

PUBLICATIONS LIST (2000-2005)

1. — Peer-reviewed papers

2000

1. BABIC, I., FISCHER-LE SAUX, M., GIRAUD, E., BOEMARE, N. 2000. Occurrence of natural dixenic associations between the symbiont *Photorhabdus luminescens* and bacteria related to *Ochrobactrum* spp. in tropical entomopathogenic *Heterorhabditis* spp. (Nematoda Rhabditida). **Microbiol.** **146** (3): 709-718.
2. BOIGEGRAIN R.-A., PUGNIERE M., PAROUTAUD P., CASTRO B., BREHELIN M. 2000. Low molecular weight serine protease inhibitors from insects are protein with highly conserved sequences. **Insect Biochem. Molec. Biol.** **30** : 145-152.
3. EUZEBY, J.P., BOEMARE, N. 2000. The modern Latin word *rhabdus* belongs to the feminine gender, inducing necessary corrections according to Rules 65(2), 12c(1) and 13b of the Bacteriological Code (1990 Revision). **Int J Syst Evol Microbiol** **50** (4): 1691-1692.
4. GIVAUDAN, A., LANOIS, A. 2000. *flhDC*, the flagellar master operon of *Xenorhabdus nematophilus* : requirement for motility, lipolysis, extracellular haemolysis, and full virulence in insects. **J. Bact.** **182** : 107-115.
5. GIVAUDAN, A., BOEMARE, N. 2000. Les symbioses bactério-helminthiques *Xenorhabdus-Steinernema* et *Photorhabdus-Heterorhabditis*. **Bull. Soc. Fr. Microbiol.** **15** : 245-251

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6. BRILLARD, J., RIBEIRO, C., BOEMARE, N., BREHELIN, M., GIVAUDAN, A. 2001. Two distinct hemolytic activities in *Xenorhabdus nematophila* are active against immunocompetent insect cells. **Appl. Environ. Microbiol.** **67** : 2515-2525.

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7. BOEMARE, N. 2002. Interactions between the partners of the entomopathogenic bacterium nematode complexes, *Steinernema-Xenorhabdus* and *Heterorhabditis-Photorhabdus*. **Nematology** **4**: 601-603.
8. BRILLARD, J., DUCHAUD, E., BOEMARE, N., KUNST, F., GIVAUDAN, A.. 2002. The PhIA hemolysin from the entomopathogenic bacterium *Photorhabdus luminescens* belongs to the two-partner secretion family of hemolysins. **J. Bact.** **184** : 3871-3878.
9. GAUDRIAULT, S., PAULIN, J.-P., BARNY, M.-A. 2002. The DspB/F protein of *Erwinia amylovora* is a type III secretion chaperone ensuring efficient intrabacterial production of Hpr-secreted DspA/E pathogenicity factor. **Mol. Plant Pathol.** **3** : 313-320.

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10. BRILLARD, J, BOYER-GIGLIO, M.H., BOEMARE, N., GIVAUDAN, A. 2003. Holin locus characterisation from lysogenic *Xenorhabdus nematophila* and its involvement in *Escherichia coli* SheA haemolytic phenotype. **FEMS Microbiol. Lett.** **218** : 107-113.
11. DUCHAUD, E., RUSNIOK, C., FRANGEUL, L., BUCHRIESER, C., GIVAUDAN, A., TAOURIT, S., BOCS, S., BOURSAUX-EUDE, C., CHANDLER, M., CHARLES, J. F., DASSA, E., DEROSE, R., DERZELLE, S., FREYSSINET, G., GAUDRIAULT, S., MEDIGUE, C., LANOIS, A., POWELL, K., SIGUIER, P., VINCENT, R., WINGATE, V., ZOUINE, M., GLASER, P., BOEMARE, N., DANCHIN, A., KUNST, F. 2003. The genome sequence of the entomopathogenic bacterium *Photorhabdus luminescens*. **Nat. Biotechnol.** **21** (11): 1307-1313.
12. RIBEIRO, C., VIGNES, M., BREHELIN, M. 2003. *Xenorhabdus nematophila* (Enterobacteriaceae) secretes a cation-selective calcium-independent porin which causes vacuolisation of the rough endoplasmic reticulum and cell lysis. **J. Biol. Chem.** **278** : 3030-3039.
13. SICARD M., LE BRUN N., PAGÈS S., GODELLE B., BOEMARE N., MOULIA C. 2003. Effect of native *Xenorhabdus* on the fitness of their *Steinernema* hosts: contrasting types of interaction. **Parasitol. Res.** **91**: 520-524.
14. SICARD, M., PAGES, S., MAULEON, H., MOULIA, C. BOEMARE, N. 2003. Analyse des ressources génétiques des symbioses bactério-helminthiques *Xenorhabdus* / *Steinernema* et *Photorhabdus* / *Heterorhabditis*. **Les Actes du BRG** **4** : 491-503.

