

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n._1__ posto/i di Ricercatore a tempo determinato in tenure track (RTT)
per il settore concorsuale 1/E1 - Psicologia Generale, Psicobiologia e Psicometria,
settore scientifico-disciplinare 1/PSIC-01 - Psicologia generale, neuropsicologia e neuroscienze
cognitive, psicometria
presso il Dipartimento di FILOSOFIA "PIERO MARTINETTI",
(avviso bando pubblicato sulla G.U. n. 52 del 28/06/2024, Codice concorso 5613)

Roberta Bianco
CURRICULUM VITAE

(N.B. IL CURRICULUM NON DEVE ECCEDERE LE 30 PAGINE E DEVE CONTENERE GLI ELEMENTI CHE IL CANDIDATO
RITIENE UTILI AI FINI DELLA VALUTAZIONE.

LE VOCI INSERITE NEL FACSIMILE SONO A TITOLO PURAMENTE ESEMPLIFICATIVO E POSSONO ESSERE INTEGRATE)

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

| | |
|---------|---------|
| COGNOME | BIANCO |
| NOME | ROBERTA |

TITOLI**TITOLO DI STUDIO**

(indicare la Laurea conseguita inserendo tipologia e relativo punteggio, Ateneo, titolo della tesi, data di conseguimento, ecc.)

| | |
|------|---|
| 2011 | MSc 110/110 cum laude in Neurobiology. Supervisor: E. D'Angelo. "Neuronal and synaptic alterations in knock-out mice with Autistic Phenotype". Università degli Studi di Pavia, Italy |
| 2011 | BA in Music (9/10). Supervisor (flute): P. Fre. Istituto Superiore di Studi Musicali F. Vittadini, Pavia, Italy |
| 2008 | BS 110/110 cum Laude in Medical Biotechnologies. Supervisor: S. Caccia. "Analysis of the kinetics of inhibitor enzyme neuroserpin. Role in the pathogenesis of FENIB". Università degli Studi di Milano, Italy |

**TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA
DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO**

(inserire tipologia del titolo e relativo punteggio, Ateneo, titolo della tesi, data di conseguimento, ecc.)

| | |
|------------|--|
| 15/08/2017 | Doctoral degree in Neuroscience at Max Planck Institute of Brain and Cognitive Sciences, Leipzig, Germany. Title: Dr rer. med. (magna cum laude) issued by Medical faculty of Leipzig University. Thesis: "Principles of action planning in music production: evidence from fMRI and EEG studies". Supervisors: Prof A. Villringer and Dr D. Sammler |
| 03/07/2014 | Abilitazione Scientifica Nazionale, BANDO D.D. 1796/2023, SETTORE CONCORSUALE 11/E1, PSICOLOGIA GENERALE, PSICOBIOLOGIA E PSICOMETRIA, fascia II |
| 03/07/2014 | Abilitazione Scientifica Nazionale, BANDO D.D. 1796/2023, SETTORE CONCORSUALE 05/D1, FISILOGIA |

CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI

(per ciascun contratto stipulato, inserire tipologia, università/ente, durata in anni / data di inizio e fine, ecc.)

Current appointment(s)

2023 - present Researcher, Marie Skłodowska-Curie fellow
Italian Institute of Technology, Neuroscience of Perception and Action Lab, Rome, Italy

Previous appointment (s)

2022 - 2023 Postdoctoral researcher on ERC Starting grant. Advisor: G. Novembre
Italian Institute of Technology, Neuroscience of Perception and Action Lab, Rome, Italy
2018 - 2021 Postdoctoral researcher on BBSRC and Alzheimer's Research UK grants. Advisor: M. Chait
UCL Ear Institute, University College London (UCL), London, United Kingdom
2016 - 2017 Visiting doctoral fellow on Erasmus Mundus Exchange Network grant. Advisor: V. Penhune
Concordia University, Montreal, Canada

ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO

(inserire tipologia dell'attività, periodo [gg/mm/aa inizio e fine], anno accademico, ateneo, denominazione del corso, numero ore/CFU, ecc.)

