

Verbal and non verbal communication in the relationship Osteopath-Patient: the role of touch.



Alessio Iacopini

BSc MS, DO; Clinical Posturologist

Head of CROMON International Department

OSEAN Board Member – Treasurer

COME Collaboration National Board Member

Email: osteoelba@gmail.com

Francesco Cerritelli

President C.O.ME. Collaboration | Centre for Osteopathic MEDicine Collaboration

Department of Neuroscience, Imaging and Clinical Sciences | University “G. d’Annunzio” - Chieti - Italy

Email: fcerritelli@comecollaboration.org | Web: <http://www.comecollaboration.org>



Communication levels

- ✓ **VERBAL:** can be "typewritten" (incidence of 7% on the entire communication process);
- ✓ **PARAVERBAL:** this is what can be produced and/or changed with the vocal apparatus, i.e. the tone, timbre, rhythm and the voice volume (percentage of 38% of the entire communication process)
- ✓ **NON VERBAL:** produced and/or varied with body movements and touch (incidence of 55% on the entire communication process).

Non Verbal Communication

- ✓ ***NON VERBAL COMMUNICATION***: the process through sending and receiving wordless cues between people.

Non Verbal Communication

- ✓ **VOICE:** paralanguage (volume, tone, rhythm, pauses, silence)
- ✓ **DISTANCE:** proxemics
- ✓ **TOUCH:** haptics
- ✓ **PHYSICAL ENVIRONMENT/APPEARANCE**

Proxemics



- ✓ Study of the relationship of the body with the space it occupies and the body of the others
- ✓ Very important is the definition of proximity or distance of the people

- ✓ **INTIMATE DISTANCE** (0-45 cm): intimate & confidential
- ✓ **PERSONAL DISTANCE** (45-120 cm): personal space, invading may create hardships
- ✓ **SOCIAL DISTANCE** (120-370 cm): formal or business relationships
- ✓ **PUBLIC DISTANCE** (370cm to...)

Hall, E. T. (1963). A system for the notation of proxemic behavior. *American anthropologist*, 65(5), 1003-1026.

Haptics

- ✓ THE WAY BY WHICH PEOPLE AND ANIMALS COMMUNICATE VIA TOUCHING
- ✓ TOUCH: the most effective means to communicate feelings and emotion

Touch in animals

- ✓ **GENTLING:** stroking and touching of newborn animals
- ✓ **LICKING:** to clean the offspring. Plays an important role in stimulating physiological functions of newborn animals contributing to their survivals

EXAMPLES



TOUCH IN HUMANS

- ✓ Tactile communication in the early stages of life may establish the foundation of all other forms of communication that humans later develop.
TOUCH SOMETIMES HELPS BETTER THAN VERBAL COMMUNICATION

Hertenstein, M. J., Verkamp, J. M., Kerestes, A. M., & Holmes, R. M. (2006). The communicative functions of touch in humans, nonhuman primates, and rats: A review and synthesis of the empirical research. *Genetic, social, and general psychology monographs*, 132(1), 5-94.



Categories of touch

- ✓ ***FRIENDSHIP WARMTH TOUCH:*** probably the most difficult to interpret, both for the receiver and the outsider
- Boys distance themselves from parents at an earlier stage than girls.
- There is more touching with the same sex parent than with cross-sex parent

Examples



Categories of touch

- ✓ ***PROFESSIONAL-FUNCTIONAL TOUCH:***
a hand on the shoulder for one person may mean a supportive gesture, while it could mean a sexual advance to another person

Examples



Categories of touch

- ✓ ***SOCIAL-POLITE TOUCH:*** to communicate a limited form of interpersonal involvement

Examples



Categories of touch

- ✓ ***LOVE-INTIMACY TOUCH:*** to communicate a particularly close and involved association between individuals

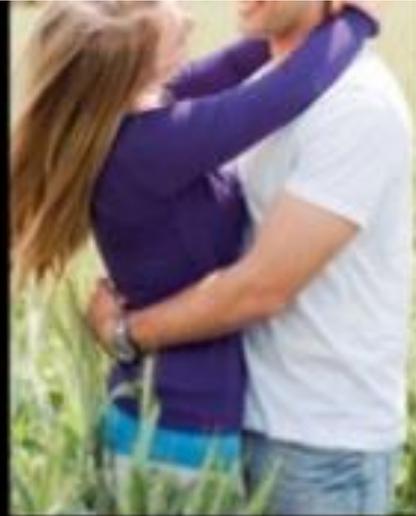
Examples



Categories of touch

- ✓ ***SEXUAL-AROUSAL TOUCH:*** the most intensive, and may be the most communicative

Examples



Osteopathic Touch



- ✓ Touch supports verbal and tactile interaction that is both **DIAGNOSTIC & THERAPEUTIC**
- ✓ Touch links sensation to perception and bridge the gap between ourselves and the others
- ✓ A tactile conversation

Seffinger M, King H, Ward R, Jones J, Rogers F, Patterson M. Osteopathic philosophy and history. In: *Educational Council on Osteopathic Principles. Core Curriculum*. Washington, DC: American Association of Colleges of Osteopathic Medicine; 2000:1-50.

The “core of osteopathy”

- ✓ Based on palpation.
- ✓ We touch to evaluate, communicate and treat the patient...

Osteopathic Touch

CENTER FOR OSTEOPATHIC MEDICINE COLLABORATION

- ✓ For osteopaths touch is an expression of compassion, skill and expertise

Still AT. *The Philosophy and Mechanical Principles of Osteopathy*. Kansas City, MO: Hudson-Kimberly Publishing Co; 1902.

- ✓ On the other hand touch is the mechanism for translating peripheral stimuli into subjective experiences and behaviors, organizing conscious-intentional movements

Olausson H, Lamarre Y, Backlund Het al. Unmyelinated tactile afferents signal touch and project to insular cortex. *Nat Neurosci*. 2002;5(9):900-904

Morgane PJ, Monkler DJ. The limbic brain: continuing resolution [review]. *Neurosci Biobehav Rev*. 2006;30(2):119-125

Because...

- ✓ The patient is touched by the osteopath... But the osteopath is touched by the patient
- ✓ An interaction of dynamics, complex systems known as the osteopath-patient relationship

Touch for the patient

- ✓ A sense of being assessed and examined and treated
- ✓ The patient is deeply touched by hands, as well as by words
- ✓ The process of touching and talking facilitates an integration of mind and body

Touch for the patient



- ✓ The process: physical, bidirectional, supportive interaction
- ✓ Professionalism: patient's expectations, care, support and boundaries
- ✓ Reassurance: reassuring role of touch concerning osteopath's knowledge, competence & confidence

Touch and Feelings



Touch can communicate emotions and people touched can decode them

Hertenstein, M. J., Keltner, D., App, B., Buleit, B. A., & Jaskolka, A. R. (2006). Touch communicates distinct emotions. *Emotion*, 6(3), 528.

- ✓ Patient and osteopath function as a united partnership, greater of the simple sum of the 2 partners

BE THERE WITH, NOT BE THERE FOR...

- ✓ The osteopath and the patient are not only present to each other as roles but also as unique persons.

Fredriksson, L. (1999). Modes of relating in a caring conversation: a research synthesis on presence, touch and listening. *Journal of advanced nursing*, 30(5), 1167-1176.

