

**CURRICULUM VITAE****Detrain Claire****I. GENERAL INFORMATION**

Born 1st May 1963 in Beloeil Belgium  
Nationality: Belgian  
Married, 1 child

Adress : Service d'Ecologie Sociale C.P. 231 Université Libre de Bruxelles  
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**II. Educational Background**

- Candidature (Bachelor) in Biological Sciences : Université Libre de Bruxelles.  
1981 : With honours (Grande Distinction)  
1982 : With honours (Grande Distinction)
- Licence ( Master) in Zoological Sciences : Université Libre de Bruxelles.  
1983 : with honours (La Plus Grande Distinction)  
1984 : with honours (Grande Distinction)
- Ph D in Sciences : Université Libre de Bruxelles.  
1989 : with highest honours - La Plus Grande Distinction avec les félicitations du jury.

Thesis title : "Polyphénisme de castes chez *Pheidole pallidula* - Formicidae - en relation avec la récolte de nourriture et la défense de la société »  
« Caste polyphenism in the ant *Pheidole pallidula* in the context of foraging and nest defense “

**III. SCIENTIFIC CAREER**PhD grantee,

Institute for Scientific Research in Industry and Agriculture (IRSIA, Belgium).  
1984 - september 1985.

Research fellow :

Fonds National de la Recherche Scientifique  
october 1985 - september 1989.

-Postdoctoral Researcher

Fonds National de la Recherche Scientifique  
october 1989 -February 1991.

-Project Manager .

Research & Development in psychopharmacology" in a pharmaceutical company (UCB)  
March 1991- September 1993.

-Research Associate – Permanent position

October 1993 – September 2009  
Fonds National de la Recherche Scientifique

Senior Research Associate – Permanent position

Since October 2009- September 2013  
Fonds National de la Recherche Scientifique

- Research Director – Permanent position

Since October 2013- now

Fonds National de la Recherche Scientifique

Head of Unit of Social Ecology (in codirection with Dr JL Deneubourg)

Since 2004 – Now

Associate professor

Université Libre de Bruxelles

Since 2007 – now

#### **IV HONOURS**

- Lauréate du concours des bourses de voyage de la communauté française (mai 1987).
- Agathon De Potter Grant: Royal Academy of Sciences (1985, 1986, 1990).
- Annual Prize of Royal Academy of Sciences (1990).
- Léo Errera Prize of Physiology : Royal Academy of Sciences (2001)
- De Potter Prize of Biology : Royal Academy of Sciences (2012)
- Elected Member of the Board of the “International Union for the Study of Social Insects”. 1990-2001
- Elected Member of the Management Board of the University of Brussels 2006-2009 and 2011

#### **V TEACHING**

##### **5.1. Courses**

Behavioural Ecology

3 ECTS - 36h Theory 1st master in Biology – Tropimundo Erasmus Mundus student (ULB-VUB)

Since 2007 - Now

Taught in English

Applied Ethology

3 ECTS 36h Theory. Master in Biology and Agronomy (ULB)

Since 2008 -Now

Complement of Ethology :

15 h Theory – 30h Exercice- 2<sup>nd</sup> licence in Biology (ULB)

2004-2007

Applied Tropical Entomology

15 h Theory -2<sup>nd</sup> master in agronomy (ULB)

2002

Insect Physiology -Seminars

- 30 h / 2<sup>nd</sup> master in agronomy (ULB)

1985 to 1991 and 1994 to 2004

##### **5.2. Direction of master and PhD theses**

###### **5.2.1. Supervision of PhD thesis (12 theses)**

Université Libre de Bruxelles-

Mme Mailleux (2001) ; Mme Hérédia 2002 ; Mr Devigne 2003 ; Mr Portha 2004 ; Mr Sempo 2004 ; Mr Servigne 2008 ; Mr Collignon –2012 ; Mme Clotuche 2011 ; Melle Diez 2012, : Melle Bologna (ongoing), Mr Leclerc (ongoing), Melle Lehue (ongoing)

### 5.2.2. Supervision of master thesis (36 theses)

#### Université de Paris 13

4 master theses in « Biologie du comportement » (C .Devigne, S. Portha, S. Depickère, J. Simar)

#### Université de Strasbourg

Eight master theses (F. Remond, D. Di Paoli, A. Friedrich, J. Prieur, Leborgne, L. Moquet, M. Fichaux, M.Thomas) in « Ecologie, Physiologie, Energétique et Comportement »