2021-present

Co-supervision of 3 PhD students (in Psychology, Concordia University, Dublin Trinity College, Italian Institute of Technology)

2021 Supervision of 1 MSc student (in Neuroscience, UCL)

2020 Supervision of 1 MSc student (in Neuroscience, UCL)

2019 Supervision of 6 MSc students (3 in Neuroscience, UCL; 2 in Audiology, UCL; 1 in Music, Mind and Brain course, Goldsmiths University)

2019-2021

Lecturer: neural signal - MEG/EEG - processing with Statistical Parametric Mapping (SPM), Wellcome Centre Human Neuroimaging, UCL, London. N ore: 4

Lecturer: Auditory neuroanatomy, system, and disease. (UCL: ANAT0003; ANIM0004). N ore: 2

Lecturer: Research methods for crowdsourcing and remote online testing (UCL: EARI0019). N ore: 2

Guest lecturer: Music cognition and memory (Goldsmiths University). N ore: 4

2019 Educational mentor, secondary education (1 mentee, Refugee Support Network, London)

2018-2019 Tutor: SPM for EEG analysis, practical training (~100 students at UCL, ICN Cognitive Neuroscience). N ore: 6

Tutor: SPM for fMRI analysis, practical training (~100 students at UCL, ICN Cognitive Neuroscience). N ore: 6

Tutor: Journal Clubs for MSc students (UCL Department of Experimental Psychology). N ore: 6

2018 Supervision of 3 MSc students (1 in Neuroscience, UCL; 2 in Music, Mind and Brain, Goldsmiths University)

2017 Supervision of 1 MSc student (in Neuroscience, Concordia University)

2015-2014 Co-supervision of 2 MSc and 3 BS students (in Neuroscience, Max Planck Institute CBS)

DOCUMENTATA ATTIVITÀ DI FORMAZIONE O DI RICERCA PRESSO QUALIFICATI ISTITUTI ITALIANI O STRANIERI

(inserire tipologia dell'attività, anno/anno accademico, ente, periodo, impegno in termini orari, ecc.)

- dal 01-10-2012 al 06-07-2017 (full time)

International collaboration as co-investigator in the project "Action planning in music production: evidence from fMRI and EEG studies" within the PhD programme: IMPRS Neuroscience of Communication at Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig. Funded PhD scholarship by Max Planck Society.

Collaborators: Prof Arno Villringer and Prof Daniela Sammler

Hosting institution: Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, DE.

Research outcome:

- 1) Bianco R., Novembre G., Ringer H., Kohler N., Keller P.E., Villringer A., Sammler D. Lateral prefrontal cortex is a hub for music production from structural rules to movement sequences. *Cerebral Cortex* 32(18): 3878-3895 (2022)
- 2) Bianco R. How regularities in sound sequences inform action planning: Neural and behavioural evidence from silent piano performance. *Acoustical Science and Technology* 41(1): 355-357 (2020)
- 3) Martins M.J.D., Fischmeister F.Ph.S., Gingras B., Bianco R., Puig-Waldmueller E., Villringer A., Fitch T.W., Beisteiner R., Recursive music elucidates neural mechanisms supporting the generation and discrimination of melodic hierarchies. *Brain Structure and Function* 225(7): 1997-2015 (2020)
- 4) Martins M.J.D*, Bianco R.*, Sammler D., Villringer A., Recursion in action: An fMRI study on the generation of new hierarchical levels in motor sequences. *Human Brain Mapping* 40(9): 2623-2638 (2019)
- 5) Bianco R., Novembre G., Keller P.E., Villringer A., Sammler D., Musical genre-dependent behavioral and EEG signatures of action planning. A comparison between classical and jazz pianists. *Neuroimage* 169: 383-394 (2018)
- 6) Bianco R., Novembre G., Kim S.G., Keller P.E., Scharf F., Friederici A.D., Villringer A., Sammler D., Neural networks for harmonic structure in music perception and action. *Neuroimage* 142: 454-464 (2016)
- 7) Bianco R., Novembre G., Keller P.E., Friederici A.D., Villringer A., Sammler D., Syntax in action has priority over movement selection in piano playing: An ERP study. *Journal of Cognitive Neuroscience* 28(1): 41- 54 (2016)

- dal 01-12-2016 al 01-10-2017 (full time)

International collaboration as principal investigator (PI) in the project "Effects of liking and predictability on music perception and production".

Funded by Research Visiting Fellowship, Erasmus Mundus Exchange Network in Auditory Cognitive Neuroscience to Dr Roberta Bianco.

Collaborator: Prof Virginia Penhune.

Co-supervised PhD student (currently on the project): Alexandre Albury

Hosting institution: Concordia University, Montreal, Canada.

