

## Alberto d'Onofrio

### Personal Details:

- **Current Position:** Principal Investigator (Tenured), International Prevention Research Institute, Lyon (France)
- **Date and place of birth:** May 20 1967, Naples (Italy);
- **Home Address:** 9 Rue de Geneve, 69006 Lyon (France)  
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### Education and Employment History:

- **October 1981/Jun1985:** Scientific Lyceum "Zaleuco", Locri. Final Score: 60/60 with one-year shortening.
- **April 1993:** "Laurea" Degree (5-years degree corresponding to a BSc + MSc) in Electrical Engineering (Automatic Control and Applied Mathematics). Pisa University. Final score: 107/110.  
Title of the Degree Dissertation: "Continuous Petri Nets". Advisor: Prof. Aldo Balestrino. Summary: Definition of two new kinds of Petri Nets and development of a user-friendly graphical simulation environment. The SW, written using the C and C++ programming languages, allowed the visual definition of Petri Nets and the simulation of discrete dynamical systems;
- **November 1993:** Engineering licence. Qualification at Pisa University. Score: 107/120;
- **1987-1988:** Siemens Grant for "Automation Engineering";
- **1995/1996:** Research collaborator at IASI-CNR (Institute of System Analysis and Informatic, National Research Council of Italy), Rome. Topics: Biomathematics, and its Application to Medical Computer Science. Coordinator: Dr. Maurizio Rafanelli;
- **2/Aug/1996 to 2/Aug/1997:** Research Software Engineer at IASI-CNR. Topics: Object-Oriented Databases and Meta-Databases, developing of a Visual Form Based SW for Conceptual modeling: *ProForm* for the "Agency for the preparation of the Jubilee 2000".Coordinator: Dr. Michele Missikoff;

- **1/Dec/1997 to 28/Feb/2000:** Software Consultant for the *Food and Agriculture Organization of United Nations*, project *Domestic Animal Diversity Information System* (<http://dad.fao.org>). Topic: development of a tool for validating zoological/genetic data sent via Internet, revision of the web-SW, automatic production of the text of the "FAO World Watch List" book for 2000, FAO-UN press. SW used: MS-Access and Visual Basic
- **27/May/1997-29/May/2000:** D.Phil. student in "Medical Computer Science" at University of "Rome - La Sapienza", Rome. Topic: "Application of Deterministic Epidemic models to the health resources allocation problem". PhD tutors: Prof. M. Rafanelli and Prof. Paolo Atzeni. Title of the dissertation: "Computer Aided Epidemiology". Summary: development of mathematical models of infectious diseases and of geographical data models to be used in allocation of health resources. The doctoral work included also visual definition and parameter estimation of the models. 29/May/2000: D.Phil. in "Medical Computer Science";
- **1999:** EU Grant for attending the International Summer School "Mathematics of Cell Physiology and Proliferation", Termoli (CB) Italy, 6-20 June 1999;
- **1/Mar/2000 – 31/Dec/2002:** Post-PhD research fellowship at the Division of Epidemiology and Biostatistics of the European Institute of Oncology. Research topics : Mathematical models in Theoretical Biology and Medicine, Biostatistics;
- **1/May/2007-present:** coordinator of the "Bioinformatics and Computational Biomedicine Task Force" at IEO.
- **1/Jan/2003-9/30/2008:** Researcher in Biomathematics (**with scientific full autonomy**), Division of Epidemiology and Biostatistics, European Institute of Oncology, Milan.
- **10/1/2008 – 12/31/2013:** Principal Investigator Tenure Track, Research Unit "Systems Biomedicine", at the Department of Experimental Oncology, European Institute of Oncology, Milan.
- **Sept 15 2013:** National Italian Habilitation to be "Professore Associato" (a position somewhat intermediate between Senior Lecturer and Reader) in "Mathematical Physics". Note that the i) habilitation was first introduced in 2013; ii) biomathematics and biophysics do not have a specific habilitation
- **Jan 3 2014-present:** Research Director (tenured) at International Research Prevention Institute, Lyon, France
- **Jan 15 2014:** National Italian Habilitation to be "Professore Associato" in "Bioengineering". I am the only Italian that got a habilitation in both mathematical and engineering.

### Academic Committees:

- **2009- Dec 31 2014:** Member of the Academic Council of the European School of Molecular Medicine, a leading private Foundation for higher education in biomedicine, under which framework 6 PhDs courses are activated.

## Affiliations in National Permanent Scientific Committees:

- **1 September 2004- present:** External member of the *M.I.R.I.A.M.* (now *A.D.A.M.S.S.*) Research Center of the Mathematics Department of Milan University.
- **1 Sept 2008 – present:** member of the CIMAB (Inter-Universitary Consortuium of Mathematics in Biology, Medicine and in Environmental Sciences)

## International Projects

- **2002-2003:** Member of the statistical sub-committee of the Committee for the European Code Against the Cancer 2003.
- **January 2003 – October 2008:** member of the scientific committee (chairs: P. Boyle and M. Smans) for the WHO IARC project “Atlas of the Cancer Mortality in Europe”
- **19 December 2006-21 September 2009:** local research co-coordinator of the EU project “Advancing Clinical-Genomic Trials on Cancer” (2006-2010). Assigned 26000 euros, but not implemented due to an error of the administrative office.
- **2009-2012:** scientific unit coordinator of the international project “Vaccine preventable diseases modelling in the European Union and EEFTA countries: forecasting the effects of introducing a new vaccine in a national/regional programme”, funded by European Centre for Disease Control within the Framework Partnership Agreement ECDC Grant 2009/002 (Project cancelled for reduction of EU funds)
- **1 February 2010- 31 December 2013:** key scientist in the EU project “P-medicine”. Share of this grant: about 54000 euros + traveling and administrative funds

## Editorial Boards

- Journal of Optimization: Theory and Applications (since dec. 2010), Springer
- Ecancermedalscience (since 2010)
- Abstract and Applied Analysis (2011-2012: I resigned due to the predatory editorial politics by Hindawi)

## Scientific Organization of International Conferences:

1. “Mathematical and Computational Epidemiology of Infectious diseases – the interplay between models and public health policies”, Erice (Italy), August 30 – September 5 2015 at the “Ettore Majorana Centre for

the Diffusion of Scientific Knowledge”. Organizers: A. d’Onofrio (**chair and main organizer**), P. Manfredi, P. Cerrai, J.W. Edmunds

2. “Mathematical Oncology: new Challenges for Systems Biomedicine”, Erice (Italy), September 26 – September 30 2011 at the “Ettore Majorana Centre for the Diffusion of Scientific Knowledge”. Organizers: Z. Agur, P. Cerrai, A. d’Onofrio (**chair and main organizer**), A. Gandolfi. 23 invited speakers, 35 contributed talks
3. “Mathways into Cancer 2” Carmona (Spain) May 27-30 2013 (member of the scientific committee)
4. “MathCell 2010” Rome (Italy) December 14-15 2013 (member of the scientific committee)
5. “Italy-UK bilateral workshop on e-Oncology”, held at the Istituto Italiano di Cultura, London, 27 October 2008 (member of the scientific committee)

### **Organized Minisymposia at International Conferences:**

- 1 U Ledzewicz and A d’Onofrio “Analysis of mathematical models for cancer growth and treatment, Part I” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 2 U Ledzewicz and A d’Onofrio “Analysis of mathematical models for cancer growth and treatment, Part II” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 3 U Ledzewicz and A d’Onofrio “Analysis of mathematical models for cancer growth and treatment, Part III” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 4 U Ledzewicz and A d’Onofrio “Analysis of mathematical models for cancer growth and treatment, Part IV” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 5 U Ledzewicz and A d’Onofrio “Analysis of mathematical models for cancer growth and treatment, Part V” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 6 P Manfredi and A d’Onofrio “Information, human behaviour and infection control” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
- 7 P Manfredi and A d’Onofrio “Information, human behaviour and diseases” **Minisymposium** at *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and*

*Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011

- 8 A d'Onofrio and A. Gandolfi "Angiogenesis and antiangiogenesis in tumor growth and control". Speakers: Z. Agur, V. Capasso, A. Friedman and A. Gandolfi. **Minisymposium** at "Joint SMB-SIAM 2006 conference on Life Sciences", Raleigh USA , July 31 – August 5 2006.

### Summer Schools (as instructor):

1. Winter Thematic School "PRESENT CHALLENGES OF MATHEMATICS IN ONCOLOGY AND BIOLOGY OF CANCER : MODELING AND MATHEMATICAL ANALYSIS". Mini-course (90 mins) on "Tumors: A bistable (and noisy!) tale". Organizers: A. Benabdallah, S. Benzekry, et al. Centre International des Recherches Mathematiques, Marseille University, March 19-23 2012
2. "Mathematical Modelling of Cancer Growth and Treatment summer School - Marie Curie EU Research and Training Network". Course on "Tumor-Immune system interplay and Immunotherapy" (5 lessons). Organizer: M.A.J. Chaplain. Dundee (UK), August 14-29 2010
3. "Biology and Computer Science: modelling and computing. The 30<sup>th</sup> Jacob T. Schwartz International School for scientific Research." Course on "Modelling of Cellular Populations" (5 lessons). Organizers: A. Ferro, A. Maggiolo-Schettini, and R. Barbuti, Lipari (IT), July 10-17 2010

