Activities

Keywords	Brief Description
Movement control	<p>Neural basis of grasping control. I investigated the role of premotor and parietal areas in grasping and action observations. The main results are the functional characterization of area F5a in the ventral premotor cortex (Theys, Pani et al. 2012), the first time documented observation of single neuron responses of AIP (anterior intraparietal cortex) neurons to hand movements (Pani et al. 2014), and the characterization of neural responses to affordable shapes in AIP (Romero, Pani, Janssen 2013). Future researches, in collaboration with the KU and UZ Universities of Leuven, plan to investigate these phenomena in patients implanted with miniaturized multielectrode arrays.</p> <p>Neural basis of executive functions control. I investigated the role of the dorsal premotor cortex in decision making by using high controlled behavioural tasks and advanced neurophysiological methods. The main results are the characterization of neural activities that accompany movement generation and inhibition (Mirabella, Pani, Ferraina 2011; Marcos, Pani et al. 2013; Pani et al. 2014) More recent works focused on how sensorial features and task complexity modulate neural activity and behavioural performance (Montanari et al. 2018; Pani et al. SciRep (under revision)). Future research will focus on how executive control operates on other cognitive functions in primates (e.g., reasoning), and on recordings from neurological patients implanted with miniaturized multielectrode arrays, in collaboration with Prof. Peter Janssen (KU Leuven) and Dr. Tom Theys (UZ Leuven).</p> <p>Cortical dynamics associated with different cognitive and functional brain states. I am working to characterize the neural activities of cortical populations of neurons that accompany broadly defined cognitive and functional states (e.g. During active engagement in a task, Resting state, Sleep, Anaesthesia). The main result so far is the observation of the long persistence of cortical neural activity after cardiac arrest (Pani et al. 2018).</p>
Cortical dynamics	
Grasping	
Primates	
Neurophysiology	

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	21	Scopus	2006	2018
Papers [international]	20	Scopus	2008	2018
Total Impact factor	91,728			

Total Impact factor (last 10 years)	89,769
Total Citations	397
Average Citations per Product	18,9
Hirsch (H)	11
Average IF per Product	4,368
Normalized H index (from Laurea degree, 16 years)	0,687
Normalized H index (from PhD degree, 10 years)	1,1

Part IX– Selected Publications since January 1st 2008

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

Persistence of cortical neuronal activity in the dying brain,
Pani P*, Giarrocco F, Giamundo M, Brunamonti E, Mattia M, Ferraina S,
 Resuscitation doi: 10.1016/j.resuscitation.2018.07.001; 2018; IF(2017)=5.863; cit=0.
 (*=corresponding author)

The influence of Generalized Anxiety Disorder on Executive Functions in children with ADHD,
 Menghini D, Armando M, Calcagni M, Napolitano C, Pasqualetti P, Sergeant JA, **Pani P**, Vicari S.
 European Archives of Psychiatry and Clinical Neuroscience 268(4): 349-357; 2018; IF (2017) =
 3.617; cit=0.

Atrophic degeneration of cerebellum impairs both the reactive and the proactive control of
 movement in the stop signal paradigm.
 Olivito G, Brunamonti E, Clausi S, **Pani P**, Chiricozzi FR, Giamundo M, Molinari M, Leggio M,
 Ferraina S.
 Experimental Brain Research 235(10):2971-2981; 2017; IF= 1.806; cit= 1.

Visual salience of the stop-signal affects movement suppression process,
 Montanari R, Giamundo M, Brunamonti E, Ferraina S, **Pani P***.
 Experimental Brain Research 235(7):2203-2214; 2017; IF= 1.806; cit=1.
 (*=corresponding author)

Evaluation of Relational Reasoning by a Transitive Inference Task in Attention-
 Deficit/Hyperactivity Disorder.
 Brunamonti E, Costanzo F, Mammì A, Rufini C, Veneziani D, **Pani P**, Vicari S, Ferraina S,
 Menghini D.
 Neuropsychology 31(2):200-208; 2017; IF=2.699; cit=0.

Reaching-related neurons in superior parietal area 5: influence of the target visibility
Brunamonti E, Genovesio A, **Pani P**, Caminiti R, Ferraina S.
Journal of Cognitive Neuroscience 28(11):1828-1837; 2016; IF=3.108; cit=2.

Neuronal Modulation in the Prefrontal Cortex in a Transitive Inference Task: Evidence of Neuronal Correlates of Mental Schema Management.
Brunamonti E, Mione V, Di Bello F, **Pani P**, Genovesio A, Ferraina S.
The Journal of Neuroscience. 36(4):1223-36; 2016; IF=5.988; cit=2.

Both the COMT Val158Met single-nucleotide polymorphism and sex-dependent differences influence response inhibition.
Mione V, Canterini S, Brunamonti E, **Pani P**, Donno F, Fiorenza MT, Ferraina S.
Front Behav Neurosci 9:127; 2015; IF=3.392; cit=9.