Research outcome:

- 1) Bianco R., Gold B., Johnson A., Penhune V., Music predictability and liking enhance pupil dilation and promote motor learning in non-musicians. *Scientific Reports* 9: 17060 (2019)
- 2) Albury A., Bianco R., Gold B., Penhune V., Context changes judgments of liking and predictability for melodies, *Frontiers in Psychology*, Volume 14 - (2023)
- 3) Albury A., Didaskalou M., Psomas M., Bianco R., Johnson A., and Penhune V., Effects of emotional arousal on motor learning in musical contexts, Poster presented at Society of Neuroscience 2023

- dal 01-10-2017 al 01-10-2021

International collaboration as co-investigator in the project "How the brain detects patterns in sound sequences".

Funded by Biotechnology and Biological Sciences Research Council, BBSRC (BB/P003745/1) to Prof. Maria Chait.

PI: Prof. Maria Chait.

Collaborator: Prof Marcus Pearce.

Hosting institution: UCL Ear Institute, University College of London, London, UK.

Research outcome:

- 1) Hu M., Bianco R., Hidalgo A., Chait M. Concurrent encoding of sequence predictability and event-evoked prediction error in unfolding auditory patterns: Insights from MEG. *Journal of Neuroscience*, e1894232024 (2024).
- 2) Bianco R., Hall E., Pearce M., Chait M. Implicit auditory memory in older listeners: from encoding to 6- month retention, *Current Research in Neurobiology*, 5, 100115 (2023).
- 3) Harrison P., Bianco R., Chait M., Pearce M. A., PPM-Decay: A Computational Model of Auditory Prediction with Memory Decay. *PLoS Comput Biol* 16(11): e1008304 (2020).

4) Bianco R., Harrison P., Bolger C., Hu M., Picken S., Pearce M., Chait M., Long-term implicit memory for sequential auditory patterns in humans. eLife 9: e56073 (2020).

- dal 01-10-2021 al 31-12-2021

International collaboration as Principal Investigator (PI) in the project "Developing an auditory memory- based diagnostic test for Alzheimer's disease".

Funded by Alzheimer's Research UK, ECR Bridging Grant to Roberta Bianco.

Collaborator: Prof Maria Chait funded by Biotechnology and Biological Sciences Research Council, BBSRC (BB/P003745/1).

Research outcome:

1) Bianco R., Mills G, De Karangal M, Rosen S & Chait M. Reward enhances online participants' engagement with a demanding auditory task. Trends in Hearing 25: DOI: 10.1177/23312165211025941 (2021).

2) Milne AE*, Bianco R.*, Poole KC.*, Zhao S.*, Billig AJ*, Chait M., An online headphone screening test based on dichotic pitch. Behavior Research Methods 53(4): 1551-1562 (2021).

3) Bianco R., Chait M. No link between Speech-in-noise perception and Auditory short-term memory - evidence from a large cohort of older and younger listeners, Trends in Hearing, 27, 23312165231190688 (2023).

4) Bianco R., Hall E., Pearce M., Chait M. Implicit auditory memory in older listeners: from encoding to 6- month retention, Current Research in Neurobiology, 5, 100115 (2023).

- dal 01-01-2023 a oggi

International collaboration as principal Investigator (PI) in the project "Neural encoding of novel and familiar proto-musical patterns in humans and monkeys".

Funded by European Commission, Marie Skłodowska-Curie Individual Fellowship (MSCA, PHYLOMUSIC, 101064334) to Roberta Bianco.

Collaborator: Dr Giacomo Novembre funded by European Research Council, ERC Starting Grant.

Hosting institution: Italian Institute of Technology (IIT), Rome, Italy.

Research outcome:

1) Bianco R., Zuk N., Bigand F., Quarta E., Grasso S., Arnese F., Ravignani A., Battaglia-Mayer A.*, Novembre G.* Neural encoding of musical expectations in a non-human primate. Current Biology, 34,2,444-450.e5 (2024)

2) Bigand F., Bianco R., Abalde S. F. & Novembre G. The geometry of interpersonal synchrony in human dance. Current Biology, 34, 3011-3019 (2024)

3) Ongoing work lead by Bianco R includes a collaboration with human newborn baby lab lead by Dr Brigitta Toth at the Institute of Cognitive Neuroscience and Psychology, Research Centre for Natural Sciences, Hungarian Academy of Sciences (HAS) Budapest Hungary.

4) Abalde S. F., Bigand F., Bianco R., Keller P. E., Novembre G. On the role of ancillary body movements in joint music making and interpersonal synchronization. Paper in preparation. Poster presented at Rhythm Production and Perception Workshop (RPPW), UK.

