

## PERSONAL DETAILS

First name: Federica  
Surname: Calcagnoli  
Gender: Female  
Nationality: Italian  
Place and date of birth: ---  
Contact address: ---  
Tel.: ---  
Email: ---  
Skype: ---



## EDUCATION

- 2009 – 2014 **Ph.D. in Behavioural and Cognitive Neurosciences**, Department of Behavioral Physiology, University of Groningen, The Netherlands  
Thesis: 'Oxytocin: the neurochemical mediator of social life'.  
ISBN: 978-90-367-7262-4.  
Advisors: Prof. J.M. Koolhaas, Dr. S.F. de Boer, Dr. M. Althaus
- 2004 – 2009 **M.Sc. in Chemistry and Pharmaceutical Technologies** (*cum laude*). Dept. of Pharmacology, University of Camerino, Italy and Dept. of Neuroendocrinology, University of Groningen, The Netherlands.  
Thesis title: Food intake and metabolism: effects of olanzapine, topiramate, or their combination.  
Advisors: Prof. R. Ciccocioppo, Dr. Carlo Polidori, Prof. A.J.W. Scheurink, Dr. S.S. Evers

## WORK EXPERIENCE

- 2014 - Present **Co-ownership**, Pharmacy Dr. Calcagnoli s.a.s, Monte Urano, Italy
- 2012 **4-month collaboration project** at the Department of Behavioral and Molecular Neuroscience, University of Regensburg, performing in situ hybridization and radioreceptor autoradiography  
Advisors: Prof. I.D. Neumann, Dr. D.I. Beiderbeck
- 2007 – 2008 **Internship**, Pharmacy Dr. A. Pioli, Francavilla d'Ete, Italy

## TEACHING EXPERIENCE

- 2010 – 2014 Mentoring undergraduate and graduate students.  
Bachelor thesis (6-month full time), University of Groningen: Lars Overweg, Kevin Ike  
Master thesis (9-month full time), University of Groningen: Christine Stubbendorff, Neele Meyer, Silvia Paterlini, Judith Kreutzmann
- 2011 – 2013 **'Maybe is not just a spray'**, invited lecture integrated in the annual master course *Neuroendocrine Basis of Behaviour*, University of Groningen, The Netherlands

2011 – 2013 **'Oxytocin, the molecule of sociality'**, invited lecture integrated in the annual bachelor course *Minor Neuroendocrine*, University of Groningen, The Netherlands

## COURSES

- 2015 *First aid and safety training course* (with certificate), Federfarma Ascoli, Altidona, Italy
- Medical management of Hyperglycemia in type 2 Diabetes*, Federfarma Ascoli Piceno, Italy
- 2012 *Project Management for Scientific Research*, Graduate School of Science (GSS), University of Groningen, The Netherlands
- 2011 *Statistic course*, Graduate School of Science (GSS), University of Groningen, The Netherlands
- EEG course*, Graduate School of Science (GSS), University of Groningen, The Netherlands
- 2010 *Neuroanatomy course*, Graduate School of Science (GSS), University of Groningen, The Netherlands
- Laboratory Animal Science*, Graduate School of Science (GSS), University of Groningen, The Netherlands (certificate art. 9)

## SKILLS

### ANIMAL HANDLING AND EXPERIMENTS

- Animal handling and nurturing (rats, short- and long-term studies)
- Behavioral observation and analysis: resident-intruder test, partner-preference test, open field test
- Intravenous and intragastric glucose tolerance test
- Microdialysis
- Biotelemetry measurements
- Administration of drug: intranasal, brain infusion, oral, intravenous, intraperitoneal, subcutaneous
- Sampling: cerebrospinal fluid from cisterna magna, blood via tail vein and heart puncture, urine
- Administration of humane end-points
- Tissue collection including brain extraction
- Perfusion
- Autopsy

### SURGERY

- Stereotactic microsurgery
- Gastric cannula implantation

- Mini-pump implantation
- Ovariectomy
- Implantation of radiotelemetry transmitter

#### LABORATORY SKILLS

- Brain fixation and slicing
- Immunochemistry
- In situ hybridization
- Receptor autoradiography
- Light and confocal microscopy
- High-performance liquid chromatography

#### OTHER SKILLS

SOFTWARES	Microsoft Office programs Graphic design and Image processing (Origin, Sigma Plot, Prism, Image J, Photoshop) Statistical software (Spss, STAT) Recording and analysis of behavioral and physiological parameters (Observer, Eline, CARDIA) Reference Manager (EndNote)
LANGUAGES	Italian: native speaker English: high proficiency Dutch: beginner Spanish: beginner

#### PROFESSIONAL AFFILIATION

Dutch Neurofederation

#### AWARD AND SCHOLARSHIP

2012	Award for the best oral presentation at 10 <sup>th</sup> International Society for aggression (ISRA), "Oxytocin & offensive aggression in feral male rats: individual variability and brain sites of action"
2008 – 2009	Erasmus scholarship, University of Camerino, Italy

