

## **CURRICULUM VITAE**

Name and Surname                      Giorgia Sollai  
Work address                              University of Cagliari, Department of Biomedical Sciences, Section  
of Physiology, University Campus of Monserrato, 09042 Monserrato  
(CA, Italy))  
Telephone                                  +39-070-6754160  
e-mail                                        [gsollai@unica.it](mailto:gsollai@unica.it)  
PEC    [giorgia.sollai@legalmail.it](mailto:giorgia.sollai@legalmail.it)

## **EDUCATION**

July 2001: Degree in Natural Sciences, University of Cagliari, with a grade of 110/110 with honors.

March 2006: PhD in Morphological and Functional Sciences – curriculum in Physiology of Sensory Systems, University of Cagliari.

2009: Certificate of Participation and Profit in the Training course for the profession of Teacher at the “Laboratorio Didattico Caralitano”, University of Cagliari.

2016: participation in the international course “Smell and Taste 8”, Otolaryngology Clinic of the University of Dresden, Germany, taught by Prof. Thomas Hummel.

2016: participation in the international course “First Course on Italian Smell and Taste”, at the Department of Otolaryngology of the University of Varese, Ospedale di Circolo and Fondazione Macchi, University Campus, Varese. Course directors: Paolo Castelnuovo, Thomas Hummel, Alberto Macchi.

2019: participation in the “Summer School” on Human Olfaction, Otolaryngology Clinic of the University of Dresden, Germany, led by Prof. Thomas Hummel.

2022-2023: Certificate of Participation and Profit in the course “Initial Training Course in the Teaching Area-AQ”, at the University of Cagliari.

## **ACADEMIC ACTIVITY**

2006 – 2009: Extraordinary Researcher position of General Physiology.

2009 – 2019: University Researcher of Physiology.

2019 – to date: Associate Professor of Physiology.

## **MANAGEMENT ACTIVITY**

2014 – to date: Research Grants Commission of the Department of Biomedical Sciences.

2017: Teaching Commission of the Master's Degree in Food and Nutrition Sciences involved in the meeting with the CEV of ANVUR in the Quality Assurance procedure of the University of Cagliari.

2017 – to date: Evaluation Commission of the candidacies for the coverage of the vacant teachings of Physiology (BIO/09) of the Faculty of Medicine.

2017 – 2019: Disciplinary Board of the University of Cagliari.

2018 – to date: Teaching Committee for the Master's Degree in Food and Nutrition Sciences.

2018 – to date: Judging Committee for the assignment of Teaching Tutoring assignments for the teaching of Elements of Physiology, Faculty of Engineering and Architecture.

2019 to date: Evaluation Committee for applications to fill vacant Physiology courses (BIO/09) in the Faculty of Biology and Pharmacy.

2021– to date: Member of the Research and VQR Committee of the Department of Biomedical Sciences.

2021– to date: Member of the Recruitment Needs Analysis and Turnover Committee of the Department of Biomedical Sciences.

2021 – to date: Member of the Student Applications Committee for the Master's Degree in Food and Nutrition Sciences.

November 2021: Appointed Internal Member (D.R. n. 1236 of 10/11/2021 - published on the University of Cagliari website on 10 nov 2021) of the Judging Committee relating to the public selection for the recruitment of a fixed-term researcher of type a) at the Department of Biomedical Sciences of the University of Cagliari, competitive sector 05/D1 - (profile SSD BIO/09), financed with resources from the National Operational Programme (PON) “Research and Innovation” 2014-2020 (PON R&I) Action IV.4 “PhDs and research contracts on innovation topics” and Action IV.6 “Research contracts on Green topics”, assigned with Ministerial Decree 1062 of 08/10/2021 (D.R. n. 1119 of 15/10/2021 – notice published in the Official Journal n. 82 of 15/10/2021).

2021 – to date: Head of the Physiology Section of the Department of Biomedical Sciences.

2022 – to date: Member of the UNICApres Center Council as representative of the Biomedical Area.

2022: Appointed member of the evaluation committee of the procedure aimed at the two-year extension of the fixed-term and full-time researcher contract, pursuant to art. 24, paragraph 3, letter a) of law 30.12.2010 n. 240, for the S.C. 05/D1 - SSD BIO/09, of Dr. Darin Zerti, at the Department of Applied Clinical Sciences and Biotechnology of the University of L'Aquila. Rep. n. 3/2022 Prot. n. 1977 of 20/09/22. 2022-UNAQISC-07/07.00001.00007.00004.