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15. AKHURST R.J., BOEMARE N.E., JANSSEN P.H., PEEL M.M., ALFREDSON D.A., BEARD C.E. 2004. Taxonomy of Australian clinical isolates of the genus *Photorhabdus* and proposal of subspecies *Photorhabdus asymbiotica* subsp. *asymbiotica* subsp. nov. and *Photorhabdus asymbiotica* subsp. *australis* subsp. nov. **Int. J. Syst. Evol. Microbiol.** **54** (4) : 1301-1310
16. BRUGIRARD-RICAUD K., GIVAUDAN A., PARKHILL J., BOEMARE N., KUNST F., ZUMBIHL R., DUCHAUD E. 2004. Variation in the effectors of the type III secretion system among *Photorhabdus* species as revealed by genomic analysis. **J. Bacteriol.** **186** (13) : 4376-4381.
17. DERZELLE S., TURLIN E., DUCHAUD E., PAGES S., KUNST F., GIVAUDAN A., DANCHIN A. 2004. The *PhoP-PhoQ* two-component regulatory system of *Photorhabdus luminescens* is essential for virulence in insects. **J. Bacteriol.** **186** (5) : 1270-1279.
18. GAUDRIAULT S., THALER J.-O., DUCHAUD E., KUNST F., BOEMARE N., GIVAUDAN A. 2004. Identification of a P2-related prophage remnant locus of *Photorhabdus luminescens* encoding an R-type phage tail-like particle. **FEMS Microbiol. Lett.** **233**: 223-231.
19. SICARD M., FERDY, J.-B., PAGÈS S., LE BRUN N., GODELLE B., BOEMARE N., MOULIA C. 2004. When mutualists are pathogens: an experimental study of the symbioses between *Steinernema* (entomopathogenic nematodes) and *Xenorhabdus* (bacteria). **J. Evol. Biol.** **17**: 985-993.
20. SICARD M., BRUGIRARD-RICAUD K., PAGES S., LANOIS A., BOEMARE N.E., BREHELIN M., GIVAUDAN A. 2004. Stages of infection during the tripartite interaction between *Xenorhabdus nematophila*, its nematode vector, and insect hosts. **Appl. Environ. Microbiol.** **70** (11) : 6473-6480

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21. BRUGIRARD-RICAUD, K., DUCHAUD, E., GIVAUDAN, A., GIRARD, P.-A., KUNST, F., BOEMARE, N., BREHÉLIN, M., ZUMBIHL, R. 2005. Site-specific antiphagocytic function of the *Photorhabdus luminescens* type III secretion system during insect colonization. **Cellular Microbiology** **7** (3) : 363-371.
22. COSTA, S, RIBEIRO, C., GIRARD, P.-A., ZUMBIHL, R., BREHÉLIN, M. 2004. Modes of phagocytosis of Gram+ and Gram- bacteria by *Spodoptera littoralis* granular haemocytes. **J. Insect Physiol.** **51** : 39-46

2. — Book chapters

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23. BOEMARE, N., AKHURST, R.J. 2001. The genera *Photorhabdus* and *Xenorhabdus*. In : **The Prokaryotes : an evolving electronic resource for the Microbiological community (3rd Ed.)**. M. Dworkin, S. Falcow, E. Rosenberg, K.-H. Schleifer, and E. Stackebrandt (eds), Springer Verlag, N.Y., USA, <http://www.prokaryotes.com>.

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24. BOEMARE, N. 2002. Biology, taxonomy and Systematics of *Photorhabdus* and *Xenorhabdus*. In: "**Entomopathogenic Nematology**", R. Gaugler (ed), CABI Publish., Oxon, UK (ISBN 085199-567-5). 35-56.