The role of Touch



- ✓ Promoting physical comfort
- ✓ Promoting emotional comfort
- ✓ Promoting mind-body comfort
- ✓ Sharing spirituality

Chang, S. O. (2001). The conceptual structure of physical touch in caring. *Journal of advanced nursing*, 33(6), 820-827.

Verbal and non verbal communication in the relationship Osteopath-Patient: the role of touch.



Alessio Iacopini

BSc MS, DO; Clinical Posturologist

Head of CROMON International Department

OSEAN Board Member – Treasurer

COME Collaboration National Board Member

Francesco Cerritelli

President C.O.ME. Collaboration | Centre for Osteopathic MEDicine Collaboration

Department of Neuroscience, Imaging and Clinical Sciences | University “G. d’Annunzio” - Chieti - Italy

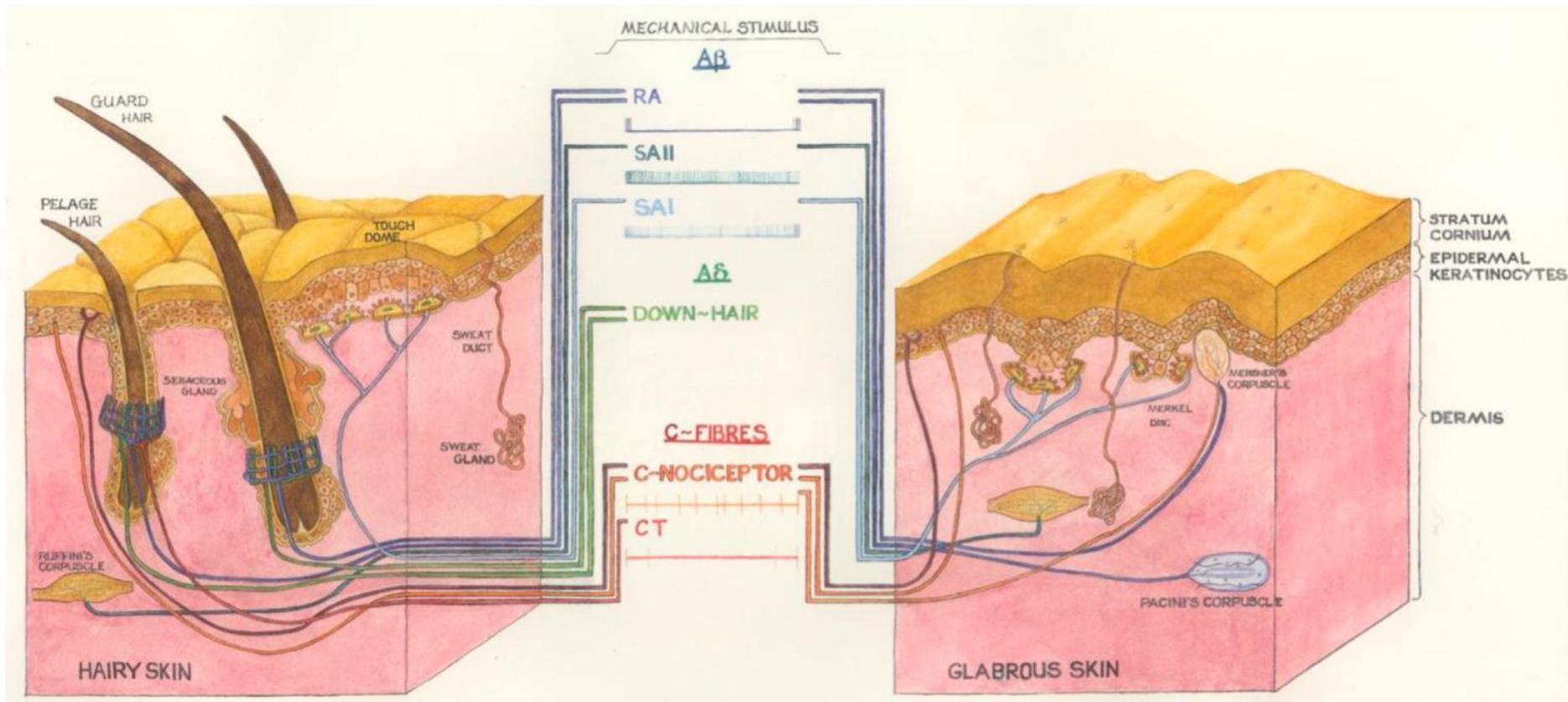
Email: fcerritelli@comecollaboration.org | Web: <http://www.comecollaboration.org>



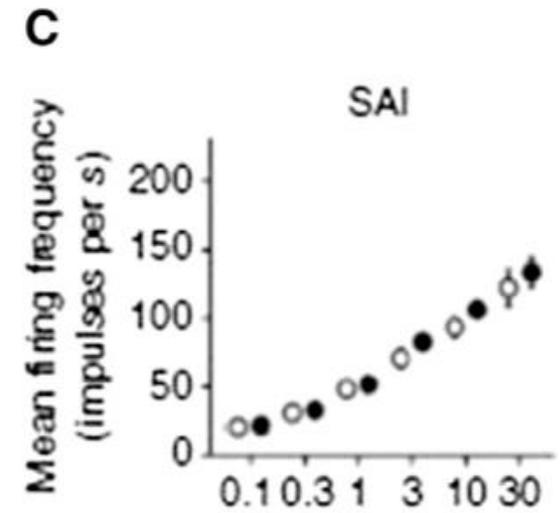
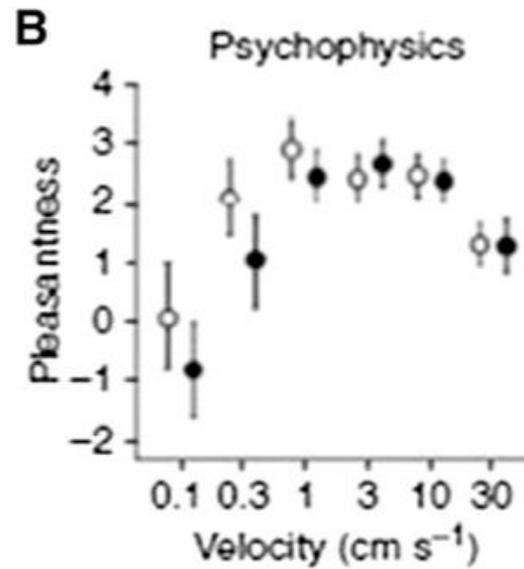
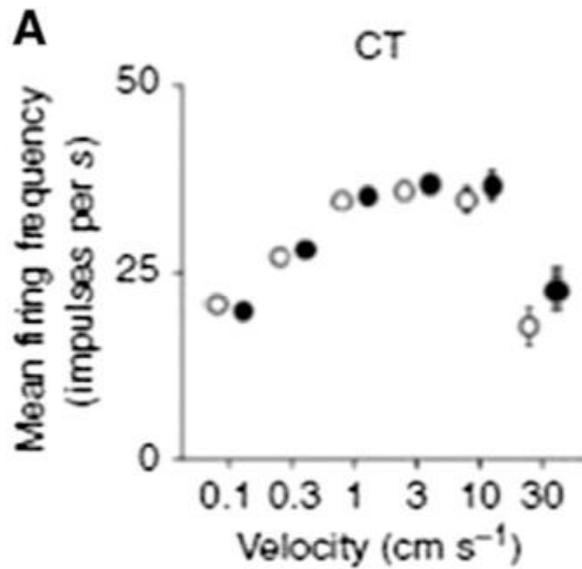
- The sense of touch plays a fundamental role in nurture and attachment during development and social interaction