2022: Selection Committee for the assignment of Teaching Tutoring assignments for the teaching of Elements of Physiology, Faculty of Engineering and Architecture.

September 2023: Appointed Internal Member (D.R. n. 1116/2023 of 09.29.2023 - published on the website of the University of Cagliari on 10.02.2023) of the Selection Committee relating to the public selection for the recruitment of a fixed-term researcher of type b) at the Department of Biomedical Sciences of the University of Cagliari, competition sector 05/D1 (profile SSD BIO/09) - (D.R. n. 802 of 06.26.2023) - code proc. rtdb\_23D\_0623\_05/D1.

October 17, 2023: Appointed President of the Selection Committee for the public selection for the recruitment of a fixed-term researcher of type b) at the Department of Biomedical Sciences of the University of Cagliari, competition sector 05/D1 (profile SSD BIO/09) – Minutes of the First Session (published on the website of the University of Cagliari on 18.10.2023).

November 2023-June 2024: Member of the Joint Faculty Commission, Faculty of Biology and Pharmacy, as a representative of the Master's Degree in Food and Nutrition Sciences (LM61).

July 2024-June 2027: Coordinator of the Council for the Course of Studies LM-61 - Master's Degree Course in Food and Nutrition Sciences (Directorate Provision n. 465/2024 of 17/06/2024 Prot. n. 0141886 of 17/06/2024).

March 2025: Appointed Internal Member (D.R. n. 330/2025 of 03.26.2025 – published on the University of Cagliari website on 03.27.2025) of the Selection Committee for the selection of a RTT Researcher, reserved for candidates who are, or have been for at least one year, fixed-term researchers of type a) or, for at least three years, holders of one or more research grants pursuant to art.22 of Law 240/2010, at the Department of Biomedical Sciences, GSD 05/BIOS-06 (SSD profile BIOS-06/A) - (D.R. n. 1482 of 09.20.2024) – selection code: rttA\_31D\_0924\_05/BIOS-06

## **TEACHING ACTIVITIES**

2011 – to date: Physiology of Nutrition, Master's Degree in Food and Nutrition Sciences.

2022 – to date: Human Physiology, Master's Degree in Pharmacy.

2022 – to date: Sensory Bases of Nutrition, School of Specialization in Health Psychology.

2011 – to date: Supervisor (supervisor) of research activities for the preparation of experimental degree theses in Food and Nutrition Sciences (Master's Degree) and Pharmacy (Single-Cycle Master's Degree).

2006 – 2010: Physiology of the Organs, Degree Course in Herbal Sciences and Technologies.

2010 – 2011: General Physiology, Degree Course in Toxicology.

2016 – 2020: Physiology, Degree Course in Nursing.

## **SCIENTIFIC AND RESEARCH ACTIVITY**

Research activity has always been focused on the physiology of the gustatory and olfactory systems, both in experimental models with evolutionarily conserved functional mechanisms such as insects and in humans.

- a) In experimental models the study is directed towards: spatial and temporal coding of information; chemoreception of protein, carbohydrate and lipid molecules and their metabolism; endocrine influences on chemoreceptor activity; analysis of sensory transduction and coding processes in chemoreceptors; functional plasticity of peripheral chemoreceptors depending on different factors (age, physiological state, nutritional history, etc.); mapping of sensory nerve pathways from peripheral organs to the central nervous system.
- b) In humans, the study is aimed at understanding the physiological factors and their relationships, responsible for the variability of the olfactory function, both general and specific for the threshold abilities, discrimination and identification of both complex odors and single molecules; the role of the olfactory system in the food choices of individuals, in the regulation of nutrient intake and in eating behavior; the functional plasticity of the olfactory system in relation to the different physiological states (age, sex, nutritional status, etc.), physio-pathological (overweight and obesity, inflammatory bowel diseases, viral infections, etc.) and psycho-physiological (eating behavior and relationship with food) of individuals. Furthermore, she actively collaborates with the research group led by Prof. Iole Tomassini Barbarossa (Department of Biomedical Sciences, University of Cagliari) in the study of the physiology of the taste system.