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25. GRIFFIN, C.T., BOEMARE, N.E., LEWIS, E.E. 2005. Biology and behaviour. In : "**Nematodes as biocontrol agents, Part II Entomopathogenic Nematodes**", P.S. Grewal, R.-U. Ehlers, and D.I. Shapiro-Ilan (eds), CABI Publish., Oxon, UK. 47-64.
26. AKHURST, R.J., BOEMARE, N. 2005. The *Xenorhabdus* genus. (2nd Ed. **Bergey's Manual of Systematic Bacteriology**) : in press
27. BOEMARE, N., AKHURST, R.J. 2005. The *Photorhabdus* genus. (2nd Ed. **Bergey's Manual of Systematic Bacteriology**) : in press

3. — Books

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28. BOEMARE, N., EHLERS, R-U., BURNELL, A., WEGENSTEINER, R., KOSCHIER, E., MULDER, R., 2001. **Virulence factors and secondary metabolites from symbiotic bacteria of entomopathogenic nematodes**. DG XII, COST 819, Brussels-Luxembourg (ISBN 92-829-0530-6). 121 pp.

4. — Patents

2001

29. THALER, J-O., GIVAUDAN, A., DUBALD, M., LATORSE, P. 2001. Pseudopeptides antimicrobiens de *Xenorhabdus*. Co-dépôt INRA- Aventis CropScience **Brevet n°INIP 0100415. PCT WO 02/055545 A1**

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30. VINCENT, R., GIVAUDAN, A., BOEMARE, N., PAGES, S., DUCHAUD, E., KUNST, F., DERZELLE, S., BUCHREISER, C., GLASER, P., DEROSE, R., WINGATE, V., POWELL. 2002. Protéines insecticides *Photorhabdus luminescens* (BAC 8c11). Co-dépôt INRA - Institut Pasteur- Aventis CropScience **Brevet INIP 0204798**.
31. VINCENT, R., GIVAUDAN, A., BOEMARE, N., PAGES, S., DUCHAUD, E., NIELSEN-LEROUX C., KUNST, F., DERZELLE, S., BUCHREISER, C., GLASER, P., DEROSE, R., WINGATE, V., POWELL. 2002. Protéines insecticides *Photorhabdus luminescens* (BAC 1a02). Co-dépôt INRA - Institut Pasteur- Aventis CropScience **Brevet INIP 0204799**.

5. —Theses

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32. BRILLARD, J. 2001. Caractérisation de cytolysines chez les bactéries entomopathogènes des genres *Xenorhabdus* et *Photorhabdus*, et étude de leur rôle dans la relation bactérie-insecte. **Diplôme de doctorat, Université Lyon1**, 171 pp.

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33. LANOIS, A. 2002. Etude de l'expression du facteur σ 28 de *X. nematophila*. **Diplôme EPHE, Université Montpellier II**, 60 pp.
34. RIBEIRO, C. 2002. "Efeito sobre os hemócitos de insectos de um factor citotóxico produzido pela bactéria *Xenorhabdus nematophilus nematophilus* (Enterobacteriaceae) Pesquisa de actividades citotóxicas. Purificação e caracterização da citotoxina". **Diplôme de doctorat, Université des Açores** (co-tutelle France-Portugal).

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35. SICARD, M. 2003. Modalités écologiques et évolutives des interactions entre les nématodes entomopathogènes *Steinernema* et leurs symbiotes bactériens *Xenorhabdus*, PhD Thesis, Université Montpellier II, Montpellier.

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36. BRUGIRARD-RICAUD, K. 2004. Rôle du système de sécrétion de type III de la bactérie entomopathogène *Photorhabdus luminescens* au cours du processus infectieux, PhD thesis, Université Lyon1, Lyon.