#### INVITED LECTURES

2014	'Oxytocin: the mediator of social life. A pharmaco-behavioral and neurobiological study in male rats'. CBN seminar, University of Groningen, The Netherlands
2013	'Brain Oxytocin and Male Aggression: an Intimate Inverse Relationship'. Department of Psychology, University of California, Davis, CA  'Oxytocin & offensive aggression in feral male rats: individual variability and brain sites of action', International Conference on Individual Differences (KNDV), Groningen, The Netherlands

- 2012 'Oxytocin & offensive aggression in feral male rats: individual variability and brain sites of action'. 10<sup>th</sup>International Society for Research on Aggression (ISRA), Luxembourg

## LIST OF PUBLICATIONS

- 2016 Althaus M, Groen Y, Wijers AA, Noltes H, Tucha O, Sweep FC, Calcagnoli F, Hoekstra PJ. Do blood plasma levels of oxytocin moderate the effect of nasally administered oxytocin on social orienting in high-functioning male adults with autism spectrum disorder? *Psychopharmacology* (under revision)
- 2015 Calcagnoli F, Kreutzmann CJ, de Boer SF, Althaus M, Koolhaas JM. Acute and repeated intranasal oxytocin administration exerts anti-aggressive and pro-affiliative effects in male rats. *Psychoneuroendocrinology*, 51: 112-121.
- Calcagnoli F, Stubbendorff C, Meyer N, de Boer SF, Althaus M, Koolhaas JM. Oxytocin microinjected into the central amygdaloid nuclei exerts anti-aggressive effects in male rats. *Neuropharmacology*, 90:74-81.
- 2014 Calcagnoli F, Meyer N, de Boer SF, Althaus M, Koolhaas JM. Chronic enhancement of brain oxytocin levels causes enduring anti-aggressive and pro-social explorative behavioral effects in male rats. *Hormones and Behavior*, 65 (4):427-433.
- Calcagnoli F, de Boer SF, Beiderbeck DI, Althaus M, Koolhaas JM, Neumann ID. Local oxytocin expression and oxytocin receptor binding in the male rat brain is associated with aggressiveness. *Behavioural Brain Research*, 261: 315-322.
- 2013 Calcagnoli F, de Boer SF, Althaus M, den Boer JA, Koolhaas JM. Anti-aggressive activity of central oxytocin in male rats. *Psychopharmacology*, 229 (4): 639-651.
- 2010 Evers SS, Calcagnoli F, van Dijk G, Scheurink AJ. Olanzapine causes hypothermia, inactivity, a deranged feeding pattern and weight gain in female Wistar rats. *Pharmacology Biochemistry and Behavior*, 97 (1): 163-169.
- BOOK**
- 2014 Calcagnoli F. 'Oxytocin: the mediator of social life. A pharmaco-behavioral and neurobiological study in male rats.'  
ISBN: 978-90-367-7262-4.  
<http://irs.ub.rug.nl/ppn/381337065>

## SCIENTIFIC COMMUNICATIONS

- 2014 'Brain Oxytocin and Male Aggression: an Intimate Inverse Relationship'. 9<sup>th</sup> Federation of European Neuroscience Societies (FENS), Milan, Italy
- 2013 'Brain Oxytocin and Male Aggression: an Intimate Inverse Relationship'. Society for Neuroscience (SfN), San Diego
- 'Brain Oxytocin inhibits offensive aggression in male rats'. 10<sup>th</sup> World Congress of Neurohypophysial Hormones (WCNH), Bristol
- 'Acute and Chronic Oxytocin Treatment in feral male rats'. 9<sup>th</sup> Dutch Endo-Neuro-Psycho Meeting (ENP), Lunteren, The Netherlands
- 2012 'Brain Oxytocin modulates male aggression'. 8<sup>th</sup> Dutch Endo-Neuro-Psycho Meeting (ENP), Lunteren, The Netherlands
- 'Oxytocin & Aggression: What? Where? How?'. 9<sup>th</sup> Göttingen Meeting of the German Neuroscience Society, Göttingen, Germany
- 'Oxytocin in the brain of aggressive male rats'. 8<sup>th</sup> Federation of European Neuroscience Societies (FENS), Barcelona, Spain

## REFERENCES

**Prof. Jaap M. Koolhaas;** *j.m.koolhaas@rug.nl*

Department of Behavioral Physiology, University of Groningen, The Netherlands

**Dr. Sietse F. de Boer;** *s.f.de.boer@rug.nl*

Department of Behavioral Physiology, University of Groningen, The Netherlands

**Dr. Monika Althaus;** *m.althaus@accare.nl*

Department of Psychiatry, University Medical Center Groningen, The Netherlands