## **Participation in the teaching staff of PhDs accredited by the Ministry**

2006 – 2009: Participation in the teaching staff of the PhD in Morphological Sciences, University of Cagliari.

2009 – 2015: Participation in the teaching staff of the PhD in Morphological and Functional Sciences, University of Cagliari.

2021 – to date: Participation in the teaching staff of the PhD in Molecular and Translational Medicine.

## **Oral presentations at conferences and organization of Symposiums**

2024: Invited Chairman at the IV REGIONAL CONGRESS ADI SIO SARDINIA, Cagliari, November 16, 2024.

2023: Moderator and organizer of the Symposium “Taste and olfaction: emerging roles in health and disease” at the “73rd SIF National Congress”, Pisa, September 6-8, 2023.

2023: Speaker at the 73rd SIF National Congress”, Pisa, September 6-8, 2023. Title: “The voltage-gated potassium channels Kv1.3: their role in olfaction and metabolism”.

2023: Invited Speaker at the III REGIONAL CONGRESS ADI SIO SARDINIA, Cagliari, December 16, 2023. Title: “Relationship between olfactory function, BMI and eating behavior”.

2022: Invited Chairman at the II REGIONAL CONGRESS ADI SIO SARDEGNA, Cagliari, May 21, 2022.

2021: Moderator and organizer of the Symposium “Olfactory functions in aging and in clinical diseases” at the Event “XXIX National Congress of the Italian Society of Psychophysiology and Cognitive Neuroscience”, September 30-October 2, 2021, Palermo.

2021: Invited speaker at the “XXIX National Congress of the Italian Society of Psychophysiology and Cognitive Neuroscience”, September 30-October 2, 2021, Palermo. Title: “Olfactory function, eating behavior and lifestyle in elderly subjects”.

2021: Invited speaker at the International Lab Meeting on Clinical Olfaction, organized online by Prof. Thomas Hummel, May 7-8, 2021. Title: “Olfactory function in Inflammatory Bowel Disease (IBD) patients”.

2020: Invited speaker at the REGIONAL CONGRESS ADI SIO SARDINIA - PIANETA OBESITA', Cagliari, February 29, 2020. Title: “Relationship between olfactory sensitivity and body mass index”.

2018: Invited speaker at the session “Physiology and Biochemistry”, XXI ECE, July 2-6, 2018, Naples, Italy. Title: “Taste receptor plasticity is related to feeding history in two congeneric species of Papilionidae (Lepidoptera)”.

2018: Invited speaker at the Workshop “Technological innovation, regulatory development and characterization on odorous issues”, SARas Ricerca e TECnologie (SARTEC), December 12, 2018, Cagliari. Title: “Diversity in olfactory perception and investigation methods”.

2014: Invited speaker at the Workshop “Eventi CRI” Edmund Mach Foundation, 30 July 2014, San Michele a/A (Trento). Title: “Gustatory sensitivity, food acceptance and bitter discriminating capability in two phylogenetically related Papilionid species”.

## **Participation in editorial committees of scientific journals and reviewer activities**

2022: Reviewer for the “Riksbankens Jubileumsfond (RJ)”, Sweden, of the research project entitled “HARMFUL CONSEQUENCES OF SMELL LOSS IN OLDER AGE: a longitudinal population-based study”

2024 – to date: Associate Editor for Frontiers in Sport & Active Living magazine.

2023: “Guest Editor” of the Special Issue “Relationship Between Taste and Olfactory Function and BMI in Normal Weight Healthy Subjects and Patients with Obesity” of the scientific journal Nutrients (ISSN: 2072-6643; MDPI)

2022 – 2023: “Guest Associate Editor” of the Topic “Women in Insect Physiology: 2022” of the scientific journal Frontiers in Insect Science, Insect Physiology.

2022 – 2023: “Topic Editor” of the Topic “Arthropod biodiversity: ecological and functional aspects” of the MPDI publishing house. Journals involved: Diversity, Life, Insects, Animals, Behavioral Sciences.