6. — Conference Proceedings

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37. BOEMARE, N. 2000. Bacterial symbionts and correlation with entomopathogenic nematode taxonomy. Abstr. XXXIIIrd Ann. Meet. Soc. Invertebr. Pathol., 13-18 August 2000, Guanajuato, Mexico. 27-28. Financée par la *Society for Invertebrate Pathology*.
38. BOEMARE, N. 2000. Co-speciation of entomopathogenic nematodes (Steinernematidae and Heterorhabditidae) and their symbiotic bacteria. Abstr. XXXIXth Ann. Meet. Soc. Nematol., 24-28 June 2000, Québec, Canada. p.37. Financée par la *Society of Nematologists (SON)*.
39. BRILLARD, J., BOEMARE, N., BREHELIN, M., GIVAUDAN, A. 2000. Gene regulation and expression of haemolytic/cytolytic activity from the insect pathogenic bacterium *Xenorhabdus nematophila*. Abstr. XXXIIIrd Ann. Meet. Soc. Invertebr. Pathol., 13-18 August 2000, Guanajuato, Mexico. p. 31

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40. AKHURST, R., BEARD, C., JANSSEN, P., BOEMARE, N., 2001. Phylogenetic analysis of Australian clinical isolates of *Photorhabdus*. Abstr. XXXIVth Ann. Meet. Soc. Invertebr. Pathol., 25-30 August 2001, Noordwijkerhout, The Netherlands. p.22
41. BOEMARE, N., BRILLARD, J., GIVAUDAN, A., 2001. Research in progress on entomopathogenic bacterium nematode symbioses. Abstr; 8th Eur. Meet. IOBC WG "Insect Pathogens and Insect Parasitic nematodes, 29 May – 2 June, Athens, Greece, p.53.
42. BRILLARD, J., RIBEIRO, C., BOEMARE, N., BREHELIN, M., GIVAUDAN, A., 2001. *Xenorhabdus nematophila* produces two distinct cytolytic activities against insect hemocytes. Abstr. XXXIVth Ann. Meet. Soc. Invertebr. Pathol., 25-30 August 2001, Noordwijkerhout, The Netherlands. p.29
43. BRILLARD, J., RIBEIRO, C., BOEMARE, N., BREHELIN, M., GIVAUDAN, A., 2001. Cytolytic activities from *Xenorhabdus nematophila* are active on immunocompetent cells. COST 850. Meet. WG 2 "Bioactive molecules", 31th August, Wageningen, The Netherlands. p.13

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44. AKHURST, R., BEARD, C., JANSSEN, P., BOEMARE, N. 2002. The Australian clinical isolates of *Photorhabdus* constitute a new taxon. Abstr. XXXVth Ann. Meet. Soc. Invertebr. Pathol., VIIIth Intern. Coll. Invertebr. Pathol. Microbial Contr. (ICIPMC), 18-23 August 2001, Foz do Iguassu, Brazil, p36
45. BOEMARE, N. 2002. Phylogeny and taxonomy of *Photorhabdus* and *Xenorhabdus*. COST 850. Meet. WG 1 and 2, 7-8th July, Kolumbary, Crete, Greece. p.28
46. BOEMARE, N., SICARD, M. 2002. Phylogeny and symbiotic relationships of the associated bacteria of Steinernematidae and Heterorhabditidae. Abstr. 10th Intern. Congr. Parasitol., 4-9 August 2002, Vancouver, Canada. pp. 19-20.
47. BRILLARD, J., DUCHAUD, E., BOEMARE, N., KUNST, N., GIVAUDAN, A. 2002. The entomopathogenic bacterium *Photorhabdus luminescens* encodes the Phla Hemolysin which belongs to the *Serratia* type of hemolysins. Abstr. Xth Intern. Congr. Bacteriol. Appl. Microbiol, The world of Microbes, IUMS, 27th July – 1st August, Paris, France, p.69
48. BRUGIRARD, K., DUCHAUD, E., BREHELIN, M., GIVAUDAN, A., FRANGEUL, L., BOEMARE, N., KUNST, F., ZUMBIHL, R. 2002. A *Yersinia* homologous of the plasmid type III secretion system is present in the entomopathogenic bacteria *Photorhabdus luminescens*. Abstr. Xth Intern. Congr. Bacteriol. Appl. Microbiol, The world of Microbes, IUMS, 27th July – 1st August, Paris, France, p.26
49. GIVAUDAN, A., LANOIS, A. 2002 Role of FliZ on the autogenous transcription of FliAZ operon and its involvement in production of AX hemolysin from the entomopathogenic bacterium, *Xenorhabdus*. Abstr. Xth Intern. Congr. Bacteriol. Appl. Microbiol, The world of Microbes, IUMS, 27th July – 1st August, Paris, France, p.61
50. SICARD, M., BOEMARE, N., MOULIA, C. 2002. Reproduction of *Steinernema* spp. with *Xenorhabdus* spp. COST 850, Meet. WG 1 and 2, 7-8th July, Kolumbary, Crete, Greece. p.29
51. ZUMBIHL, R., LANOIS, A., BRUGIRARD, K., BRILLARD, J., DUCHAUD, E., KUNST, F., GIVAUDAN, A. 2002. *Xenorhabdus* and *Photorhabdus* virulence factors and their impacts on insect cellular immunity. Proc. XXXVth Ann. Meet. Soc. Invertebr. Pathol., VIIIth Intern. Coll. Invertebr. Pathol. Microbial Contr. (ICIPMC), 18-23 August 2001, Foz do Iguassu, Brazil, pp. 177-182.

