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President of **Institut Francilien d'Ethologie**
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PROFESSIONAL HISTORY

Nov 2009 **Full Professor**, University of Paris 13, France
2008-2009 **Associate Professor**, University of Copenhagen, Denmark
2005-2008 **Associate Research Professor**, University of Copenhagen
2006 **Habilitation**, University of Regensburg (Germany)
2001-2005 **Post-doc**, University of Regensburg
1998-2001 **Post-doc**, University of Tours (France)
1996-1998 **Research Associate**, University of Pisa (Italy)
1996 **Culture della materia per la Zoologia**, University of Pisa
1996 **PhD** in Animal Behaviour (Ethology), University of Parma

SCIENTIFIC AND ADMINISTRATIVE RESPONSIBILITIES

- From 2011 : **President** of Institut Francilien d'Ethologie
- From 2010 : **Adjoint Director** of the Laboratoire d'Ethologie Expérimentale et Comparée
- 2009-2010 : **Director of the PhD school** « Ecology and Evolution », University of Copenhagen
- 2008-2010 : Member of the **organizing committee and secretary of the congress IUSI 2010** (XVI International Congress of *International Union for the Study of Social Insects*, Copenhagen, 8-14 August 2010)
- 2005-2010 : **Responsible of the research program** «Information and Recognition», *Centre for Social Evolution*, University of Copenhagen
- 2005-2008 : **Director of the Marie Curie Excellence Team CODICES**, University of Copenhagen
- From 2010 : **Expert evaluator German National Science Foundation**, Germany
- From 2009 : **Expert evaluator National Science Foundation (NSF)**, USA
- From 2008 : **Member of the Scientific Board of Fyssen Fondation**
- From 2008 : **Expert evaluator Agence nationale de la recherche (ANR)**
- From 2007 : **Expert evaluator EU-FP7** (Marie Curie Actions)

- **Peer Reviews for International Journals:**

Animal Behaviour; Behavioral Ecology; Behavioral Ecology and Sociobiology; Biological Journal of the Linnean Society; Biology Letters; Chemical Senses; Current Biology; Evolutionary Ecology; Ethology; Frontiers in Comparative Psychology (*Associate Editor*); Journal of Evolutionary Biology (*Board Member 2006-2010*); Journal of Chemical Ecology; Journal of Ethology; Journal of Insect Physiology; Journal of Insect Science; Insectes Sociaux; Myrmecological News; Naturwissenschaften; Physiological Entomology, PLoS ONE; Proceeding Royal Society B, Science.

FUNDING

- 2010 **Marie Curie Reintegration Grant**, *Identity Code* (45.000 euro), University Paris 13.
- 2008 **Freia Grant** (68.000 euro plus a PhD fellowship), University of Copenhagen
- 2005-2009 **Marie Curie Excellence Grant**, *CODICES (Chemical cOmmunication coDes of InseCt societies)* (1.500.000 euro, including salary for post-docs and PhD students)
- 2004 **Habilitations-stipendium**, Programm Chancengleichheit für Frauen in Forschung und Lehre, University of Regensburg
- 2003 Grant of **Deutsche Forschungsgemeinschaft** (German Research Foundation).
- 2001 Post-doc grant of the *INSECTS* EU-network (*Integrated Studies of the Economy of Insect Societies*), University of Regensburg
- 2000 Fellowship **Consiglio Nazionale delle Ricerche** (CNR) for research abroad
- 1998 Individual **Marie Curie** Fellowship (programme *Training and Mobility of Researchers* (European Commission), University of Tours

