

Report July – September 2014; Smell & Taste

Peer-reviewed Original Publications

- Thomas-Danguin T, Sinding C, Romagny S, El Mountassir F, Atanasova B, Le Berre E, Le Bon AM, Coureau G (2014) The perception of odor objects in everyday life: a review on the processing of odor mixtures. *Front Psychol.* 2014 Jun 2;5:504
- Merkoniidis C, Grosse F, Ninh T, Hummel C, Haehner A, Hummel A (2014) Characteristics of chemosensory disorders in patients seeking medical advice and their clinical significance. *Eur Arch ORL* (in press)
- Sorokowska A, Hummel T (2014) Polska wersja testu Sniffin' Sticks - adaptacja i normalizzazione. *Otolaryngologia Polska* (in press)
- Oertel G, Huynh TT, Hummel T, Ferreiros N, Lötsch J (2014) Lack of fluconazole effects on human taste and smell. *J Clin Pharmacy Ther* (in press)
- Karstensen HG, Mang Y, Fark T, Hummel T, Tommerup N (2014) The first mutation in CNGA2 in two brothers with anosmia. *Clin Gen* (in press)
- Iannilli E, Bult JHF, Roudnitzky N, Schuster B, Gerber J, de Wijk RA, and Hummel T (2014) Oral texture influences the neural processing of ortho- and retronasal odors. *Brain Res* (in press)
- Sorokowska A, Schriever VA, Gudziol V, Hummel C, Hähner A, Iannilli E, Sinding C, Aziz M, Seok HS, Negoias S, Hummel T (2014) Investigating odor identification abilities in more than 1400 people aged 4 to 80 years. *Eur Arch ORL* (in press)
- Gottschlich M, Hummel T (2014) Effects of handedness on olfactory event-related potentials in a simple olfactory task. *Rhinology* (in press)

Other publications (Chapters, peer-reviewed reviews)

- Croy I, Krone F, Walker S, Hummel T (2014) Olfactory processing: Detection of rapid changes. In: Buettner A, Beauchamp J, Guthry B (eds) "Proceedings from the ACS spring meeting, New Orleans".
- Seo HS, Hummel T (2014) Cross-modal Integration in Olfactory Perception. In: Springer Handbook Odor, Buettner A (ed); Springer, New York (in press)
- Hummel T, Hummel C, Haehner A (2014) Altersabhängige Veränderungen chemosensorischer Funktionen; Kapitel 3.2.2.4. In: Altersmedizin aktuell. Heiß HW (Hrsg.) ecomed Medizin, Heidelberg, pp. 1-14
- Hummel T (2014) Das Riechvermögen im Alter. *HNO* (in press)
- Hähner A, Hummel T, Stuck BA (2014) Riechstörungen und Therapie. *HNO* (in press)

Presentations

- 4.7.2014, 17:30-24:00 h: "Lange Nacht der Wissenschaft": mit Carolin Stetzler, Birte-Antina Wegener, Karoline Andrä,



Severine Kunz, Steffi Weise, Ramona Baki, Gina Rüter, Claudia Mitzschke, Katharina Schön, Mohammed Aziz, Charlotte Sinding, Thomas Hummel

- 14.8.2014: Presentation at the CFIN/MindLab at Aarhus University (T. Hummel): 15.00-15.45 h: „Clinical aspects of the sense of smell“

Guests

- Adam Patterson, from Toronto: Medical student, visiting from the 1st of July until the 31st of July
- Ilona Croy, Gothenborg, visits from July-02 to July-04
- Dr. Fiedler, Koblenz, visits from July-07 until July-09
- Dr. Hisayuki Uneyama, Tokyo, visits on August 11
- Dr. Samanta Viana from Portugal visits from September-02 until December-31
- Silvia Gavliaková from Slovakia visits from September-02 until December-31
- Dr. Masako Kawai from Tokyo visits on September 15
- Raffaela Fürer, Univ. of Basel, Medical Student, starts the „German part“ of her thesis on the 16th of September
- Prof. Dr. Jörn Lötsch, visits from September 18-19

What else:

- Freitag, 11.7. um 15h: Geruchsfeature im Deutschlandradio Kultur: **Wie funktioniert die Nase, die mitten in unserem Gesicht platziert ist? Wieso können wir manche Menschen nicht riechen und andere nicht?**
<http://www.kakadu.de/inhalt/9844>
- 1-8-2014: Mohammed Aziz starts as a „wissenschaftlicher Mitarbeiter“
- Participation (T. Hummel) as an opponent in [Tim van Harteveld's](#) thesis defense at the University of Aarhus on the 15th of August.
- 18th of August: T. Hummel – Radio Interview with BBC on the human sense of smell
- Interview with “Apothekenumschau”: Können Frauen besser riechen als Männer?
<http://www.apotheken-umschau.de/Nase/Koennen-Frauen-besser-riechen-als-Maenner-338169.html>
- 8.9.: Franziska Broy (Dresden): Spatio-temporal characterization of gustatory ERPs for the 5 basic taste qualities: sweet, salty, bitter, sour, and umami
- 8.9.: Severine Kunz (Dresden): The effect of age on gustatory event-related potentials and their brain sources
- 8.9.: Silvia Gavliakova (Martin, Slovakia): The role of trigeminal TRP channels in modulation of cough reflex and 3D view of respiratory neuronal network
- ECRO conference: participation of
 - ✓ Emilia Iannilli (Symposium organizer on Sept. 10: „The central-nervous processing of taste in humans“; oral presentation on Sept. 10: Lateralized processing of taste in the human brain; poster presentation: Human event related potentials in response to oral stimulation with water),
 - ✓ Charlotte Sinding (Poster: Habituation to 32 odor molecules varying in chemical, physical and psychophysical characteristics),

- ✓ Franziska Broy (Poster: Spatio-temporal characterization of gustatory ERPs (gERPs) for the 5 basic taste qualities: sweet, salt, bitter, sour and umami),
- ✓ Severine Kunz (Poster: Age-related effect on gustatory event-related potentials and their brain sources),
- ✓ Mohammed Aziz Mohammed (Poster: Increasing the detectability of olfactory event-related potentials – measurement of olfactory event-related-potentials with a short inter-stimulus interval)
- Dr. MIsako Kawai (Ajinomoto, Kanagawa, Japan) presents on Monday 15th of September, at 15:00 h, about "What is umami taste? -Its novel gustatory properties "
- Dr. G Archunan, Bharathidasan University, Tiruchirappalli, India, presents on the 25th of Sept on "Characterization of olfactory pheromones and their biological significance"

Thesis

- [Kerstin Laqua](#) (9.9.2014) - Wahrnehmung und Bewertung Ekel auslösender Sinnesreize

Courses, conferences etc.:

INTRODUCTORY COURSE TO SCIENTIFIC RESEARCH: FROM DESIGN TO ANALYSIS OF RESULTS. By Dr. Charlotte Sinding

This module is planned to give students the necessary skills to perform each step of an experiment. The course aims at promoting the necessary thought beforehand the start of the experiment. To involve the student in his research and demystify several aspects of research, each course is composed of a theoretical and an applied part based on each one's thematic. The module takes place during 6 weeks (1 hour/week):

- I Why shall we do scientific research?
- II How to elaborate question and hypothesis?
- III How to look for bibliography and how to be critical with articles?
- IV Material and Methods, how to limit bias
- V How to handle data, first look
- VI Analysis of an article/ Analysis of each one's design of study

STATISTICS: INTRODUCTION TO BASIC CONCEPTS FOR DATA ANALYSIS by Dr. Emilia Iannilli

Contents:

- (1) Population and Samples
- (2) The Mean, Variance and Standard Deviations
- (3) Frequency distributions: the Standard Normal Distribution
- (4) The standard Error
- (5) Confidence Intervals
- (6) Linear regression
- (7) Correlation

(8) Test Statistics

- a. Chi-square
- b. One sample T-test
- c. Two sample T-test
- d. Paired T-test
- e. F-test
- f. ANOVA

(9) Application of Excel and SPSS

The course consists of 3 classes of 2 hours each. It will be divided in a conceptual section (2/3) and a practical section (1/3) 1st class: topic (1) to (7) and application in Excel sheet ; 2nd class: topic (8)a to (8)b and application in Excel sheet ; 3rd class: topic (8)e to (8)f, application in a Excel sheet and introduction to SPSS

Acquired grants: