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Born in Niort (France), 10-27-1968.

Education

- 1996** Ph. D in life sciences (with best honors), UNIVERSITÉ PARIS 6. Title: *Modèles Formels de la Sélection des Cellules B et T*. Jury: Varela F. J. (thesis advisor), Kazatchkine M. (president), Bersini H., Coutinho A. and Stewart J. (reviewers).
- 1992** Diplôme d'Études Approfondies in cognitive sciences (with honors), UNIVERSITÉ PARIS 6.
- 1991** Maîtrise (*i.e.*, master) in computer science (with honors), major in artificial intelligence, UNIVERSITÉ PARIS 6.
- 1989** Diplôme d'Études Universitaires Générales (*i.e.*, BA) in mathematics and physics, UNIVERSITÉ PARIS 6.

Research and teaching

- 2003–** IRIBHM, UNIVERSITÉ LIBRE DE BRUXELLES. Associate professor. Bioinformatic analysis and integration of high-throughput gene expression data in cancers.
- 97–01** SANTA FE INSTITUTE AND LOS ALAMOS NATIONAL LABORATORY Mathematical modeling and large scale simulation of T cell repertoire development. Bioinformatic analysis of correlations between HIV sequence variability and HIV recognition by cytotoxic T cells.
- 94–96** LOS ALAMOS NATIONAL LABORATORY Development of a software library for the simulation of biological networks. Analysis of T cell repertoire development.
- 93–94** INSTITUT DE RECHERCHES INTERDISCIPLINAIRES ET DE DÉVELOPPEMENTS EN INTELLIGENCE ARTIFICIELLE, UNIVERSITÉ LIBRE DE BRUXELLES. Immune networks modeling. Analysis of immune networks dynamics. Analysis of methods for the simulation of distributed systems.
- 92** LABORATOIRE ÉLECTRONIQUE ET INTELLIGENCE ARTIFICIELLE, CEMAGREF (PARIS) DEA thesis. Computer simulation of immune networks.
- 91** UNIVERSITÉ PARIS 6. Master project. Implementation of a semantic network language (a tool for knowledge representation) in LISP.
- 90–91** UNIVERSITÉ ASSAS (PARIS 2). Teaching assistant in computer science.

Grant

- European Union Marie-Curie Intra-European fellowship (2004–2006).

Peer reviewed articles

1. van Staveren, C. G., **Detours, V.**, Dumont, J. E., & Maenhaut, C., (2006), Negative Feedbacks in Normal Cell Growth and their Suppression in Tumorigenesis. *Cell Cycle* 5, 571–572.
2. van Staveren, C. G., Weiss, D., Delys, L., Venet, D., Cappello, M., Andry, G., Dumont, J. E., Libert, F., **Detours, V.** & Maenhaut, C., (2006), Gene Expression in TSH-treated Human Thyrocytes and Autonomous Adenomas: Suppression of Negative Feedbacks in Tumorigenesis, *Proc. Nat. Acad. Sci. USA* 103, 413–418.
3. Wattel, S., Mircescu, H., Venet, D., Burniat, A., Franc, B., Frank, S., Andry, G., Van Sande, J., Rocmans, P., Dumont, J. E., **Detours, V.** & Maenhaut, C., (2005), Gene Expression in Thyroid Autonomous Adenomas Provides Insight on their Physiopathology, *Oncogene* 24, 6902–16.
4. **Detours, V.**, Dumont, J. E., & Maenhaut, C., (2005), Systems Biology, Cell Specificity and Physiology, in *Multidisciplinary Approaches to Theory in Medicine*, McNamara L. Ed., Elsevier, in press.
5. **Detours, V.**, Wattel, S., Venet, D., Hutsebaut, N., Bogdanova, T., Tronko, M. D., Dumont, J. E., Franc, B., Thomas, G. & Maenhaut, C., (2005), Absence of a Specific Radiation Signature in Post-Chernobyl Thyroid Cancers, *British J. Cancer* 92, 1545–1552.
6. **Detours, V.**, Dumont, J. E., Bersini, H., & Maenhaut, C., (2003). Integration and Cross-Validation of High-Throughput Gene Expression Data: Comparing Heterogenous Data Sets, *FEBS Lett.* 546, 98–102.
7. Yusim, K., Keşmir, C., Addo, M. M., Altfeld, M., Gaschen, B., Chigaev, A., **Detours, V.** & Korber, B. T., (2002), Clustering Patterns of CTL Epitopes in HIV-1 Proteins Reveal Imprints of Immune Evasion on HIV-1 Global Variation, *J. Virology*, 76(17), 8757–8768.
8. Keşmir, C. Nussbaum, N. K., Shild, H., **Detours, V.**, Brunak, S., (2002), Prediction of Proteasome Clivage Motifs by Neural Networks, *Protein Engeneering*, 15(4), 287–296.
9. Korber, B. T., Gaschen, B., Yusim, K., Thakallapally, R., Keşmir, C. & **Detours, V.**, (2001), Evolutionary and Immunological Implications of Contemporary HIV-1 Variation, *Brit. Med. Bull.*, 58, 19–42.
10. **Detours, V.** & Perelson, A. S., (2000), The Paradox of Alloreactivity and Self MHC Restriction: Quantitative Analysis and Statistics, *Proc. Nat. Acad. Sci. USA*, 97, 8479–8483.
11. **Detours, V.**, Mehr, R., & Perelson, A. S., (2000), Deriving Quantitative Constraints Under Which T Cell Selection Operates from Data on the Mature T Cell Repertoire, *J. Immunol.* 164, 121–128.
12. **Detours, V.**, Mehr, R., & Perelson, A. S., (1999) A Quantitative Theory of Affinity-Driven T Cell Repertoire Selection, *J. theor. Biol.* 200, 389–403.
13. **Detours, V.**, & Perelson, A. S., (1999), Explaining High Alloreactivity as a Quantitative Consequence of Affinity-Driven T Cell Selection, *Proc. Nat. Acad. Sci. USA* 96, 5153–5158.
14. **Detours, V.**, Sulzer, B., & Perelson A. S., (1996), Size and Connectivity of the Idiotypic Network are Independent of the Discreteness of the Affinity Distribution, *J. theor. Biol.* 183, 408–416.
15. Bersini, H., & **Detours, V.**, (1994), Asynchrony Induces Stability in Cellular Automata Based Models, in *Proceedings of the Fourth Conference on Artificial Life*, Brooks, R. A., Maes, P., Eds. MIT Press.
16. **Detours, V.**, Bersini, H., Stewart, J., Varela, F. J., (1994), Development of Idiotypic Network in Shape Space, *J. theor. Biol.* 170, 401–414.

Thesis

1. **Detours, V.**, (1996), *Modèles Formels de la Sélection des Cellules B et T*, Ph. D dissertation, Université Paris 6.
2. **Detours, V.**, (1992), *Simulations du Réseau Idiotypique*, Master thesis, École des Hautes Études en Sciences Sociales, École Polytechnique, Université Paris 6.