PUBLICATIONS

Books and book chapters

- I. **D'ETTORRE P.**, Hughes D.P. (Eds) (2008) *Sociobiology of Communication: an interdisciplinary perspective*, Oxford University Press, Oxford, UK.
A novel synthesis bridging the gaps between proximate and ultimate levels of analysis, between empirical model systems, and between biology and the humanities.
The book offers complementary approaches spanning a large diversity of research programs, from the genetic basis of bacterial communication to how linguistics, psychology and philosophy may ultimately contribute to a biological understanding of human mate choice and the evolution of human societies.
- II. **D'ETTORRE P.**, Moore, A.J. (2008) *Chemical communication and the coordination of social interactions in insects*. In: d'Ettorre, P., Hughes, D.P. (eds) *Sociobiology of communication*. Oxford University Press, Oxford, pp. 81-96.
- III. **D'ETTORRE P.**, Lenoir, A. (2009) *Nestmate recognition*. In: Lach, L., Parr, C., Abbott, K. (eds) *Ant Ecology*. Oxford University Press, Oxford, pp 194-209.
- IV. van Zweden, J.S., **D'ETTORRE P.** (2010) *The role of hydrocarbons in nestmate recognition*. In: Blomquist, G.C., Bagnères, A.-G. (eds) *Insect Hydrocarbons: Biology, Biochemistry and Chemical Ecology*. Cambridge University Press, Cambridge, pp 222-243.

Peer reviewed international journals

2011

1. Bos N., Lefèvre T., Bruun Jensen A. & D'ETTORRE P. (2011) Sick ants become unsociable. *J. Evol Biol*, *in press*.
2. Bos N., Dreier S., Jørgensen C.G., Nielsen J., Guerrieri F.J. & D'ETTORRE P. (2011) Learning and perceptual similarity among cuticular hydrocarbons in ants. *J Insect Physiol*, *in press*
3. Guerrieri F.J., D'ETTORRE P., Devaud J-M & Giurfa M. (2011) Long-term olfactory memories are stabilised via protein synthesis in *Camponotus fellah* ants. *J Exp Biol* 214, 3300-3304.
4. van Zweden, J.S., Vitikainen, E., D'ETTORRE P. & Sundström, L. (2011) Do cuticular hydrocarbons provide sufficient information for optimal sex allocation in the ant *Formica exsecta*? *Journal of Chemical Ecology*, *in press*
5. Bonckaert, W., van Zweden, J.S., Billen, J., D'ETTORRE P. & Wenseleers, T. (2011) Colony stage and not facultative policing explains pattern of worker reproduction in the Saxon wasp, *Molecular Ecology* 20, 3455-3468
6. Grinsted L., Bilde T. & D'ETTORRE P. (2011) Cuticular hydrocarbons as potential kin recognition cues in a subsocial spider. *Behavioral Ecology*, 22 (6), 1187-1194.
7. Fouks, B., D'ETTORRE P. & Nehring V. (2011) Brood adoption in the leaf-cutting ant *Acromyrmex echinator*: adaptation or recognition noise? *Insectes Sociaux* , 58, 479-486.
8. Nehring V., Evison S.E F., Santorelli L.A., D'ETTORRE P. & Hughes W.O.H. (2011) Kin-informative recognition cues in ants. *Proceedings Royal Society London B*, 278, 1942-1948.

2010

9. Bos N., Guerrieri F.J. & D'ETTORRE P. (2010). Significance of chemical recognition cues is context dependent in ants. *Animal Behaviour* 80, 839-844.
10. Stroeymeyt N., Guerrieri F.J., van Zweden J.S. & D'ETTORRE P. (2010) Rapid decision-making with side-specific perceptual discrimination in ants. *PLoS ONE* 5(8): e12377.
11. Holman L., Jørgensen C.G., Nielsen J. & D'ETTORRE P. (2010) Identification of an ant queen pheromone regulating worker sterility. *Proceedings Royal Society London B*, 277, 3793-3800.
12. Schmidt A.M., D'ETTORRE P. & Pedersen J.S. (2010) Low levels of nestmate discrimination despite high genetic differentiation in the invasive pharaoh ant. *Frontiers in Zoology* 7, 20.
13. van Zweden J.S., Brask J.B., Christensen J.H., J. J. Boomsma J.J., Linksvayer T.A. & D'ETTORRE P. (2010) Blending of heritable recognition cues among ant nestmates creates distinct colony gestalt odours but prevents within-colony nepotism. *Journal of Evolutionary Biology* 23, 1498-1508.
14. Holman L., Dreier S. & D'ETTORRE P. (2010) Selfish strategies and honest signalling: reproductive conflicts in ant queen associations. *Proc. R. Soc. London B*, 277, 2007-2015.
15. McMullan J.B., D'ETTORRE P., Brown M.J.F. (2010) Chemical cues in the host-seeking behaviour of tracheal mites (*Acarapis woodi*) in honey bees (*Apis mellifera mellifera*). *Apidologie* 41 (5), 568-578.