5) Nguyen T., Bigand F., Reisner S., Koul A., Bianco R., Markova G., Hoehl S., Novembre G. Tiny Dancers - Infants' neural and motor responses to music at different pitches. Paper in preparation. Poster presented at 17th International Conference on Music Perception and Cognition, JP.

DOCUMENTATA ATTIVITÀ IN CAMPO CLINICO

(indicare, data, durata, ruolo, ente presso il quale si è prestata attività assistenziale, ecc.)

NA

REALIZZAZIONE DI ATTIVITÀ PROGETTUALE

(indicare descrizione dell'attività, durata, eventuale ente a favore del quale è stata realizzata l'attività, ecc.)

Si veda attività di ricerca sopra

ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI CENTRI O GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI O PARTECIPAZIONE AGLI STESSI

(per ciascuna voce inserire tipologia di progetto, titolo del progetto, anno, durata, eventuale ente finanziatore e importo del finanziamento, ruolo, gruppo di ricerca, ecc.)

2024 Interviewed for European Research Council (ERC) Starting Grant 2024 (SH4, score B, rank within the top 45% of interviewed applicants).

dal 01-02-2023 a oggi

Funded international project to Roberta Bianco (as PI). Title of the project: Neural encoding of novel and familiar proto-musical patterns in humans and monkeys. Marie Skłodowska-Curie Individual Fellowship (Principal Investigator). Funded by European Commission (PHYLOMUSIC, MSCA-PF 101064334). Duration 2 years. Amount: € 188.000

dal 01-11-2021 al 31-12-2021

Funded international project to Roberta Bianco (as PI). Title of the project: Developing an auditory memory- based diagnostic test for Alzheimer's disease. Early Career Researcher Bridging Fund (Principal Investigator), funded by Alzheimer's Research UK. Duration: 2 months. Amount: £ 4,606.75

dal 30-10-2016 al 30-09-2017

Funded international project to Roberta Bianco (as PI). Title of the project: Effects of liking and predictability on music perception and production. ACN Mobility Fellowship (Principal Investigator, doctoral visiting fellowship) funded by Erasmus Mundus Exchange Network in Auditory Cognitive Neuroscience. Concordia University (Montreal, CA). Duration: 10 months. Amount: € 17.750

TITOLARITÀ DI BREVETTI

(per ciascun brevetto, inserire autori, titolo, tipologia [nazionale o internazionale], anno, numero brevetto, ecc.)

NA

ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

(inserire titolo congresso/convegno, data, durata in giorni/ore, ente organizzatore, ecc.)

Conference Speaker at 12th Biannual conference of the German cognitive science society: "How Language and Behaviour Constitute Cognition (Gesellschaft für Kognitionswissenschaft, KogWis2014). Tübingen, DE. Talk title: "Action planning is based on musical syntax in expert pianists. ERP evidence."

dal 29-09-2014 al 02-10-2014

Poster presenter at 21st Annual Meeting of the Organization for Human Brain Mapping (OHBM). Honolulu, Hawaii, USA. Poster title: "Musical Syntax in Production and Perception: an fMRI study." <https://www.humanbrainmapping.org/i4a/pages/index.cfm?pageID=3625>

dal 14-06-2015 al 18-06-2015

Conference Speaker at The Neurosciences and Music - VI, Music, Sound and Health 2017. Boston, USA. Talk title: "Genre-specific behavioural and EEG signatures of musical action planning in classical and jazz pianists." <https://www.fondazione-mariani.org/en/congresso/t-he-neuroscencies-and-music-vi/> dal 15-06-2017 al 18-06-2017

Conference Speaker at Music & Eye-Tracking Conference, MPI for Empirical Aesthetics. Frankfurt/M., DE. Talk title: "Dissociating the role of music predictability and liking in motor sequence learning." <https://www.aesthetics.mpg.de/en/the-institute/events/past-events/music-eye-tracking-conference-2017.html>

dal 17-08-2017 al 18-08-2017

Conference Speaker at Basic Auditory Science (BAS) 2018. New Castle, UK. Talk title: "Implicit learning of patterns in rapid sound sequences: behavioural evidence." <https://conferences.ncl.ac.uk/bas2018/>

dal 03-09-2018 al 04-09-2018

Invited Conference Speaker at Tohoku Universal Acoustical Communication Month 2018. Sendai, JP. Seminar on brain, hearing and speech sciences for universal speech communication. Talk title: "How regularities in sound sequences inform action planning: neural and behavioural evidence from silent piano performance." <https://www.tfc.tohoku.ac.jp/program/2153.html>

dal 24-10-2018 al 30-10-2018

Poster presenter at SWC Workshop Predictive processing in the Brain at Sainsbury Wellcome Centre (SWC) London, UK. Poster title: "Fast and long-term implicit memory for rapid sound sequences: behavioural evidence in human listeners".