Alpha-and beta-band oscillations subserve different processes in reactive control of limb movements.
Pani P, Di Bello F, Brunamonti E, D'Andrea V, Papazachariadis O, Ferraina S.
Front Behav Neurosci 8:383; 2014; IF=3.27; cit=5.

Grasping execution and grasping observation activity of single neurons in the macaque anterior intraparietal area.
Pani P, Theys T, Romero MC, Janssen P.
Journal of Cognitive Neuroscience 26 (10), 2342-2355; 2014; IF=4.085; cit=25.

Coding of Shape Features in the Macaque Anterior Intraparietal Area.
Romero MC, **Pani P**, Janssen P
The Journal of Neuroscience 34 (11), 4006-4021; 2014; IF=6.344; cit=27.

Proactive and reactive control of movement are differently affected in ADHD children
Pani P, Menghini D, Napolitano C, Calcagni M, Armando M, Sergeant JA, Vicari S.
Research in Developmental Disabilities 34(10) : 3104-3111; 2013; IF=2.735 ; cit=9.

Heterogeneous attractor cell assemblies for motor planning in premotor cortex.
Mattia M, **Pani P** , Mirabella G , Costa S, Del Giudice P, Ferraina S.
The Journal of Neuroscience 33(27):11155-68; 2013; IF=6.747; cit= 26.

Neural variability in premotor cortex is modulated by trial history and predicts behavioral performance.
Marcos E, **Pani P**, Brunamonti E, Deco G, Ferraina S, Verschure P.
Neuron 78:249-55; 2013; IF=15.982 ; cit= 40.

Three-dimensional shape coding in grasping circuits: a comparison between the Anterior Intraparietal area and ventral premotor area F5a
Theys T, **Pani P**, van Loon J, Goffin J, Janssen P.
Journal of Cognitive Neuroscience. 25(3):352-64; 2013; IF=4.687 ; cit= 31.

Selectivity for three-dimensional shape and grasping related activity in the macaque ventral premotor cortex.
Theys T, **Pani P**, van Loon J, Goffin J, Janssen P. The Journal of Neuroscience 32(35):12038-12050; 2012; IF=6.908 ; cit= 31.

Cognitive control of movement in down syndrome
Brunamonti E, **Pani P**, Papazachariadis O, Onorati P, Albertini G, and Ferraina S.
Research in Developmental Disabilities 32: 1792-1797; 2011; IF=3.405 ; cit=16.

Neural correlates of cognitive control of reaching movements in the dorsal premotor cortex of rhesus monkeys.
Mirabella G, **Pani P**, Ferraina S.
Journal of Neurophysiology 106 (3): 1454-1466; 2011; IF=3.316 ; cit=67.

The presence of visual gap affects the duration of stopping process
Mirabella G^o, Pani P^o, Ferraina S.
Experimental Brain Research 192(2):199-209; 2009; IF=2.256 ; cit=19.
(^o =**equally contributed**).

Context influences on the preparation and execution of reaching movements
Mirabella G, **Pani P**, Ferraina S.
Cognitive Neuropsychology 25(7):996-1010; 2008; IF=1.755 ; cit=36.

Part X– Editorial Activity

Ad Hoc Reviewer:
Frontiers in Neuroscience, Behavioral and Brain Functions

Part XI– Seminar, Invited Talks and Symposia

2004

Countermanding task and ADHD. Sapienza University of Rome, Faculty of Psychology

2005

Inhibitory control and impulsivity in ADHD persons. Sapienza University of Rome, Faculty of Psychology

2007

Psychophysics of movement generation and movement suppression in humans. Italian Group of Behavioral Neurophysiology, Sapienza University of Rome

2007

Countermanding reaching in humans and non-humans primates. Dept. of Biomedic Sciences and Advanced Therapies, Neuroloab (University of Ferrara)

2011

Responses of AIP neurons during visually-guided grasping (Society for Neuroscience, Washington DC, nanosymposium)

2012

Responses of AIP neurons during visually-guided grasping WIP Seminar KU Leuven

2013

ADHD and strategies of Inhibitory control. Giornate di Psicologia dell'età Evolutiva University of Bozen, Bolzano

ADHD and cognitive control of movement. Focus in Neuropsichiatria dell'età evolutiva. SINPIA, Catania

2015

Neural correlates of movement generation in dorsal premotor cortex (CIMEC, Trento)

2016

Cortical mechanisms of movement generation in primates (University of L'Aquila)

2017

Neural basis of whether and when to move in dorsal premotor cortex (SINS, Symposium, Speaker and Chairman, Ischia)

2018

Advances in Brain Modulation (Sapienza University of Rome, Organizer and Chairman)

Roma 27/08/2018

In fede

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