2009

16. El-Showk S., van Zweden J.S., D'ETTORRE P. & Sundström L. (2009) Are you my mother? Kin recognition in the ant *Formica fusca*. *Journal of Evolutionary Biology*, 23, 397-406.
17. Guerrieri F.J. & D'ETTORRE P. (2009) Associative learning in ants: conditioning of the maxilla-labium extension response in *Camponotus aethiops*. *Journal of Insect Physiology* 56, 88-92.
18. Kronauer D.J., Schöning C. , D'ETTORRE P. & Boomsma J.J. (2009) Colony fusion and worker reproduction after queen loss in army ants. *Proc. R. Soc. London B* 277, 755–763.
19. Guerrieri F.J., Nehring V., Jørgensen C.G., Nielsen J., Galizia C.G. & D'ETTORRE P. (2009) Ants recognize foes and not friends. *Proc. R. Soc. London B* 276, 2461-2468.

20. Heinze J & D'ETTORRE P. (2009) Honest and dishonest communication in social Hymenoptera. *Journal of Experimental Biology* 212, 1775-1779.
21. Dreier S. & D'ETTORRE P. (2009) Social context predicts recognition systems in ant queens. *Journal of Evolutionary Biology* 22, 644-649.
22. Vogel V., Pedersen J.S., D'ETTORRE P., Lehmann L. & Keller L. (2009) Dynamics and genetic structure of Argentine ant supercolonies in their native range. *Evolution* 63, 1627-1639.
23. van Zweden J.S., Heinze J., Boomsma J.J. & D'ETTORRE P. (2009) Ant queen egg-marking signals: matching deceptive laboratory simplicity with natural complexity, *PLoS ONE* 4, e4718
24. van Zweden J., Dreier S. & D'ETTORRE P. (2009) Disentangling environmental and heritable nestmate recognition cues in a carpenter ant. *Journal of Insect Physiology* 55, 158-163.

2008

25. D'ETTORRE P. (2008) Multiple levels of recognition in ants: a feature of complex societies. Special issue "Emergence of Social Behaviour", *Biological Theory* 2, 108-113.
26. Cremer S., Ugelvig L.V., Drijfhout F.P., Schlick-Steiner B.C., Steiner F.M., Seifert B., Hughes D.P., Schulz A., Petersen K.S., Konrad H., Stauffer C., Kiran K., Espadaler, D'ETTORRE P., Aktaç N., Eilenberg J., Jones G.R., Nash D.R., Pedersen J.S. & J. Boomsma J.J. (2008) The Evolution of Invasiveness in Garden Ants. *PLoS ONE* 3, e3838.
27. Cremer S, D'ETTORRE P., Drijfhout F. P., Sledge M.F., Turillazzi S. & Heinze J. (2008) Imperfect chemical female mimicry in males of the ant *Cardiocondyla obscurior*. *Naturwissenschaften* 95, 1101-1105.
28. Guerrieri F.G. & D'ETTORRE P. (2008) The mandible opening response: quantifying aggression elicited by chemical cues in ants. *Journal Experimental Biology* 211, 1109-1113.

2007

29. D'ETTORRE P. (2007) You are what you learn. *Current Biology* 17, R766-767.
30. Dreier S., van Zweden J.S. & D'ETTORRE P. (2007) Long term memory of individual identity in ant queens. *Biology Letters* 3, 459-462 (highlighted article on *Biology Letters* web site).
31. Kellner K., Trindl A., Heinze J. & D'ETTORRE P. (2007) Polygyny and polyandry in small ant societies. *Molecular Ecology* 16, 2363-2369.
32. Foitzik S., Sturm H., Pusch K., D'ETTORRE P. & Heinze J. (2007) Nestmate recognition and intraspecific chemical and genetic variation in *Temnothorax* ants. *Animal Behaviour* 73, 999-1007.
33. Beibl J., D'ETTORRE P. & Heinze J. (2007) Cuticular profiles and mating preference in a slave-making ant. *Insectes Sociaux* 54, 174-182.
34. van Zweden J.S., Fürst M.A., Heinze J. & D'ETTORRE P. (2007). Specialization in policing behaviour among workers of the ant *Pachycondyla inversa*. *Proc. R. Soc. London B* 274, 1421-1428.

1993-2006

35. D'ETTORRE P., Tofilski A., Heinze J., Ratnieks F.L.W. (2006). Non-transferable signals on ant queen eggs. *Naturwissenschaften*, 93, 136-140.
36. D'ETTORRE P., Wenseleers T., Dawson J., Hutchinson S., Boswell T., Ratnieks F.L.W. (2006) Wax combs mediate nestmate recognition by guard honey bees. *Animal Behaviour*, 71, 773-779.
37. D'ETTORRE P., Heinze J. (2005). Individual recognition in ant queens. *Current Biology*, 15, 2170-2174 (**Cover paper**).
38. Brunner E., Trindl A., Falk K.H., Heinze J. and D'ETTORRE P. (2005). Reproductive conflict in social insects: Male production by workers in a slave-making ant. *Evolution*, 59, 2480-2482.
39. D'ETTORRE P., Kellner K., Delabie, J. and Heinze J. (2005) Number of queens in founding associations of the ponerine ant *Pachycondyla villosa*. *Insectes Sociaux*, 52, 327-332.

40. Hartmann A., D'ETTORRE P., Jones G.R., Heinze J. (2005). Fertility signalling: the proximate mechanism of worker policing in the clonal ant *Platythyrea punctata*. *Naturwissenschaften*, 92, 282-286.
41. Buschinger A., Beibl J., D'ETTORRE P. (2004). Recent records of *Myrmicinosporidium durum* Hölldobler, 1933, an enigmatic fungal parasite of ants. *Myrmecology News*, 6, 9-12.
42. D'ETTORRE P., Brunner E., Wenseleers T., Heinze J. (2004). Knowing your enemies: a test of the acceptance threshold model in a host-social parasite system. *Naturwissenschaften*, 91, 594-597.
43. D'ETTORRE P., Heinze J., Ratnieks F.L.W (2004). Worker policing by egg eating in the ponerine ant *Pachycondyla inversa*. *Proc. R Soc. London B*, 271, 1427-1434.
44. Trindl A., Heinze J., D'ETTORRE P. (2004). Isolation and characterization of five microsatellite loci in the ponerine ant *Pachycondyla inversa* (Hymenoptera, Formicidae). *Molecular Biology Notes*, 4, 583-585.
45. D'ETTORRE P., Heinze J., Schulz C., Francke W., Ayasse M. (2004) Does she smell like a queen? Chemoreception of a cuticular hydrocarbon signal in the ant *Pachycondyla inversa*. *Journal Experimental Biology*, 207, 1085-1091.
46. Souza D.J., Della Lucia T.M. Errard, C., D'ETTORRE P., Mercier J.L (2003). Brood recognition by workers of *Acromyrmex laticeps nigrosetosus* Forel, 1908 (Hymenoptera, Formicidae). *Ciencia Rural*, 33, 91-95.
47. D'ETTORRE P., Mondy N., Lenoir A., Errard C. (2002). Blending in with the crowd: social parasites integrate into their host colonies using a flexible chemical signature. *Proc R. Soc. London B*, 269, 1911-1918 **(Cover paper)**.
48. D'ETTORRE P., Mora P., Dibangou V., Rouland C., Errard C. (2002). The role of symbiotic fungus in the digestive metabolism of two species of fungus-growing ants. *Journal Comparative Physiology B*, 172, 169-176.
49. D'ETTORRE P., Heinze J. (2001). Sociobiology of slave-making ant. *Acta Ethologica*, 3, 67-82 (review paper).
50. Lenoir A., D'ETTORRE P., Errard C., Hefetz A. (2001). Chemical ecology and social parasitism in ants. *Annual Review of Entomology*, 46, 573-99 (review paper).
51. D'ETTORRE P., Errard C., Ibarra F., Francke W., Hefetz A. (2000). Sneak in or repel your enemy: Dufour's gland repellent as a strategy for successful usurpation in the slave-maker *Polyergus rufescens*. *Chemoecology*, 10, 135-142.
52. D'ETTORRE P., Mori A., Le Moli F. (1997). Haplometrotic colony founding by the slave-making ant *Polyergus rufescens* Latr. (Hymenoptera, Formicidae). *Italian Journal of Zoology*, 64, 49-53.
53. Mori A., D'ETTORRE P. , Le Moli F. (1996). Selective acceptance of parasitic brood by hosts in the evolution of slavery in ants (Hymenoptera: Formicidae). *Insectes Sociaux*, 43, 391-400.
54. Mori A., D'ETTORRE P., Le Moli F. (1995). Host nest usurpation and colony foundation in the European amazon ant, *Polyergus rufescens* (Hymenoptera: Formicidae). *Insectes Sociaux*, 42, 279-286.
55. Mori A., Grasso D.A., D'ETTORRE P., Le Moli F. (1994). Specificity in host choice by the slave-making ant *Polyergus rufescens* Latr. (Hymenoptera Formicidae). *Ethology Ecology & Evolution*, 3, 89-93.
56. Grasso D.A., Mori A., D'ETTORRE P. , Le Moli F. (1994). Intraspecific raids and territoriality in *Polyergus rufescens* Latr. (Hymenoptera Formicidae). *Ethology Ecology & Evolution*, 3, 81-87.
57. Mori A., D'ETTORRE P., Le Moli F. (1994). Mating and post-mating behaviour of the European amazon ant, *Polyergus rufescens* (Hymenoptera, Formicidae). *Italian Journal of Zoology*, 61, 203-206.
58. Le Moli F., Grasso D.A., D'ETTORRE P., Mori A. (1993). Intraspecific slavery in *Polyergus rufescens* Latr. (Hymenoptera Formicidae): field and laboratory observations. *Insectes*