Walker & McGlone 2013 for review

CT fibres

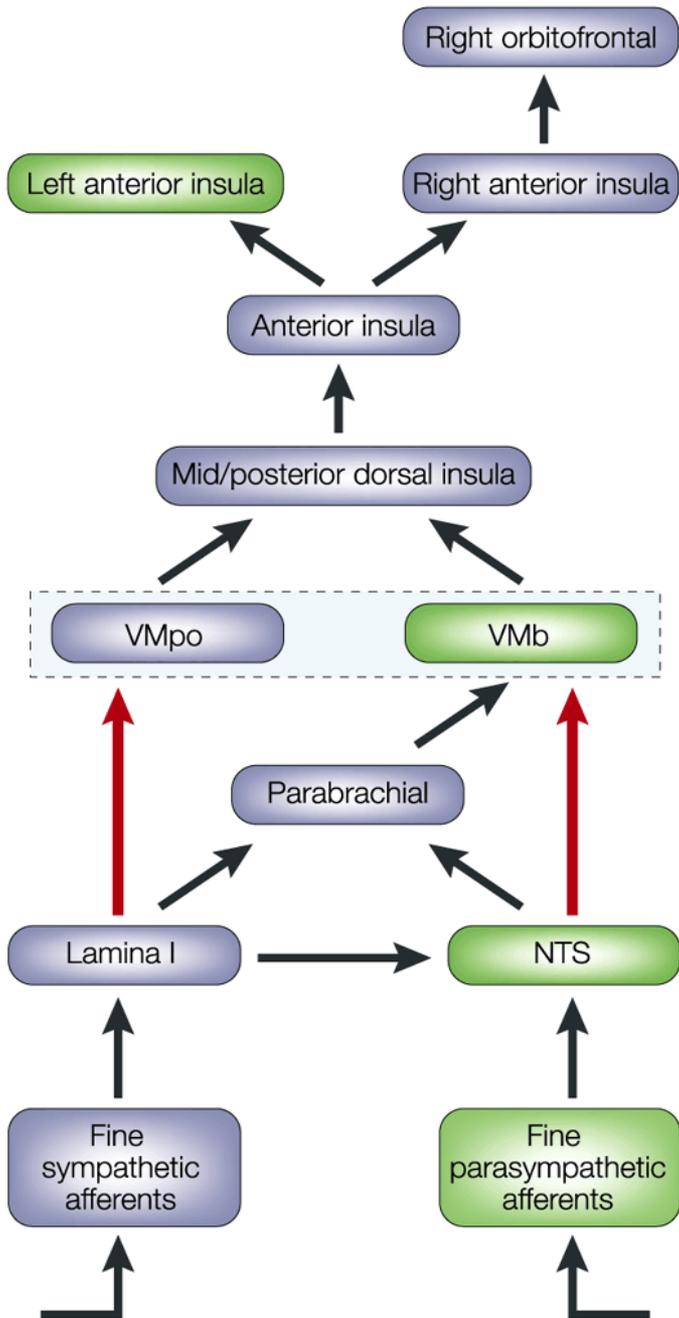


CT properties



Pathway

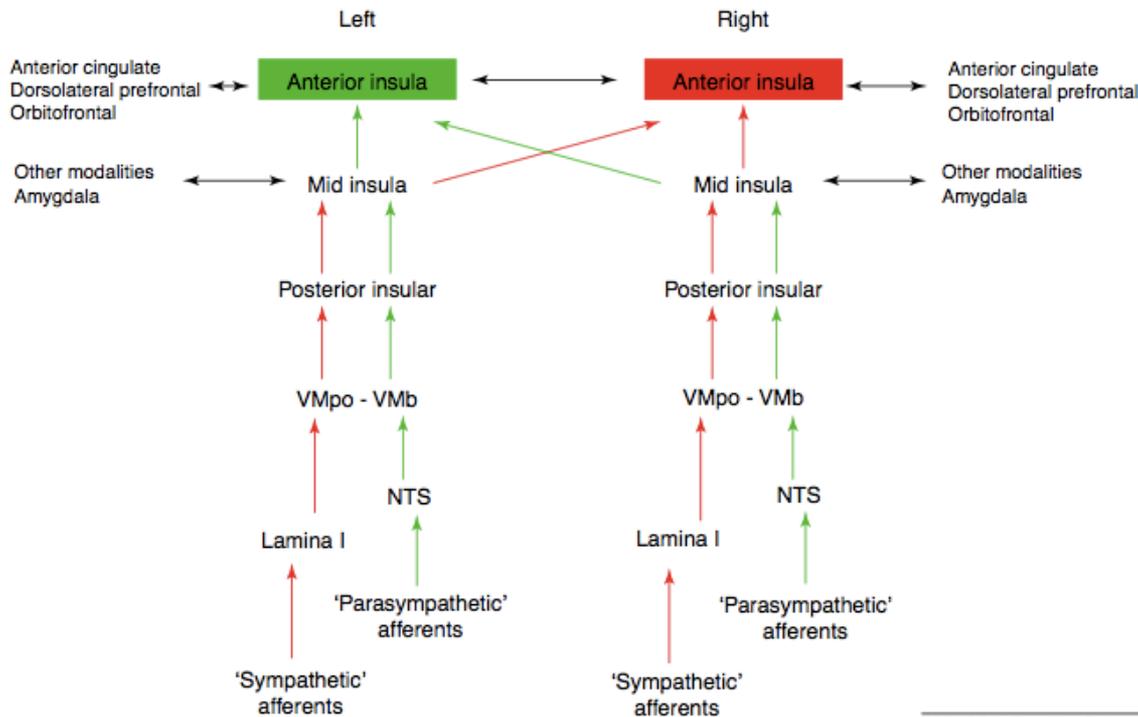
COME
CENTER FOR OSTEOARTHRIC MEDICINE COLLABORATION



Two thalamic nuclei together represent all homeostatic afferent inflow (both sympathetic and parasympathetic) from the body.

Craig A.D. How do you feel? Interoception: the sense of the physiological condition of the body. *Nature Reviews Neuroscience* 3, 655-666 (2002);