Université de Toulouse Two master theses (T. Schmidt, P.Julié)

#### Université Libre de Bruxelles-

17 master theses in Biology (AC Mailleux, O Tasse, C. Natan, G. Sempo, L.Piroux, A. Buffin, CA Petre, S. Kiridis, V. Fournel, B. Collignon, Q. Ghysens, V Montourcy, A Guiet, L Valdivieso, A.Bologna, D.Françoise, M.Delferrière, A. Debraekeleer, J. Pinto)  
One Master thesis in Agronomy ( M. Versaen)

Université de Liège-Facultés Agronomiques de Gembloux One Master thesis in Agronomy ( L. Diez)

Université de Liège One Master thesis in Biology (A. Govers)

## **VI. RESEARCH ACTIVITIES**

### **6.1.Publications**

**100 papers published in books or international journals with a reviewing process**

- **62** papers as first or last author
- **38** papers as co-author

**18 papers** published in French

**149 contributions** (oral communication or poster as main author or co-author) to conferences , congress or symposia

Editor of the book “Information processing in social insects (Birkhauser Verlag, Basel, 1999)

### **6.2. Research stays**

- Summer school in Marine Biology- Roscoff (Bretagne). 1983 (1month).
- Research stay at « Station Biologique des Eyzies » (Université P. et M. Curie- France). 1985 (1 month).
- Research stay at « Station d'écologie méditerranéenne de Banyuls/mer » ( Université P. et M. Curie). 1986 & 1987 (3 months)
- Short stays at « Laboratoire d'Ethologie et de psychologie animale » Université Paul Sabatier de Toulouse from 1984 till 1989.
- Training in "*Pharmacokinetics and Metabolism in drug development*". London . 1992
- Short stays at research Center for epilepsy (London) and Centre IRI (International Research Investigations) Edinburgh. 92.
- Research stay at “Christensen Research Institute” Madang- Papua-New Guinea and -“King Léopold III Biological Station” (Laing Island- Papua-New Guinea) 1994 (2 months).

#### **6.4 Participation to international congress**

- participation to **57** congresses among which **3** plenary lectures and **18** conferences as invited speaker at the Santa Fe Institute (USA), Woods Hole Insittute (USA) Imperial College (UK), Université P. Sabatier de Toulouse (France),....

#### **6.5 Scientific expertise**

##### **6.5.1. Referee for 28 journals :**

1. Adaptive Behaviour/ 2. African Journal of Zoology/3. Annales de la Société Entomologique de France/ 4.. Animal Behaviour/ 5. Applied Entomology /6 Behavioral Ecology/ 7. Behavioral Ecology and Sociobiology/8. Behavioural Processes/9 Belgian Journal of Entomology/.10. Biochemical systematics and Ecology /11. Biological Bulletin of Poznan / 12. Chemoecology / 13. Comptes Rendus de l'Académie Française des Sciences / 14. Current Biology /15 Ecological Entomology / 16. Ecology / 17 Ecology Ethology Evolution / 18. Ethology / 19. Forest Ecology and Management / 20. Insectes Sociaux / 21. Journal of Ecology / 22. Journal of Insect Behaviour /23. Journal of Insect Physiology / 24. Journal of Tropical Ecology / 25. Nature/ 26. Naturwissenschaften / 27. Oecologia /28. Proceedings of the Royal Society of London

**6.5.2. Expert for AERES** –Agence d'Evaluation de la Recherche Scientifique in 2009

##### **6.5.3. Regular Member of PhD juries**

at the Université Libre de Bruxelles (11 theses),  
 at the Facultés agronomiques de Gembloux (2 theses),  
 at the university of Mons (1 thesis),  
 at the university P. Sabatier and INRA research centre of Toulouse (8 theses),  
 at the university of Paris 13 (1 thesis)  
 at the university of Strasbourg (2 theses)  
 at the university of Gröningen (1 thesis)  
 At the Katholieke Universiteit Leuven (1 thesis)  
 At the university of Vienna (1thesis)  
 At the university of Bristol (1 thesis)

### **VII. MAIN RESEARCH AREAS**

- Information processing and decision-making in social insects
- Physiology of communication in ants during foraging and nest defense
- Waste management in ant societies
- Ant Interactions with Plants and Aphids: behavior, physiology of seed harvesting as well as of aphid-tending ants
- Polymorphism, division of labour and social regulation of castes