

Appendix B

List of publications

Publications in international peer reviewed journals

- Ferrer, J., **Prats, C.** and López, D., 2008. Individual-based Modelling: an essential tool for microbiology. *Journal of Biological Physics*, in press.
- **Prats, C.**, Giró, A., Ferrer, J., López, D. and Vives-Rego, J., 2008. Analysis and IbM simulation of the stages in bacterial lag phase: basis for an updated definition. *Journal of Theoretical Biology* 252, 56-68.
- Ferrer, J., Vidal, J., **Prats, C.**, Valls, J., Herreros, E., López, D., Giró, A. and Gargallo, D., 2007. Individual-based model and simulation of Plasmodium falciparum infected erythrocyte in vitro cultures. *Journal of Theoretical Biology* 248, 448-459.
- **Prats, C.**, López, D., Giró, A., Ferrer, J. and Valls, J., 2006. Individual-based modelling of bacterial cultures to study the microscopic causes of the lag phase. *Journal of Theoretical Biology* 241, 939-953.

Contributions to international conferences

Proceedings with review - full papers

- **Prats, C.**, Ferrer, J., Flix, B., Giró, A., López, D. and Vives-Rego, J., 2007. Evolution of biomass distribution during bacterial lag phase through flow cytometry, particle analysis and Individual-based Modelling. In: G. Nychas et al. (Ed.), *5th International Conference on Predictive Modelling in Foods. Proceedings*, p. 301-304, Agricultural University of Athens, Greece (ISBN: 978-960-89313-7-4) [5th

International Conference on Predictive Modelling in Foods (ICPMF 2007), Athens (Greece), September 2007]

- **Prats, C.**, Ferrer, J., Giró, A., López, D. and Valls, J., 2006. Spatial properties in Individual-based Modelling of microbial systems. Study of the composting process. In: Méndez-Vilas, A. (Ed.), *Modern Multidisciplinary Applied Microbiology. Exploiting Microbes and their Interactions*, p. 461-465, Wiley-VCH Verlag, Weinheim, Germany (ISBN: 3-527-31611-6) [International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2005), Badajoz (Spain), April 2005]
- Gras, A., **Prats, C.** and Ginovart, M., 2006. An Individual-based model to study the main groups of microbes active in composting process. In: Méndez-Vilas, A. (Ed.), *Modern Multidisciplinary Applied Microbiology. Exploiting Microbes and their Interactions*, 14-18, Wiley-VCH Verlag, Weinheim, Germany (ISBN: 3-527-31611-6) [International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2005), Badajoz (Spain), April 2005]

Proceedings with review - abstracts

- Ferrer, J., **Prats, C.** and D. López, 2007. Individual-based Modelling: an essential tool for Microbiology. In: *Abstracts. 6th International Conference on Biological Physics*, p.91, Uruguai, Montevideo (ISBN: 978-9974-8002-2-9) [6th International Conference of Biological Physics (ICBP 2007), Montevideo (Uruguay), August 2007]
- **Prats, C.**, Giró, A., Ferrer, J., López, D., Valls, J., and Vives-Rego, J., 2006. A Mathematical Analysis of the Stages in Bacterial Lag Phase. In: *Food Micro 2006. Food safety and food biotechnology: diversity and global impact. Book of abstracts*, p.550 [The International ICFMH Symposium. Food safety and food biotechnology: diversity and global impact (Food Micro 2006), Bologna (Italy), August 2006]
- **Prats, C.**, Giró, A., Ferrer, J., López, D. and Valls, J., 2006. A physical interpretation of the microbial growth rate temperature dependence. In: *XX Sitges Conference. Physical Biology: from Molecular Interactions to Cellular Behavior. Book of abstracts*, p. 161-163 [XX Sitges Conference. Physical Biology: from Molecular Interactions to Cellular Behavior, Sitges (Spain), June 2006]
- Ferrer, J., Herreros, E., Valls, J., **Prats, C.**, López, D. and Gargallo-Viola, D., 2005. Individual based modelling and simulation of Plasmodium falciparum Infected erythrocytes in vitro cultures. In: *The American Journal of Tropical Medicine and*

Hygiene, volume 73 number 6 (Suppl.), p. 113-114 [American Society of Tropical Medicine and Hygiene (ASTMH) 54th Annual Meeting, Washington (USA), December 2005]

- Ferrer, J., **Prats, C.**, Valls, J. and López, D., 2005. Individual Based Model and simulation of *Plasmodium falciparum* Infected Erythrocytes in vitro cultures. In: *Abstract book. Medicine and health in the tropics*, p. 235 [XVIth International Congress for Tropical Medicine and Malaria, Marseille (France), September 2005]
- **Prats, C.**, Ferrer, J., Giró, A., López, D. and Valls, J., 2005. Spatial properties in Individual based modelling of microbiological systems. Study of the composting process In: *BioMicroWorld-2005 Book of Abstracts*, p. 642 [International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2005), Badajoz (Spain), April 2005]
- Gras, A., **Prats, C.** and Ginovart, M., 2005. An Individual based model to study the main groups of microbes active in composting process. In: *BioMicroWorld-2005 Book of Abstracts*, p. 23 [International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2005), Badajoz (Spain), April 2005]
- **Prats, C.**, Giró, A., López, D. and Valls, J., 2004. Individual Based Modelling of Bacterial Cultures. A Lag Phase Study. In: *Abstracts. 5th International Conference on Biological Physics*, p.84 [5th International Conference on Biological Physics (ICBP 2004), Göteborg (Suècia), August 2004]