dal 08-04-2019 al 09-04-2019

Conference Speaker at Interdisciplinary Advances in Statistical Learning (IASL), 2019. San Sebastian, ESP. Talk title: "Implicit memory for regularities in rapid sound sequences. " <https://www.bcbl.eu/oldevents/statistical-learning2019/en/conference/>

dal 27-06-2019 al 29-06-2019

Poster Presenter at Basic Auditory Science (BAS) 2019. London, UK. Poster title: "Behavioural and neural evidence for implicit memory for regularities in rapid sound sequences." <https://www.ucl.ac.uk/ear/events/2019/sep/basic-auditory-science-2019>

dal 04-09-2019 al 05-09-2019

Conference Speaker at Advances and Perspectives in Auditory Neuroscience (APAN), 2019. Chicago, USA. Talk title: "Behavioural and neural evidence for implicit memory for regularities in rapid sound sequences." <https://www.med.upenn.edu/apan/>

dal 18-10-2019 al 18-10-2019

Poster presenter at Society of Neuroscience (SfN), 2019. Chicago, USA. Talk title: "Behavioural and neural evidence for implicit memory for regularities in rapid sound sequences." <https://www.sfn.org/meetings/neuroscience-2019>

dal 19-10-2019 al 23-10-2019

Poster presenter at Association for Research in Otolaryngology (ARO), 2020, San Jose, USA. Poster title: "A Brain Network of Temporo-Frontal and Hippocampal Areas Support Pattern Detection in Rapid Sound Sequences". <https://aro.org/meetings/midwinter-meeting-2020/>

dal 25-01-2020 al 29-01-2020

Invited Speaker at Seminar Series MMB/PANC Lecture Series, Goldsmiths 2019-2020, London, UK. Talk title: "The unforgettable melodies - Can music help us understand how memories form?"

<https://musicmindandbrain.wordpress.com/2020/05/29/the-unforgettable-melodies-can-music-help-us-understand-how-memories-form/>

dal 19-03-2020 al 19-03-2020

Invited Seminar Speaker at International Laboratory for Brain, Music, and Sound Research (BRAMS), Montreal, CA. Talk title: "The role of memory in statistical tracking of sound sequences."

<https://brams.org/2021/03/15/brams-virtual-conference-by-dr-dr-roberta-bianco/>

dal 25-03-2021 al 25-03-2021

Conference Speaker at University College London (UCL) Neuroscience Symposium, 2021. London, UK. Talk title: "Long-term implicit memory for sequential auditory patterns in humans".

<https://www.ucl.ac.uk/school-life-medical-sciences/events/2021/jun/ucl-neuroscience-symposium-2021> dal 15-06-2021 al 16-06-2021

Conference Speaker at Advances and Perspectives in Auditory Neuroscience (APAN), 2021 (online). Authors: Bianco R, Chait M. Talk title: "Effects of attention on the formation of long-term implicit memory for sound patterns". <https://www.med.upenn.edu/apan/>

dal 04-11-2021 al 05-11-2021

Invited Seminar Speaker at Max Planck • NYU Center for Language Music and Emotion. NY, USA. Talk title: "The role of memory in the perception of auditory patterns." <https://clame.nyu.edu/news-and-events>

dal 24-03-2022 al 24-03-2022

Invited Seminar Speaker at Queen Mary University London (QMUL), Music Cognition Lab 10th Anniversary Workshop: Talk title: "The effects of ageing on long-term memory of tone-patterns: evidence from online, reaction-time based, longitudinal study"

dal 01-07-2022 al 01-07-2022

Invited Conference talk at the Symposium: 'Music learning and memory: from sensorimotor activations to social interaction', Italian Association of Psychology, 30' conference, University of Padova, Padova, IT. Talk title: On the neural and computational underpinnings of memory of tone sequences.