Insula

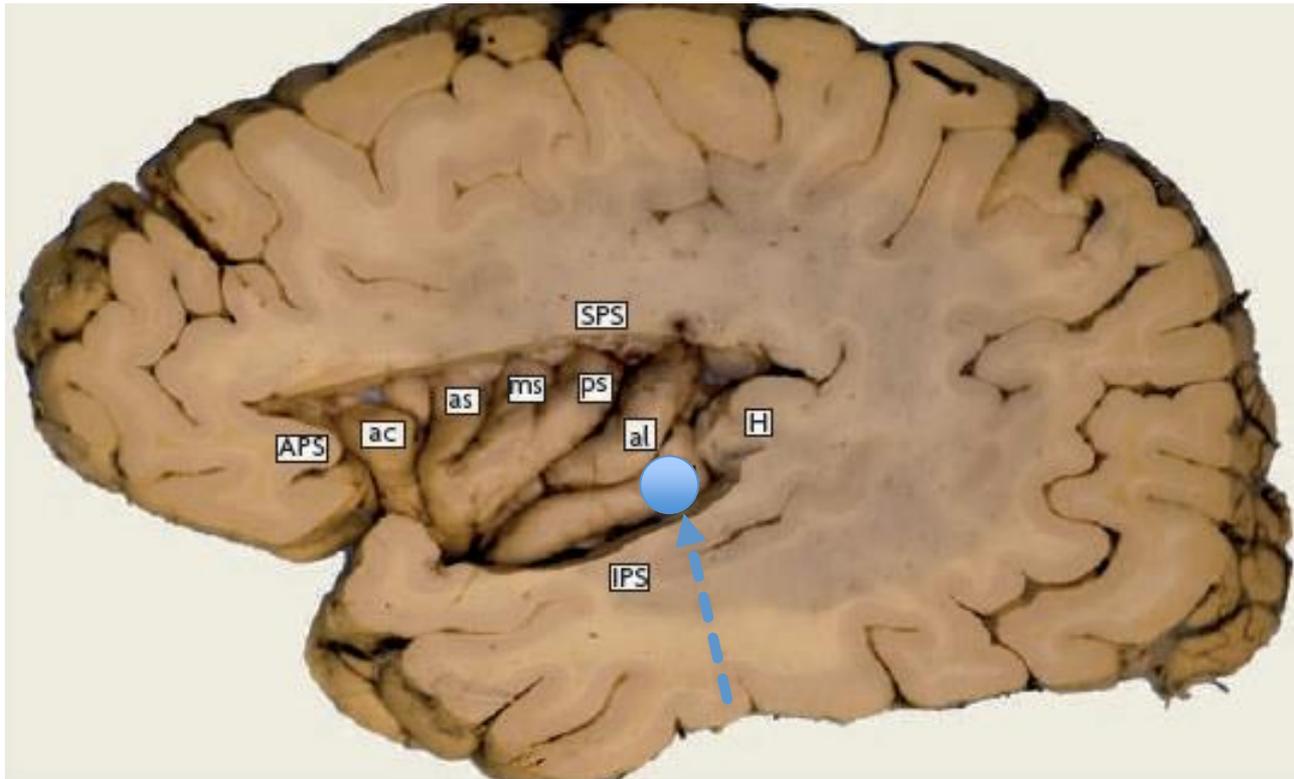


TRENDS in Cognitive Sciences

The underlying anatomical pathway involves:

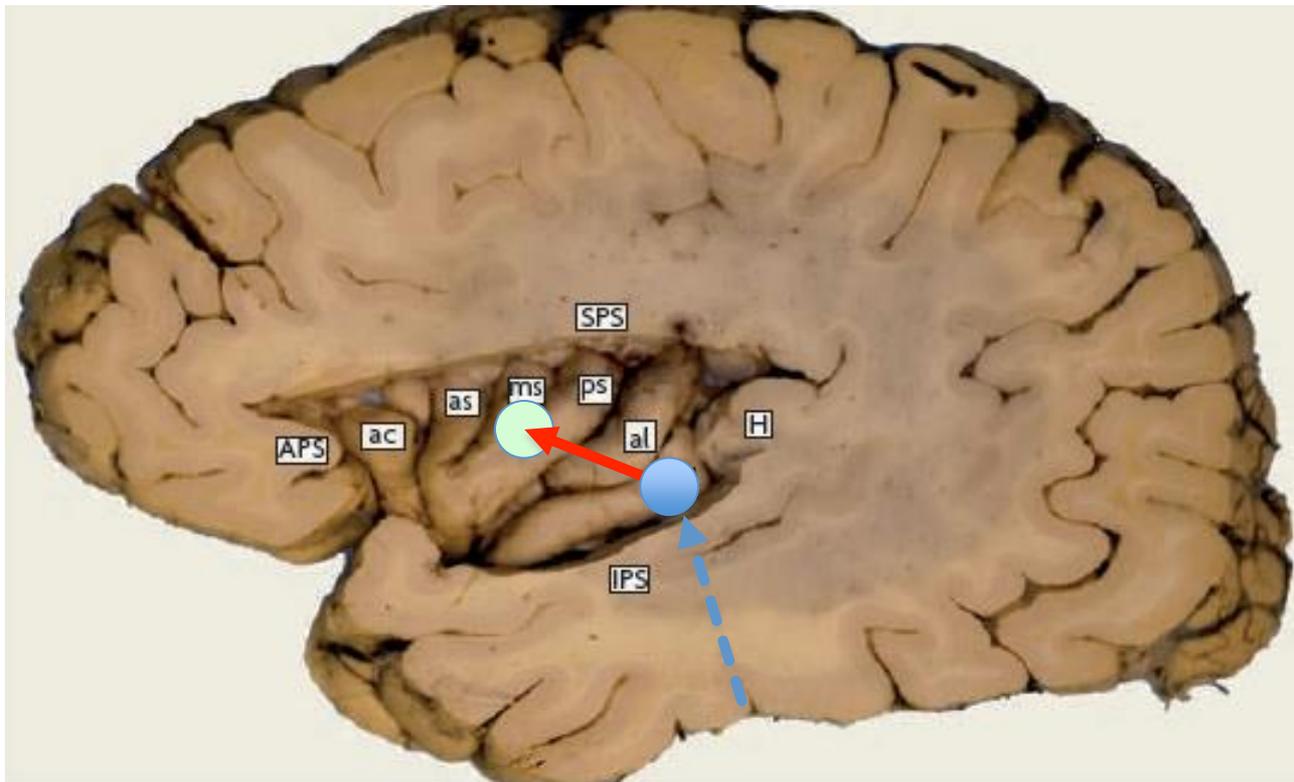
1. the contralateral anterior insula, which must contain an initial re-representation of interoceptive cortex on the same side,
2. by way of a callosal pathway, a lateralized, second-order re-representation on the right side that is subsequently forwarded to orbitofrontal cortex.

Posterior to mid to anterior pathway



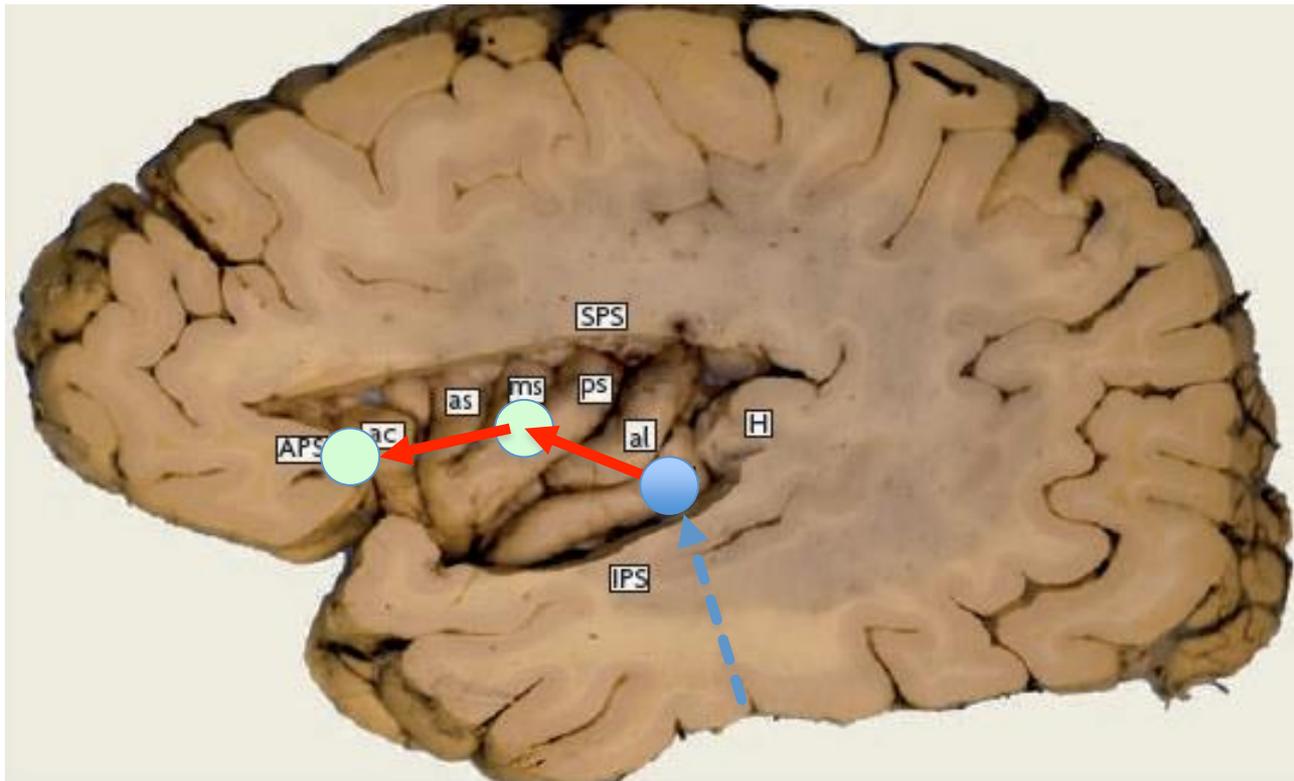
Craid AD. How do you feel – now? The anterior insula and human awareness. Nat Rev Neurosc. 2009; 10, 59:70.