Peer-reviewed conference proceedings

- I. D'ETTORRE P., Casas J. (2001). Reproductive strategies of parasitic wasps: a field case study. *Advances in Ethology (supplements to Ethology)*, 36, 143
- II. D'ETTORRE P., Mora P., Dibangou V., Errard C. (2000). Rôle du champignon symbiotique dans le métabolisme digestif de deux espèces de fourmis champignonnistes. *Actes Coll. Ins. Soc.*, 13, 89-94
- III. D'ETTORRE P., Errard C. (1999). Trophallaxie proctodéale chez la fourmi esclavagiste *Polyergus rufescens*. *Actes Coll. Ins. Soc.*, 12, 61-64
- IV. D'ETTORRE P., Errard C. (1998). Chemical disguise during colony founding in the dulotic ant *Polyergus rufescens* Latr. (Hymenoptera, Formicidae). *Insect Social life*, 2, 71-77
- V. Errard C., D'ETTORRE P. (1998). Camouflage chimique chez la reine de *Polyergus rufescens* lors de la fondation. *Actes Coll. Ins. Soc.*, 11, 137-142
- VI. Giovannotti M., D'ETTORRE P., Fanfani A., Mori A., Le Moli F. (1996). The dufour gland in the obligatory slave-making ant *Polyergus rufescens* Latr. (Hymenoptera, Formicidae). *Insect Social life*, 1, 151-156
- VII. Mori A., Invidia M., D'ETTORRE P., Le Moli F. (1996). The attraction of parasitic brood toward workers of enslaved and free-living ant species. *Insect Social life*, 1, 163-167
- VIII. D'ETTORRE P., Le Moli F., Mori A., Pietrelli L., Giovannotti M. (1996). Epicuticular hydrocarbon profiles in the slave-making ant *Polyergus rufescens* Latr. and its host species (Hymenoptera, Formicidae): preliminary results. *Insect Social life*, 1, 145-150