### Professional Societies:

- European Society of Mathematical and Theoretical Biology
- Societa' Italiana di Matematica Applicata e Industriale

### Collaborations:

- **29/Jul/01 - 19/Aug/01, 17/Feb/02 - 24/Feb/02, 18/Aug/02 - 25/Aug/02 and 21/Sept/2003-13/Oct/2003:** Visiting Scientist at *Molecular and Genetics Laboratory of Cancer Research UK*, Lincoln's Inn Fields, London (UK);
- **26/Aug/02 - 07/Sept/02, 17/Oct/02-18/Oct/02, 22/May/04-29/May/04, 10/May/06 - 12/May/06, 25/April/2007 - 27/April/2007:** Visiting Scientist at the *International Agency for Research on Cancer - World Health Organization*, 150 Cours Albert Thomas , Lyon (France);
- **9/Feb/03-12/Feb/03:** Visiting Scientist at the *Norwegian Cancer Registry (Kreftregisteret)*, Oslo.
- **28/Jul/03 - 4/Aug/03, 23/apr/06 - 28/Apr/06:** Visiting Scientist at the "Department of Statistics and Modelling Science" of Strathclyde University , Glasgow UK.
- **21/March/2006 - 23/March/2006, 27/Nov/2006 - 02/Dec/2006, 07/jan/2007 - 13/Jan/2007** visiting Scientist at the Mathematics Dept. of Pisa University
- **13/Apr/2007 - 17/apr/2007:** visiting Scientist at the Mathematics Dept. of Messina University

- **October 2008:** Visiting Scientist at the Mathematics Dept. of Messina University
- **15-20 June 2009:** Visiting Scientist at the Department of Mathematics, Mechanics and Informatics, Warsaw University
- **22-27 November 2010:** Visiting Scientist at the Department of Mathematics, Dundee University, UK

### **Activity of Postdocs Supervising:**

- Sebastiano de Franciscis, PhD. Postdoc in Systems Biomedicine and Theoretical Biophysics Nov 1 2011-current (Nov 1 2013)

### **Activity of Thesis Supervising:**

- 2008: Francesca Gatti, MSc in Mathematics at Pisa University, 30 October 2008. Title of her research Thesis: “Delay-Induced Oscillatory Dynamics of Tumor-Immune System Interaction” (see rpublication #54, published in the ISI-indexed journal *Mathematical and Computer Modelling*) . Marks: 110/110 *cum laude*.
- 2011: Sara Gattoni, MSc in Mathematics at Bologna University, 21 October 2011. Title of her research Thesis: “Noisy Oncology: bounded noises state transitions in oncology” (see publication # 81, published in the ISI-indexed journal *Physica A: statistical physics and its applications*). Marks: 110/110 *cum laude*.
- Aug 2013-Sept: 2014 Dario Domingo, MSC student in Mathematics at Pisa University. Title of his research thesis: “Bounded Stochastic Processes and their Applications” Marks: 110/110 *cum laude*.

### **Organization of Professional Meetings**

- General Meeting of the European Integrated Projects “Advancing clinico-Genomics Trials on cancer”, Milan 6-8 february 2008

### **Foreign Languages:**

- French: fluent.
- English: fluent.

### **Research areas:**

- **Mathematical and Physical Biology, including Systems Biology**
- **Epidemiology and Biostatistics**
- **History, Philosophy and Sociology of Sciences**

### **In particular:**

- Mathematical Models in Oncology
- Mathematical Epidemiology of Infectious Diseases, with particular regard to the interplay between information and behavioral changes
- Statistical Epidemiology (special focus on spatial and cancer epidemiology)
- Systems Biology, of intra- and inter- cellular phenomena.

### Other past and present scientific activities and interests:

- **Medical and Geographical Computer Science**
  - **History of Computer** 1997-2000: member of CNR project "Virtual Museum of History of Computer Science in Italy". My activity was essentially to find, organize and digitalize the documents needed to build up a part of the museum.
  - **Communicating Science**
  - **Mathematical Models in Politics and Macro Economy**

### *Publications*

#### **H-index (Sept 1 2014):**

- H-index (Scopus): 19 (Oct 2013)
- H-index (ISI): 19
- H-index (Google): 25

To compare, take into the account that the median H-index of all italian full professors in mathematical physics is 8.3

### **Books and special number of Journals**

- 1 A. d'Onofrio (**Corresponding editor**), P. Cerrai and A. Gandolfi (eds) *New Challenges for Cancer Systems Biomedicine*. Springer Verlag (2012) ISBN 978-88-470-2570-7
- 2 P. Manfredi and A. d'Onofrio (**equal contributor**) (eds) *Modeling the interplay between Human Behavior and Spread of Infectious Diseases*, Springer Verlag (2012) ISBN 978-1-4614-5473-1
- 3 A. d'Onofrio (**corresponding editor**), P. Cerrai and A. Gandolfi (eds) *Mathematical Oncology: proceedings of the Congress "Mathematical Oncology: new challenges for Systems Biomedicine"- Erice September 26-30 2011* Special Number of *Mathematical Biosciences and Engineering*, Vol 10(1) 2013 American Institute for Mathematical Sciences Publishing