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53. DUCHAUD, E., GIVAUDAN, A., BOEMARE, N., KUNST, F. 2003. Analysis of the genome of *Photorhabdus luminescens*, an entomopathogenic bacterial symbiont of entomoparasitic nematodes. Abstr. 9th European Meeting of IOBC-WPRS WG – COST Actions 842 and 850, 23-29 May 2003, Schloss Salzau, Germany, p.17.
54. SICARD, M., PAGES, S., LE BRUN, N., BOEMARE, N., MOULIA, C. 2003. Co-evolution in *Steinernema-Xenorhabdus* interactions. Abstr. 9th European Meeting of IOBC-WPRS WG – COST Actions 842 and 850, 23-29 May 2003, Schloss Salzau, Germany, p.90.
55. THALER, J.-O., 2003. New antimicrobial peptides in *Xenorhabdus nematophila* F1. Abstr. 9th European Meeting of IOBC-WPRS WG – COST Actions 842 and 850, 23-29 May 2003, Schloss Salzau, Germany, p.107.

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56. BOEMARE, N., MAULEON, H. 2004. Implementation of the entomopathogenic bacterium helminthic complexes (*Xenorhabdus/Steinernema* and *Photorhabdus/Heterorhabditis*) for biological control of agricultural pests. Abstr. Sino-French Forum on Biocontrol and Environmental safety (FBES), 13-17 November 2004, Guangzhou, China.
57. BRUGIRARD-RICAUD, K., DUCHAUD, E., GIVAUDAN, A., BOEMARE, N., BREHELIN, M., ZUMBIHL, R., 2004. Site-specific antiphagocytic function of the *Photorhabdus luminescens* type III secretion system during insect colonization. Abst. 155th Meet. Soc. Gen. Microbiol., 6-9 Sept. 2004, Trinity College, Ireland. p.43
58. COSTA, S., RIBEIRO, C., ZUMBIHL, R., VIGNEUX, F., BOEMARE, N., BREHELIN, M., 2004. Phagocytosis by insect macrophages: a morphological and biochemical study. Abst. 37th Ann. Meet. Soc. Invertebr. Pathol., 1-6 August 2004, Helsinki, Finland, p. 55. (2nd price of student posters)
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60. GAUDRIAULT S., LANOIS A., PAGES S., BRUGIRARD K., ZUMBIHL R., GIVAUDAN A., 2004. Etudes génomiques comparatives et fonctionnelles de *Photorhabdus*, bactérie pathogène d'insectes. Rés. 6^{ème} Congr. Nat. Soc. Fr. Microbiol. , 10-12 Mai 2004, Bordeaux (France). p.301
61. SICARD, M., BOEMARE, N., STOCK, P., 2004. Symbiosis, pathogenesis, and phylogenetic relationship of the insecticidal nematode bacterium complex *Steinernema-Heterorhabditis*. XXIIIth Willie Hennig Society (WHS), 18-23th July 2004, Paris (MNHN).
62. THALER, J.-O., AUMELAS, A., BOEMARE, N. Variabilité intra et interspécifique des pseudopeptides antibactériens dans le genre *Xenorhabdus*. Rés. 6^{ème} Congr. Nat. Soc. Fr. Microbiol. , 10-12 Mai 2004, Bordeaux (France). p.112
63. VIGNEUX, F., RIBEIRO, C., BAGHDIGUIAN, S., BREHÉLIN, M. 2004. *In vivo* induction of apoptosis by *Xenorhabdus nematophila* in insect phagocytes. Abst. 37th Ann. Meet. Soc. Invertebr. Pathol., 1-6 August 2004, Helsinki, Finland, pp.101-102.