<https://aipass.org/xxx-congresso-aip-plenario-padova-27-30-settembre-2022/>

dal 27-09-2022 al 30-09-2022

Invited Seminar Speaker at University of Cambridge, Centre for Music & Science (CMS) and Music Cognition QMUL Lab. Cambridge, UK. Talk title: "On the neural and computational underpinnings of memory for tone sequences."

dal 25-10-2022 al 25-10-2022

Invited Seminar Speaker at Teatro Kursaal Santa Lucia (Bari); Public event: The power of Music. Talk title: "Il cervello che prevede i suoni futuri". Organizzato da Università degli Studi di Bari Aldo Moro. dal 26-11-2022 al 26-11-2022

Invited Conference Speaker at the Symposium: 'Online Experimentation in Audition: Recent Advances and Future Directions', Association for Research in Otolaryngology (ARO), 2023, Orlando, USA. Talk title: An online, reaction-time based, longitudinal study on long-term auditory memory.

<https://aro.org/> dal 11-02-2023 al 15-02-2023

Invited Conference Speaker (co-author) at the Symposium: 'Auditory Expectations, Learning and Plasticity', Association for Research in Otolaryngology (ARO), 2023, Orlando, USA. Talk title: Neural Mechanisms for Tracking Uncertainty in Rapidly Unfolding Sound Sequences. <https://aro.org/>

dal 11-02-2023 al 15-02-2023

Poster presenter at Association for Research in Otolaryngology (ARO), 2023, Orlando, USA. Poster title: "Tracking structural changes in sound sequences: a comparative EEG study across human and non-human primates." <https://aro.org/>

dal 11-02-2023 al 15-02-2023

Invited Seminar Speaker at Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, IT. Talk title: "Neural encoding of music: phylogenetic and computational perspectives." <https://www.sissa.it/>
dal 07-06-2023 al 09-06-2023

Conference Speaker at 19th Rhythm Perception and Production Workshop (RPPW). Nottingham, UK. Talk title: "Neural encoding of musical expectations in non-human primates."

<https://www.rppw.org/program--keynotes.html>

dal 19-06-2023 al 19-06-2023

Invited Seminar Speaker at IMRPS NeuroCom Summer School "A Journey through Cognitive Neuroscience" at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, DE. <https://imprs-neurocom.mpg.de/242808/temp-summer-school-finish>

dal 26-06-2023 al 28-06-2023

Conference Speaker at The 17th International Conference on Music Perception and Cognition (ICMPC17- APSCOM7). Tokyo, JP. Talk title: "Neural encoding of musical expectations in non-human primates." <https://jsmpc.org/ICMPC17/program/>

dal 24-08-2023 al 24-08-2023

Invited Seminar Speaker at "Starting a grant proposal: from idea to practice, the value of interdisciplinarity in grant writing" at University of Milano-Bicocca, Milan, IT <https://www.summerschoolbicocca.com/23-starting-a-grant-proposal.php>

dal 20-10-2023 al 20-10-2023

Invited Seminar Speaker at CogCom/BeCogBio Seminar WS 2023/2024, University of Vienna, Vienna, AT. Talk title: "Neural encoding of musical expectations in human and nonhuman primates". <https://cogcom.univie.ac.at/seminars/>

dal 20-11-2023 al 21-11-2023

Invited Seminar Speaker at "Funding your research and beyond", Italian Institute of Technology, Milan, IT. Talk title: "How to write a competitive Marie Skłodowska-Curie application". <https://www.iit.it/it/training>

dal 22-01-2024 al 22-01-2024

Invited Conference Speaker at the Symposium: 'New Approaches and Technologies in Auditory Neuroscience', Association for Research in Otolaryngology (ARO), Anaheim, USA. <https://aro.societyconference.com/conf/#sessions/conf10004>

dal 02-02-2024 al 07-02-2024

Organiser (and speaker) of the Public Seminar at Libreria Scaldasole (Milan); Neuroscienza e Musica. Personal talk title: "Percezione sensoriale, ed origini evolutive della musica". Other speakers: Prof. Laura Ferrei and Prof Carlotta Lega

dal 29-02-2024 al 29-02-2024

CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA
(inserire nome e motivazione del premio, data, ente erogatore, ecc.)

Member of Neuroscience Careers Network (NCN) committee (UCL, London). Based on high-level scientific productivity, I was selected to join a committee to develop and administer career advice/ mentoring/ grant-writing seminars and workshops for early career scientists at the faculty level.

dal 01-01-2018 al 01-01-2020

Award as Invited Young Lecturers at the Universal Acoustical Communication Month (UACM) 2018, Sendai, Japan, funded by Tohoku University.