2022 – 2023: “Guest Editor” of the special volume “Role of Olfaction in Food Intake, Metabolism, Energy Balance and Obesity” of the scientific journal Nutrients (ISSN: 2072-6643; MDPI)

2021 – 2022: “Guest Editor” of the special volume “Implications of Taste and Olfaction in Nutrition and Health” of the scientific journal Nutrients (ISSN: 2072-6643; MDPI)

2021 – to date: Member of the Editorial Board as Reviewer Editor for Frontiers in Physiology, section Invertebrate Physiology.

2021 – to date: Member of the Editorial Board as Reviewer Editor for Frontiers in Insect Science, section Insect Physiology.

2021 – to date: “Topical Advisory Panel Member of Diversity” of the MDPI publishing house.

2020 – 2022: “Guest Associate Editor” of the Research Topic “An Integrated Model of the Olfactory System Through Phylogenetic, Evolutionary, and Clinical Aspects: From Invertebrates to Humans, Through Sensory, Perceptual, and Cognitive Olfactometry Studies.” Manuscripts can be submitted to this Research Topic via the following journals: Frontiers in Ecology and Evolution, Frontiers in Physiology, Frontiers in Neuroscience and Frontiers in Psychology.

2019 – 2021: “Guest Editor” of the special volume: “Biodiversity of Insect” of the scientific journal Diversity (ISSN: 1424-2818; MDPI).

2016 – to date. Reviewer activity for the following Scientific Journals contained in the international databases “Scopus” and “Web of Science”: Frontiers in Physiology, Frontiers in Neuroscience, Frontiers in Insect Science, European Journal of Neuroscience, Brain Science, Sensors, Journal of Insect Physiology, Insects, Animal Biology, Genetics Research, Journal of Asia-Pacific Entomology, Viruses, Aquaculture, Flavor and Fragrance Journal, Atmosphere, International Journal of Environmental Research and Public Health, Chemosensors, HealthCare, Biosensors, Journal of Aging and Health, Obesities, Nutrients, Antioxidants, International Journal of Molecular Sciences, Foods, Journal of Sports and Health Science, Metabolites, Food Research International.

### **Achievements in technology transfer**

2016: National patent for industrial invention, application no. 102016000057785 in the name of the University of Cagliari. Title: Device, system and related method for the quantitative assessment of taste sensitivity through electrophysiological recordings of bioelectric potentials generated by gustatory stimulation of the taste cells of the human tongue. Inventors: Tomassini Barbarossa I, Crnjar RM, Sollai G, Melis M, Pani D, Cosseddu P, Bonfiglio A.

2017: International patent for industrial invention; International Application Number: PCT/IB2017/053254; International Publication Number: WO 2017/212377 A1; International publication date: 14.12.2017; title: “Device, system and relating method for the quantitative assessment of taste sensitivity”; Intentors: Tomassini Barbarossa I, Crnjar RM, Sollai G, Melis M, Pani D, Cosseddu P, Bonfiglio A; claiming priority of Italian application no. 102016000057785 of 22/09/2016 on behalf of the University of Cagliari.

### **Published articles**

1. M. Melis, M, Mastinu, **G. Sollai (2024)** Effect of the *rs2821557* polymorphism of the human *Kv1.3* gene on olfactory function and BMI in different age groups. **Nutrients** **16**, **821**. <https://doi.org/10.3390/nu1606821>.