Posterior to mid to anterior pathway

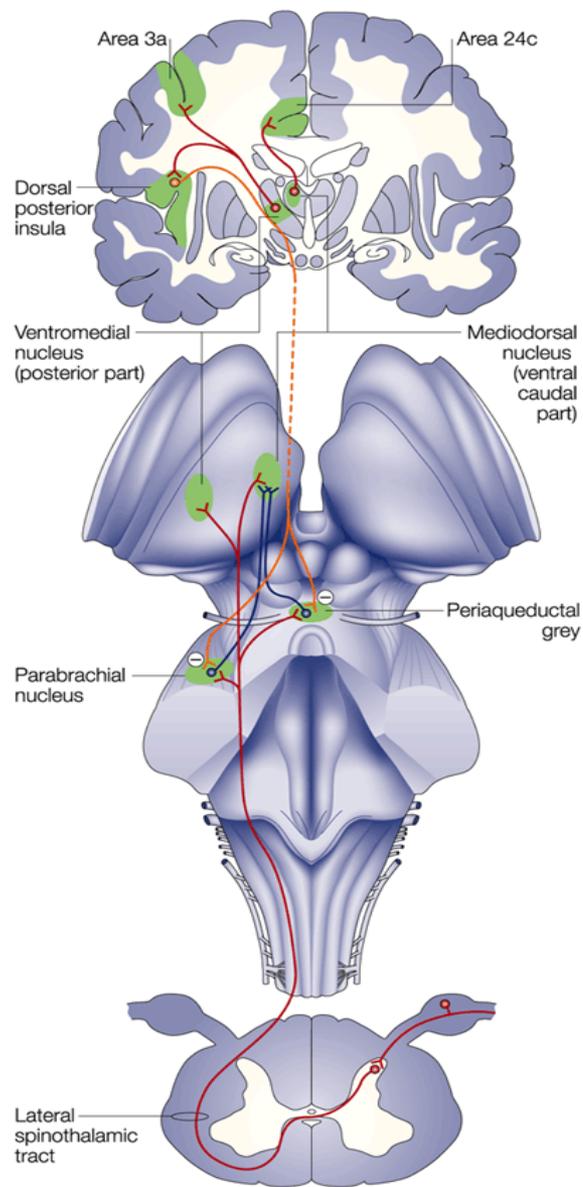


Craik AD. How do you feel – now? The anterior insula and human awareness. Nat Rev Neurosc. 2009; 10, 59:70.

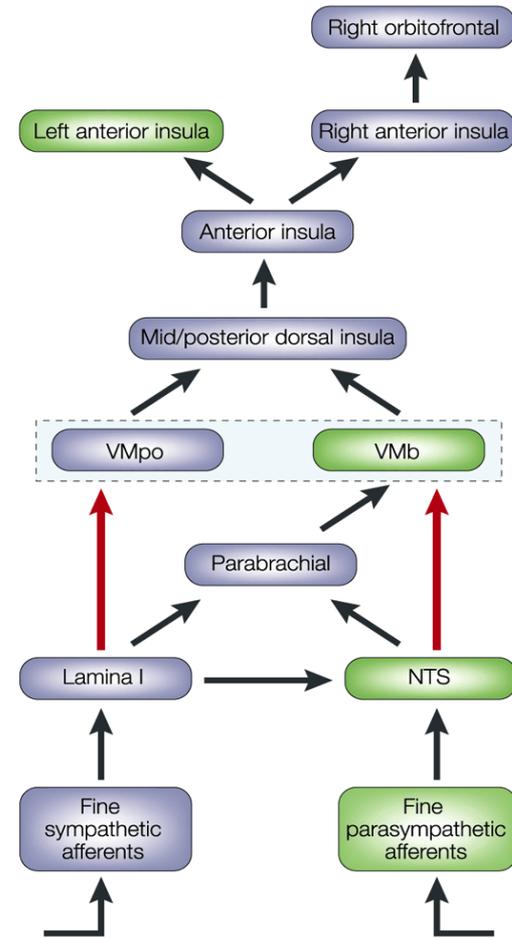
Posterior to mid to anterior pathway



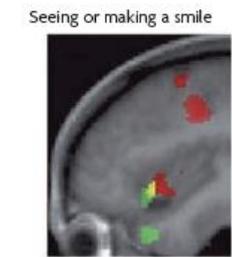
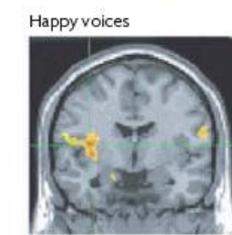
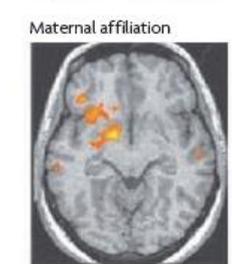
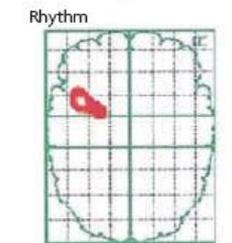
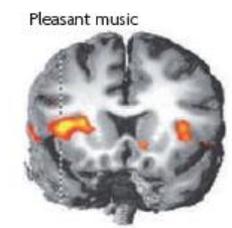
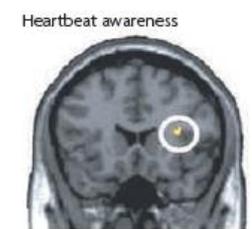
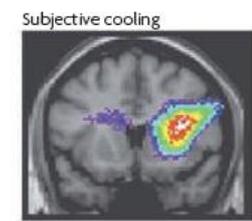
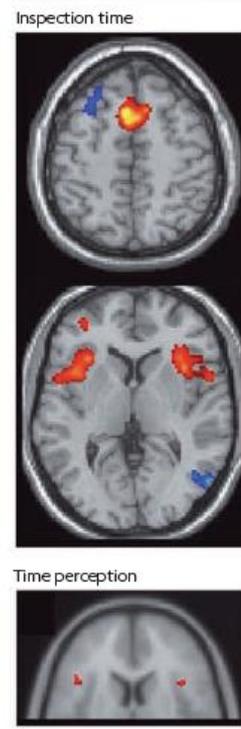
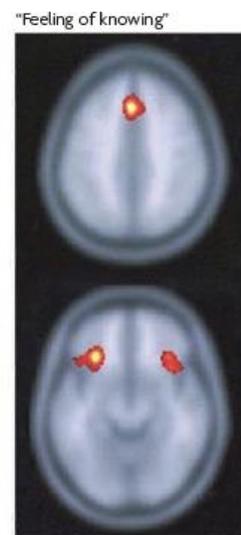
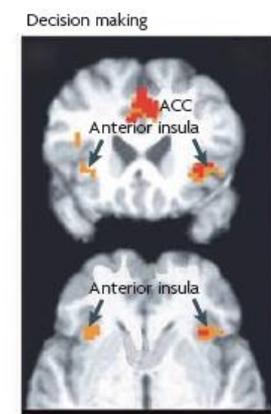
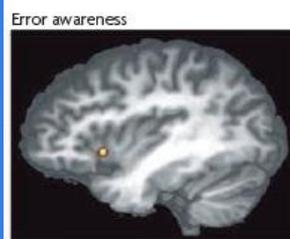
Craid AD. How do you feel – now? The anterior insula and human awareness. Nat Rev Neurosc. 2009; 10, 59:70.