This award resulted in the teaching contribution to the Seminar on brain, hearing and speech sciences for universal speech communication and a peer reviewed paper entitled "BiancoR. How regularities in sound sequences inform action planning: Neural and behavioural evidence from silent piano performance. *Acoustical Science and Technology* 41(1): 355-357 (2020)"

dal 24-10-2018 al 30-10-2018

Member of Association for Research in Otolaryngology (ARO), prestigious organisation promoting basic and clinical research in the broad field of Otolaryngology, including hearing and cognitive sciences. Since 2020, I have been contributing inputs both concerning scientific topics (through several posters and symposia) and serving as a mentor in promoting balance and equality in academic life (as part of the spARO Mentorship Program Pairing 2023-2024)

dal 01-01-2020 a oggi

Recognised as successful academic scientist formed within the IMPRS Neuroscience of Communication PhD program, and therefore selected for the alumni session at the IMPRS Summer School at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig, Germany.

dal 26-06-2023 al 28-06-2023

POSSESSO DEL DIPLOMA DI SPECIALIZZAZIONE EUROPEA RICONOSCIUTO DA BOARD INTERNAZIONALI
(relativamente a quei settori concorsuali nei quali è prevista)
(indicare ambito di conseguimento del diploma, data di conseguimento, ente che ha rilasciato il diploma, ecc.)

NA

TITOLI DI CUI ALL'ARTICOLO 24 COMMA 3 LETTERA A) E B) DELLA LEGGE 30 DICEMBRE 2010, N. 240
(indicare se contratto di tipologia A o B, Ateneo, data di decorrenza e fine contratto/periodo/durata in anni, ecc.)

NA

PRODUZIONE SCIENTIFICA

PUBBLICAZIONI SCIENTIFICHE

(per ciascuna pubblicazione indicare: nomi degli autori, titolo completo, casa editrice, data e luogo di pubblicazione, codice ISBN, ISSN, DOI o altro equivalente)

- 1) 2024. Bigand F, Bianco R, Abalde S.F & Novembre G. The geometry of interpersonal synchrony in human dance. CURRENT BIOLOGY, vol. 34, 3011-3019, <https://doi.org/10.1016/j.cub.2024.05.055>
- 2) 2024. Hu M., Bianco R., Hidalgo A., Chait M. Concurrent encoding of sequence predictability and event- evoked prediction error in unfolding auditory patterns: Insights from MEG. THE JOURNAL OF NEUROSCIENCE, ISSN: 0270-6474, doi: 10.1523/JNEUROSCI.1894-23.2024
- 3) Bianco R, Zuk N J, Bigand F, Quarta E, Grasso S, Arnese F, Ravignani A, Battaglia-Mayer A, Novembre G (2024). Neural encoding of musical expectations in a non-human primate. CURRENT BIOLOGY, vol. 5, p. 179-181, ISSN: 1879-0445, doi: 10.1016/j.cub.2023.12.019
- 4) Bianco R, Hall E T R, Pearce Marcus T., Chait M (2023). Implicit auditory memory in older listeners: From encoding to 6-month retention. CURRENT RESEARCH IN NEUROBIOLOGY, vol. 5, p. 179-181, ISSN: 2665-945X, doi: 10.1016/j.crneur.2023.100115
- 5) Bianco R, Chait M (2023). No Link Between Speech-in-Noise Perception and Auditory Sensory Memory - Evidence From a Large Cohort of Older and Younger Listeners. TRENDS IN HEARING, vol. 27, ISSN: 2331-2165, doi: 10.1177/23312165231190688
- 6) Albury A W., Bianco R, Gold B P., Penhune V B. (2023). Context changes judgments of liking and predictability for melodies. FRONTIERS IN PSYCHOLOGY, vol. 14, ISSN: 1664-1078, doi: 10.3389/fpsyg.2023.1175682
- 7) Novembre G, Nguyen T, Bigand F, Tucci V, Papaleo F, Bianco R, Koul A (2023). Sociality and Timing: Correlation or Causation? Comment on 'The evolution of social timing' by Verga L., Kotz S. & Ravignani A.. PHYSICS OF LIFE REVIEWS, vol. 5, p. 179-181, ISSN: 1571-0645, doi: 10.1016/j.plrev.2023.10.023
- 8) Bianco R, Novembre G, Ringer H, Kohler N, Keller P E, Villringer A, Sammler D (2022). Lateral Prefrontal Cortex Is a Hub for Music Production from Structural Rules to Movements. CEREBRAL CORTEX, vol. 32, p. 1-18, ISSN: 1047-3211, doi: 10.1093/cercor/bhab454
- 9) Bianco R, Mills G, de Kerangal M, Rosen S, Chait M (2021). Reward Enhances Online Participants' Engagement With a Demanding Auditory Task. TRENDS IN HEARING, vol. 25, ISSN: 2331-2165, doi: 10.1177/23312165211025941
- 10) Martins M J D, Fischmeister F Ph S, Gingras B, Bianco R, Puig-Waldmueller E, Villringer A, Fitch W T, Beisteiner R (2020). Recursive music elucidates neural mechanisms supporting the generation and detection of melodic hierarchies. BRAIN STRUCTURE AND FUNCTION, vol. 169, p. 383-394, ISSN: 1863-2653
- 11) Harrison P M C, Bianco R, Chait M, Pearce M T (2020). PPM-Decay: A computational model of auditory prediction with memory decay. PLOS COMPUTATIONAL BIOLOGY, vol. 16, ISSN: 1553-734X
- 12) Bianco R (2020). How regularities in sound sequences inform action planning: Neural and behavioral evidence from silent piano performance. ACOUSTICAL SCIENCE & TECHNOLOGY, vol. 41, p. 355-357, ISSN: 1346-3969, doi: 10.1250/ast.41.355