2. **Sollai G**, Solari P, Crnjar R (2024) Qualitative and quantitative sex-related differences in the perception of single molecules from coffee headspace. **Foods** **13**, 3239. <https://doi.org/10.3390/foods13203239>.
3. P. Solari, **G. Sollai**, R. Crnjar (2024) Neuromuscular anatomy and motor patterns at the base of calling behaviour in the female spongy moth *Lymantria dispar*. **Insects** **15**, 169. <https://doi.org/10.3390/insects15030169>
4. **Sollai G**, Crnjar R (2023) Association among Olfactory Function, Lifestyle and BMI in Female and Male Elderly Subjects: A Cross-Sectional Study. **Nutrients** **15**, 2492. <https://doi.org/10.3390/nu15112492>.
5. Crnjar R, Solari P, **Sollai G** (2023) The Human Nose as a Chemical Sensor in the Perception of Coffee Aroma: Individual Variability. **Chemosensors** **11**, 248. <https://doi.org/10.3390/chemosensors11040248>.
6. Velluzzi F, Deledda A, Lombardo M, Foschi M, Crnjar R, Grossi E, **Sollai G** (2023) Application of Artificial Neural Networks (ANN) to Elucidate the Connections among Smell, Obesity with Related Metabolic Alterations, and Eating Habit in Patients with Weight Excess. **Metabolites** **13**, 206. <https://doi.org/10.3390/metabo13020206>.
7. Melis M, Tomassini Barbarossa I, **Sollai G** (2023) The implications of taste and olfaction in nutrition and health. **Nutrients** **15**, 3412. <https://doi.org/10.3390/nu15153412>.
8. Solari P, **Sollai G**, Pasquini V, Giglioli A, Crnjar R, Addis P (2023) Blue-green algae as stimulating and attractive feeding substrates for a Mediterranean commercial sea urchin species, *Paracentrotus lividus*. **Life** **13**, 1510. <https://doi.org/10.3390/life13071510>.
9. Melis M, Tomassini Barbarossa I, Crnjar R, **Sollai G** (2022) Olfactory Sensitivity Is Associated with Body Mass Index and Polymorphism in the Voltage-Gated Potassium Channels Kv1.3. **Nutrients** **14**, 4986. <https://doi.org/10.3390/nu14234986>.
10. **Sollai G**, Melis M, Tomassini Barbarossa I, Crnjar R (2022) A polymorphism in the human gene encoding OBPIIa affects the perceived intensity of smelled odors. **Behav Brain Res** **427**, 113860. <https://doi.org/10.1016/j.bbr.2022.113860>.
11. Velluzzi F, Deledda A, Onida M, Loviselli A, Crnjar R, **Sollai G** (2022) Relationship between Olfactory Function and BMI in Normal Weight Healthy Subjects and Patients with Overweight or Obesity. **Nutrients** **14**, 1262. <https://doi.org/10.3390/nu14061262>.
12. **Sollai G**, Di Cosmo A, Invitto S (2022) An integrated model of the olfactory system through phylogenetic, evolutionary, and clinical aspects: from invertebrates to humans, through sensory, perceptual, and cognitive olfactometry studies. **Front Ecol Evol** **10**, 877994. doi: 10.3389/fevo.2022.877994.
13. **Sollai G**, Solari P (2022) An overview of “Insect Biodiversity”. **Diversity** **14**, 134. Doi: 10.3390/d14020134
14. Crava MC, Bobkov Y, **Sollai G**, Anfora G, Crnjar R, Cattaneo AM (2022) Chemosensory receptors in the larval maxilla of *Papilio hospiton*. **Front Ecol Evol** **9**, 795994. Doi: 10.3389/fevo.2021.795994.
15. **Sollai G** and Crnjar R (2021). Age-Related Olfactory Decline Is Associated with Levels of Exercise and Non-exercise Physical Activities. **Front Aging Neurosci** **13**, 695115. doi: 10.3389/fnagi.2021.695115.
16. Solari P, **Sollai G**, Palmas F, Sabatini A, Crnjar R (2021) A method for selective stimulation of leg chemoreceptors in whole crustaceans. **J Exp Biol**, 243636. doi: 10.1242/jeb.243636.

17. **Giorgia Sollai**, Melania Melis, Mariano Mastinu, Danilo Paduano, Fabio Chicco, Salvatore Magri, Paolo Usai, Thomas Hummel, Iole Tomassini Barbarossa, Roberto Crnjar (2021) Olfactory Function in Patients with Inflammatory Bowel Disease (IBD) Is Associated with Their Body Mass Index and Polymorphism in the Odor Binding-Protein (OBPIIa) Gene. **Nutrients**, **13**, 703. <https://doi.org/10.3390/nu13020703>.
18. Melania Melis, Iole Tomassini Barbarossa, Thomas Hummel, Roberto Crnjar, **Giorgia Sollai** (2021) Effect of the rs2890498 polymorphism of the OBPIIa gene on the human ability to smell single molecules. **Behav Brain Res**, **402**, 113127. <https://doi.org/10.1016/j.bbr.2021.113127>.
19. Jaime C. Pinero, John G. Stoffolano Jr, Katherine Chiu, Kay Colletti, Zoe Dixon, Victoria Salemme, Roberto Crnjar, **Giorgia Sollai** (2021) Effects of chitosan and erythritol on labellar taste neuron activity, proboscis extension reflex, daily food intake, and mortality of male and female spotted-winged drosophila, *Drosophila suzukii*. **J Insect Physiology**, **125**, 104088.
20. Solari P, **Sollai G**, Palmas F, Sabatini A, Crnjar R (2021). A method for selective stimulation of leg chemoreceptors in whole crustaceans. **J Exp Biol**, 243636.
21. **Sollai G**, Tomassini Barbarossa I, Usai P, Hummel T, Crnjar R (2020). Association between human olfactory performance and ability to detect single compounds in complex chemical mixtures. **Physiology and Behavior**, **217**, 112820. DOI: 10.1016/j.physbeh.2020.112820.
22. Melania Melis\*, **Giorgia Sollai\***, Mariano Mastinu, Danilo Pani, Piero Cosseddu, Annalisa Bonfiglio, Roberto Crnjar, Beverly J. Tepper and Iole Tomassini Barbarossa (2020). Electrophysiological Responses from the human tongue to the six taste qualities and their relationship with PROP taster status. **Nutrients**, **12**, 2017. Doi:10.3390/nu12072017. \*Equal contribution.
23. Melania Melis, Mariano Mastinu, **Giorgia Sollai**, Danilo Paduano, Fabio Chicco, Salvatore Magri, Paolo Usai, Roberto Crnjar, Beverly J. Tepper and Iole Tomassini Barbarossa (2020). Taste Changes in Patients with Inflammatory Bowel Disease: Associations with PROP Phenotypes and polymorphisms in the salivary protein, Gustin and CD36 Receptor Genes. **Nutrients**, **12**, 409. doi:10.3390/nu12020409.
24. Corda G, Solari P, Dettori MA, Fabbri D, Delogu G, Crnjar R, **Sollai G** (2020). Association between olfactory sensitivity and behavioral responses of *Drosophila suzukii* to naturally-occurring volatile compounds. **Arch Insect Biochem Physiol**, e21669. <https://doi.org/10.1002/arch.21669>.
25. **Giorgia Sollai**, Paolo Solari, Roberto Crnjar (2020). Differences in the olfactory sensitivity of *Ceratitis capitata* to headspace of some host plants in relation to sex, mating condition and population. **Diversity**, **12**, 207. doi:10.3390/d12050207.
26. Cristina Maria Crava, Damiano Zanini, Simone Amati, **Giorgia Sollai**, Roberto Crnjar, Marco Paoli, Marco Valerio Rossi-Stacconi, Omar Rota-Stabelli, Gabriella Tait, Albrecht Haase, Roberto Romani, Gianfranco Anfora (2020). Structural and transcriptional evidence of mechanotransduction in the *Drosophila suzukii* ovipositor. **J Insect Physiology**, **125**, 104088. <https://doi.org/10.1016/j.jinsphys.2020.104088>.
27. **Giorgia Sollai**, Melania Melis, Salvatore Magri, Paolo Usai, Thomas Hummel, Iole Tomassini Barbarossa, Roberto Crnjar (2019). Association between the rs2590498 polymorphism of Odorant Binding Protein (OBPIIa) gene and olfactory performance in healthy subjects. **Behav Brain Res**, **372**, 112030. <https://doi.org/10.1016/j.bbr.2019.112030>.
28. **Sollai G**, Melis M, Mastinu M, Pani D, Cosseddu P, Bonfiglio A, Crnjar R, Tepper BJ, Tomassini Barbarossa I (2019). Human tongue electrophysiological response to oleic acid and its associations with PROP taster status and the CD36 polymorphism (rs1761667). **Nutrients**, **11**, 315. doi 10.3390/nu11020315.