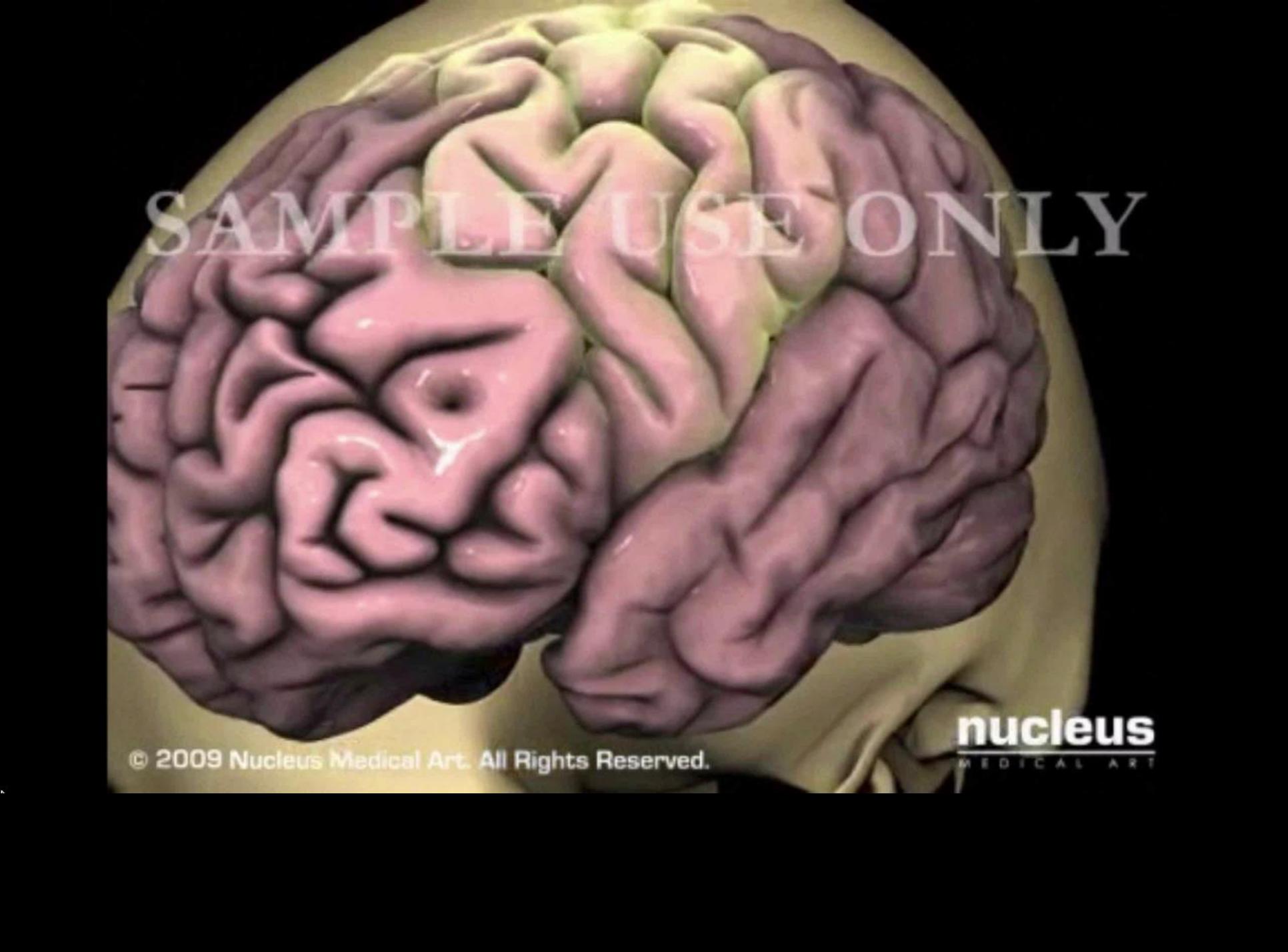


Orbito-frontal cortex



Craig A.D. How do you feel? Interoception: the sense of the physiological condition of the body. Nature Reviews Neuroscience 3, 655-666 (2002);



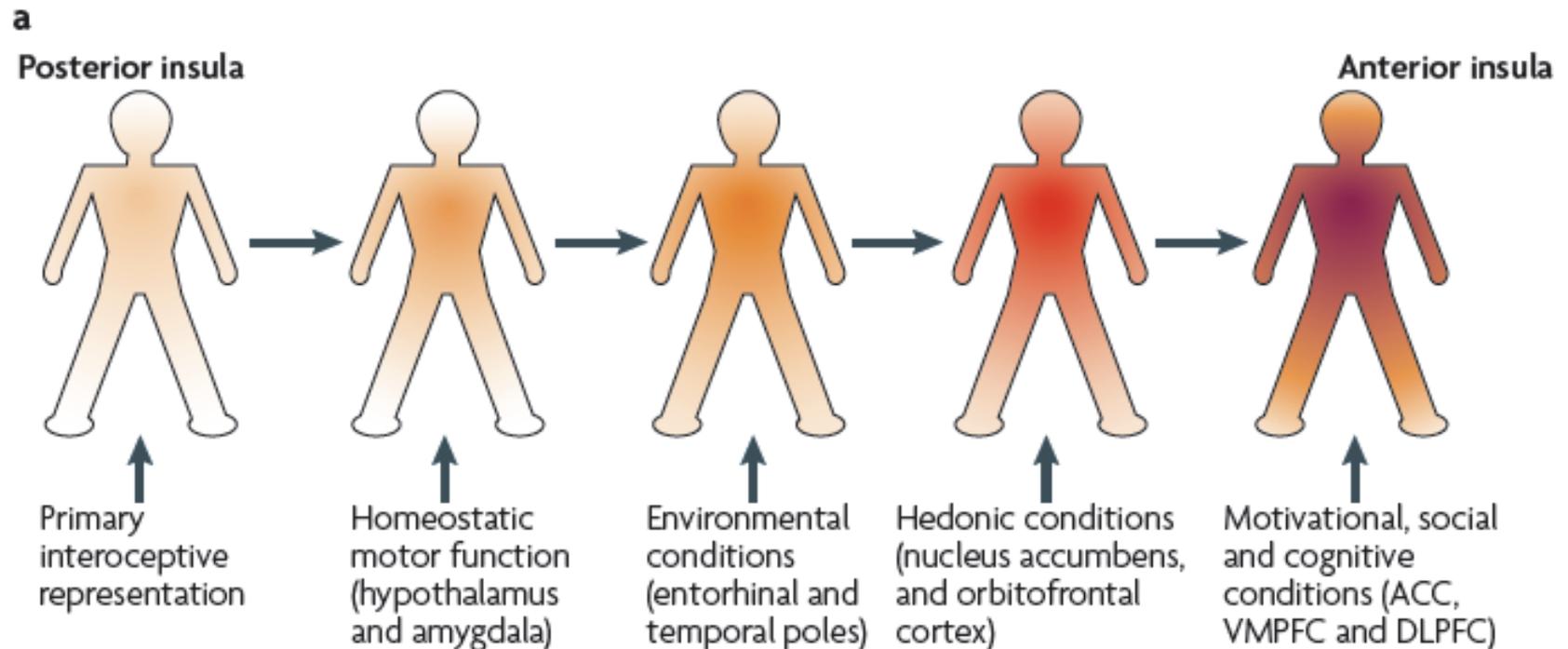


SAMPLE USE ONLY

© 2009 Nucleus Medical Art. All Rights Reserved.

nucleus
MEDICAL ART

Model of awareness



Craik AD. How do you feel – now? The anterior insula and human awareness. *Nat Rev Neurosc.* 2009; 10, 59:70.

Ultimate goal: homeostasis



It's the fixity of the milieu interieur which is the condition of free and independent life and that all the vital mechanisms. However varied they may be, have only one object, that of preserving constant the conditions of life in the internal environment. (Bernard C. 1878)

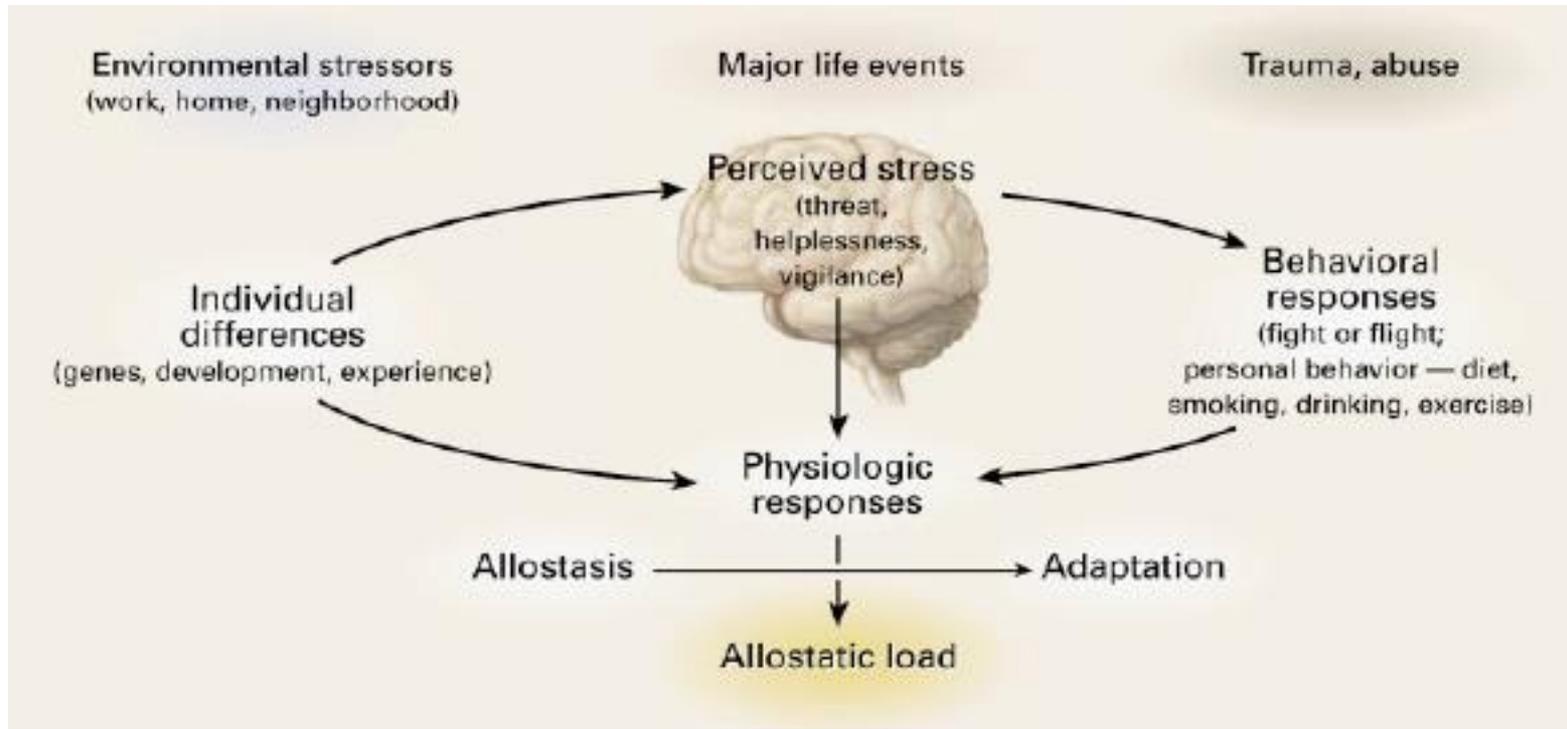
Quoted from Canon WB. The wisdom of the body, 2nd revised and enlarged edition. New York: Norton. 1939

is the property of a system in which variables are regulated so that internal conditions remain stable and relatively constant: pH, temperature, sugar level, PO₂ and selected ions.

(from Greek: ὁμοιος homœos, "similar" and στάσις stasis, "standing still")

Canon WB. Organization for physiological homeostasis. *Physiol. Rev.*, 1929. 9, 399-431.

Allostasis





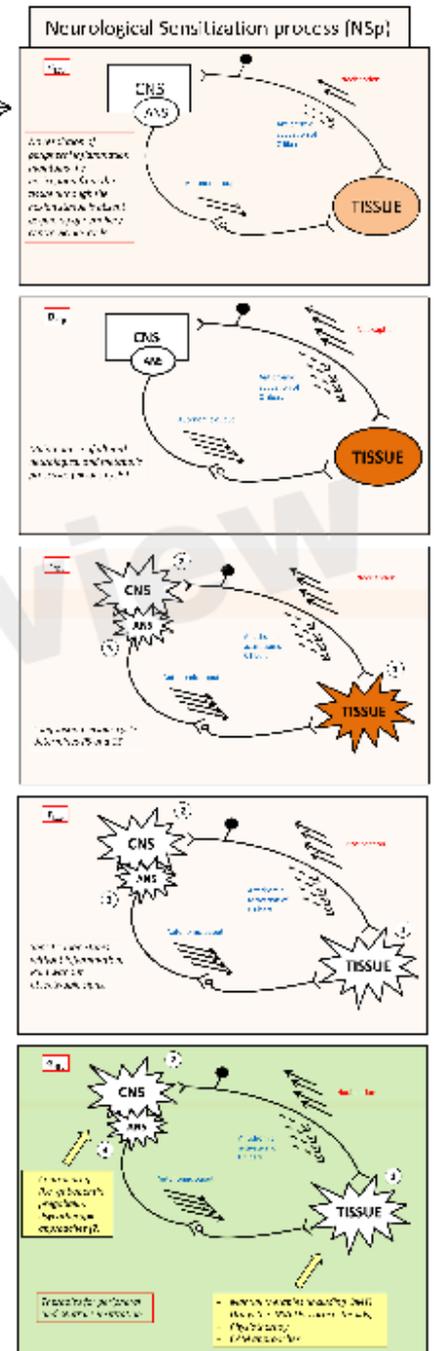
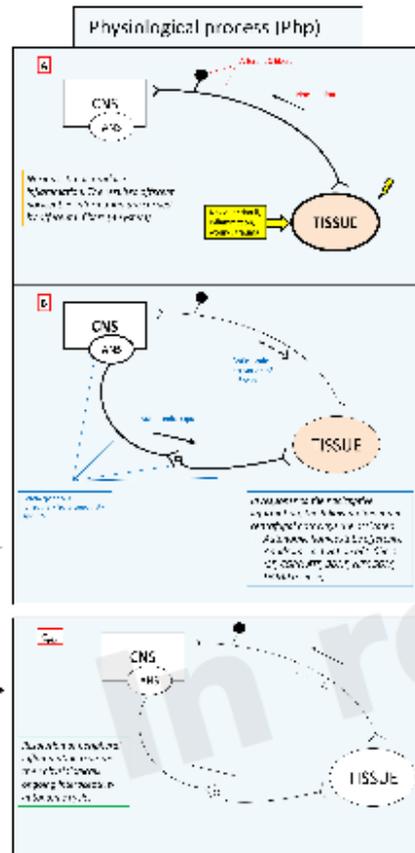
CrossMark

Sensitization and Interoception as Key Neurological Concepts in Osteopathy and Other Manual Medicines

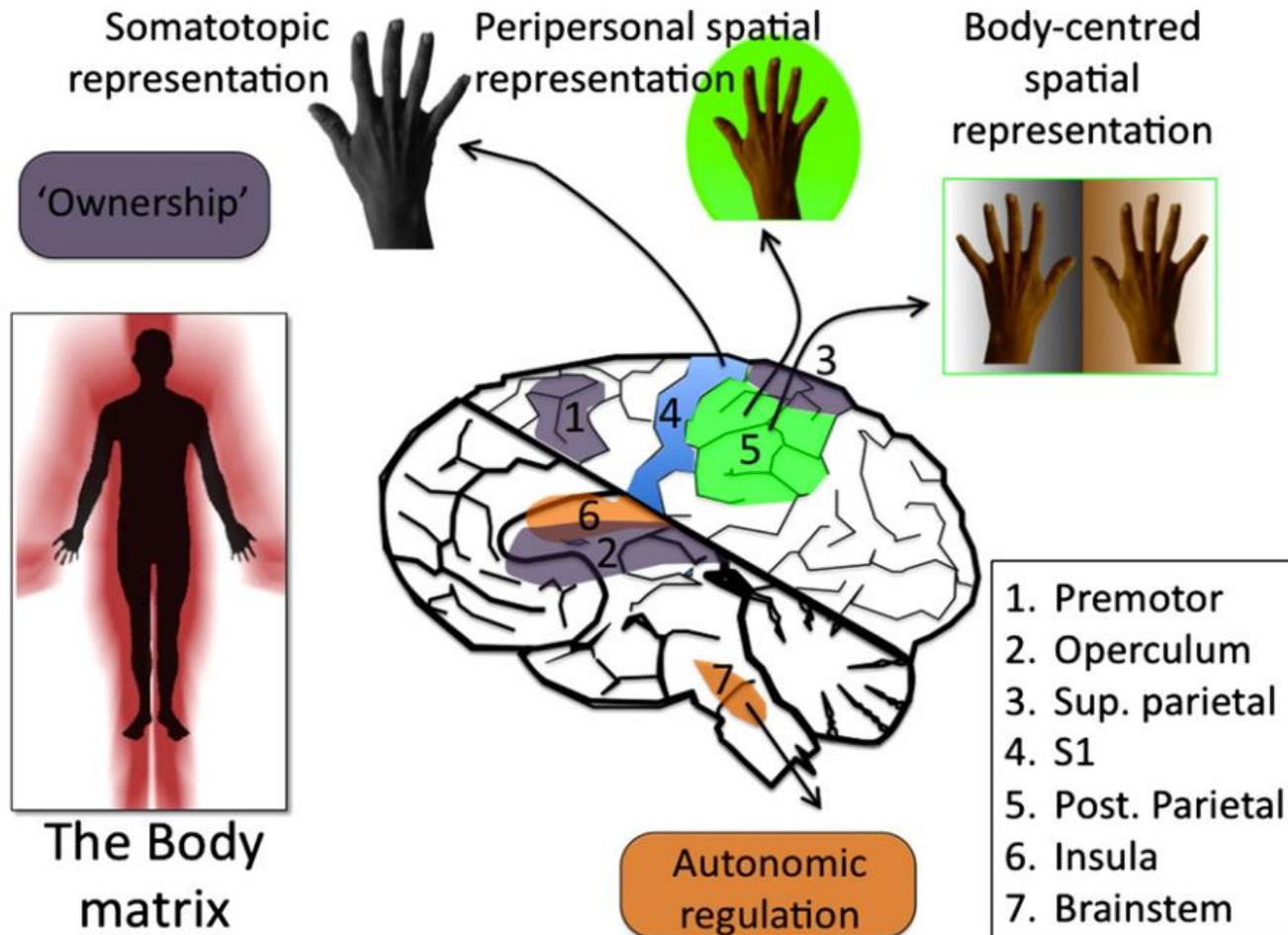
Giandomenico D'Alessandro^{1,2}, **Francesco Cerritelli**^{1,3,4*} and **Pietro Cortelli**^{5,6}

¹ Clinical-based Human Research Department, Centre for Osteopathic Medicine Collaboration, Pescara, Italy, ² Accademia Italiana Osteopatia Tradizionale, Pescara, Italy, ³ Department of Neuroscience, Imaging and Clinical Sciences "G. D'Annunzio" University of Chieti-Pescara, Pescara, Italy, ⁴ ITAB-Institute for Advanced Biomedical Technologies, "G. D'Annunzio" University of Chieti-Pescara, Pescara, Italy, ⁵ Department of Biomedical and Neuromotor Sciences, Bellaria Hospital, University of Bologna, Bologna, Italy, ⁶ IRCCS Istituto delle Scienze Neurologiche di Bologna, AUSL di Bologna, Bologna, Italy

Interoceptive paradigm



Body matrix



Thank you!



Alessio Iacopini

BSc MS, DO; Clinical Posturologist

Head of CROMON International Department

OSEAN Board Member – Treasurer

COME Collaboration National Board Member

Email: osteobelba@gmail.com

Francesco Cerritelli

President C.O.ME. Collaboration | Centre for Osteopathic MEDicine Collaboration

Department of Neuroscience, Imaging and Clinical Sciences | University "G. d'Annunzio" - Chieti - Italy

Email: fcerritelli@comecollaboration.org | Web: <http://www.comecollaboration.org>