- 13) Milne A, Bianco R, Poole K, Zhao S, Oxenham A, Billig A, Chait M (2020). An online headphone screening test based on dichotic pitch. *BEHAVIOR RESEARCH METHODS*, vol. 169, p. 383-394, ISSN: 1554-3528, doi: 10.1101/2020.07.21.214395
- 14) Bianco R, Harrison P M C, Hu M, Bolger C, Picken S, Pearce M T, Chait M (2020). Long-term implicit memory for sequential auditory patterns in humans. *ELIFE*, vol. 169, p. 383-394, ISSN: 2050-084X
- 15) Di Liberto G M., Pelofi C, Bianco R, Patel P, Mehta A D., Herrero J L., de Cheveigné A, Shamma S, Mesgarani N (2020). Cortical encoding of melodic expectations in human temporal cortex. *ELIFE*, ISSN: 2050-084X
- 16) Bianco R, Ptasczynski L E, Omigie D (2019). Pupil responses to pitch deviants reflect predictability of melodic sequences. *BRAIN AND COGNITION*, vol. 169, p. 383-394, ISSN: 1090-2147, doi: 10.1016/j.bandc.2019.103621
- 17) Bianco R, Gold B P, Johnson A P, Penhune V B (2019). Music predictability and liking enhance pupil dilation and promote motor learning in non-musicians. *SCIENTIFIC REPORTS*, vol. 169, p. 383-394, ISSN: 2045-2322, doi: 10.1038/s41598-019-53510-w
- 18) Martins M J D, Bianco R, Sammler D, Villringer A (2019). Recursion in action: An fMRI study on the generation of new hierarchical levels in motor sequences. *HUMAN BRAIN MAPPING*, vol. 169, p. 383-394, ISSN: 1097-0193, doi: 10.1002/hbm.24549
- 19) Bianco R, Novembre G, Keller PE, Villringer A, Sammler D (2018). Musical genre-dependent behavioural and EEG signatures of action planning. A comparison between classical and jazz pianists. *NEUROIMAGE*, vol. 169, p. 383-394, ISSN: 1053-8119, doi: 10.1016/j.neuroimage.2017.12.058
- 20) Bianco R, Novembre G, Keller Peter E P E, Scharf F, Friederici Angela D A, Villringer A, Sammler D (2016). Syntax in action has priority over movement selection in piano playing: an ERP study. *JOURNAL OF COGNITIVE NEUROSCIENCE*, vol. 142, p. 454-464, ISSN: 0898-929X, doi: 10.1162/jocn
- 21) Bianco R, Novembre G, Keller P E E, Kim Seung-Goo S-G., Scharf F, Friederici A, Villringer A, Sammler D (2016). Neural networks for harmonic structure in music perception and action. *NEUROIMAGE*, vol. 142, p. 454-464, ISSN: 1053-8119, doi: 10.1016/j.neuroimage.2016.08.025

Data

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