29. Melis M, **Sollai G**, Masala C, Pisanu C, Cossu G, Melis M, Sarchiotto M, Oppo V, Morelli M, Crnjar R, Hummel T, Tomassini Barbarossa I (2019). Odor identification performance in Idiopathic Parkinson's disease is associated with gender and the genetic variability of olfactory binding-protein (OBPIIa). **Chemical Senses**, **44**: 311-318. doi: 10.1093/chemse/bjz020.
30. Melis M, Grzeschuchna L, **Sollai G**, Hummel T, Tomassini Barbarossa I (2019). Taste disorders are partly genetically determined: Role of the *TAS2R38* gene, a pilot study. **Laryngoscope**, **129**: E307-E312. doi: 10.1002/lary.27828.
31. **Sollai G**, Crnjar R (2019). The contribution of gustatory input to larval acceptance and female oviposition choice of potential host plants in *Papilio hospiton* (Géné). **Arch Insect Biochem Physiol**, **100**, e21521. doi: 10.1002/arch.21521.
32. **Sollai G**, Solari P, Crnjar R (2018). Olfactory sensitivity to major, intermediate and trace components of sex pheromone in *Ceratitis capitata* is related to mating and circadian rhythm. **J Insect Physiol**, **110**: 23-33. doi: 10.1016/j.jinsphys.2018.08.007.
33. **Sollai G**, Biolchini M, Crnjar R (2018). Taste sensitivity and divergence in host plant acceptance between adult females and larvae of *Papilio hospiton* Gén. **Insect Science**, **25**: 809-822. doi: 10.1111/1744-7917.12581.
34. **Sollai G**, Biolchini M, Crnjar R (2018). Taste receptor plasticity in relation to feeding history in two congeneric species of Papilionidae (Lepidoptera). **J Insect Physiol**, **107**: 41-56. doi: 10.1016/j.jinsphys.2018.02.007.
35. Solari P, **Sollai G**, Masala C, Maccioni R, Crnjar R, Liscia A (2018). Octopamine modulates the activity of motoneurons related to calling behavior in the gypsy moth *Lymantria dispar*. **Insect Science**, **25**: 797-808. doi: 10.1111/1744-7917.12580.
36. Solari P, Peddio S, **Sollai G**, Masala C, Podda C, Frau G, Palmas F, Sabatini A, Crnjar R (2018). Development of PVC dispensers for long-lasting release of attractants for the control of invasive crayfish populations. **Diversity**, **10**(4), 128. doi: 10.3390/d10040128.
37. **Sollai G**, Biolchini M, Loy F, Solari P, Crnjar R (2017). Taste input from tarsal sensilla is related to egg-laying behaviour in *Papilio hospiton*. **Entomologia Experimentalis et Applicata**, **165**: 38-49. doi: 10.1111/eea.12622.
38. Tait G, Vezzulli S, Sassu F, Antonini G, Biondi A, Baser N, **Sollai G**, Cini A, Tonina L, Ometto L, Anfora G (2017). Genetic variability in Italian populations of *Drosophila suzukii*. **BMC Genetics**, **18**, 87. doi: 10.1186/s12863-017-0558-7.
39. Biolchini M, Murru E, Anfora G, Loy F, Banni S, Crnjar R, **Sollai G** (2017). Fat storage in *Drosophila suzukii* is influenced by different dietary sugars in relation to their palatability. **PlosOne**, e0183173. doi: 10.1371/journal.pone.0183173.
40. Pani D, Usai I, Cosseddu P, Melis M, **Sollai G**, Crnjar R, Tomassini Barbarossa I, Raffo L, Bonfiglio A (2017). An automated system for the objective evaluation of human gustatory sensitivity using tongue biopotential recordings. **PlosOne**, e0177246. doi: 10.1371/journal.pone.0177246.
41. **Giorgia Sollai**, Maurizio Biolchini, Paolo Solari, Roberto Crnjar (2017). Chemosensory basis of larval performance of *Papilio hospiton* on different host plants. **J Insect Physiol**, **99**: 47-57. doi: 10.1016/j.jinsphys.2017.02.007.
42. **Giorgia Sollai**, Melania Melis, Danilo Pani, Piero Cosseddu, Ilenia Usai, Roberto Crnjar, Annalisa Bonfiglio, Iole Tomassini Barbarossa (2017). First objective evaluation of taste sensitivity to 6-n-propylthiouracil (PROP), a paradigm gustatory stimulus in humans. **Scientific Reports**, **7**, 40343. doi: 10.1038/srep40353.

43. Paolo Solari, **Giorgia Sollai**, Carla Masala, Francesco Loy, Francesco Palmas, Andrea Sabatini, and Roberto Crnjar (2017). Antennular morphology and contribution of aesthetascs in the detection of food-related compounds in the shrimp *Palaemon adspersus* Rathke, 1837 (Decapoda: Palaemonidae). **Biol Bull**, **232**: 110-122. doi: 10.1086/692696.
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