- 4 A. d'Onofrio (**editor**) *Bounded Noises and their applications in Physics, Biology and Engineering*, Birkhauser Science-Springer Verlag Group (2013)
- 5 A. d'Onofrio and A. Gandolfi (editors) *Mathematical Oncology 2014*, Birkhauser Science

***in preparation:***

- 6 A. d'Onofrio and P. Liò (editors) *Computational Oncology*, special focus number of E-cancermedicalsciences
- 7 M. Banjeree and A. d'Onofrio (editors) "Stochasticity and Statistical Mechanics in Population Dynamics and Ecology", special focus number of *Mathematical Models in Natural Sciences* (Cambridge University Press)

**International Peer-Refereed Papers (Published or in press on international ISI-indexed journals or in international peer-refereed books):**

1. E. Pourabbas, A. d'Onofrio, M. Rafanelli: "A Method to estimate the incidence of communicable diseases under seasonal fluctuations with application to cholera", *"Applied Mathematics and Computation"*, 118/2-3 (2001) pp 161-174, 2-s2.0-0012460662, WOS:000167154400004
2. A d'Onofrio (Corr. author) and E. Pourabbas, " Formalization of temporal thematic map contents", *ACM-GIS 2001, Proceedings of the Ninth ACM International Symposium on Advances in Geographic Information Systems, Atlanta, GA, USA, November 9-10, 2001*, pag 15-20, ACM Press ( 2001) 2-s2.0-0035757963
3. A d'Onofrio, "Stability property of Pulse Vaccination Strategy in SEIR epidemic model", *"Mathematical Biosciences"*, 179/1 (2002) pp. 57-72, 2-s2.0-0036291194, WOS:000176531300003
4. A d'Onofrio, " Pulse vaccination strategy in the SIR epidemic model: Global asymptotic stable eradication in presence of vaccine failures", *"Mathematical and Computer Modelling"*, 36/4-5, (2002), pp. 473-489. 2-s2.0-0037200435, WOS:000178418500007
5. A d'Onofrio "Globally stable vaccine-induced eradication of horizontally and vertically transmitted infectious diseases with periodic contact rates and disease-dependent demographic factors in the population", *"Applied Mathematics and Computation"*, Vol. 140/2-3, pp. 537-547, (2003) 2-s2.0-0037431579, WOS:000180606600030
6. B Jereczek-Fossa, C Garibaldi, G Catalano, A d'Onofrio, T De Pas, C Bocci, M Ciocca, F DePaoli, R Orecchia "Analysis of mandibular dose distribution in radiotherapy for oropharyngeal cancer : Dosimetric and clinical results in 18 patients", *"Radiotherapy and Oncology "*, 66 (2003) pagg. 49-56, 2-s2.0-12244294472, WOS:000183859800006
7. A. Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Modelling cell populations with spatial structure: Steady state and treatment-induced evolution of tumour cords" *"Discrete and Continuous Dynamical Systems Series B"* Vol 4 n.1, 161-186 (2004) 2-s2.0-1042291061, WOS:000187071400012

8. A. Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Regression and regrowth of tumour cords following single-dose anticancer treatment", *Bulletin of Mathematical Biology*, (2003) 65, 903-931, 2-s2.0-0041426312, WOS:000184910000006
9. A. d'Onofrio "Pulse Vaccination Strategy in the SIR epidemic model in presence of Vaccine, Failures", in *Mathematical Modelling and Computing in Biology and Medicine: proceedings of the fifth Conference of the European Society of Mathematical & Theoretical Biology 2002* V. Capasso ed., (2003) pag 450-456
10. Boyle P., d'Onofrio A., Maisonneuve P., Severi G., Robertson C, Tubiana M and Veronesi U "Measuring Progress Against Cancer in Europe. Has the 15% Decline targeted for 2000 come about ?", *Annals of Oncology*, vol 14, pag 1312-1325 (2003), 2-s2.0-0042009645, WOS:000184656100033
11. Quinn MJ, d'Onofrio A, Møller B and Black R, Martinez-Garcia C, Møller H, Rahu M, Robertson C, Schouten LJ, La Vecchia C, Boyle P "Cancer Mortality Trends in the EU and Acceding Countries up to 2015", *Annals of Oncology* pag 1148-1152 (2003), 2-s2.0-0041853712, WOS:000184382400027
12. A.d'Onofrio (Corr. Auth.) and E. Pourabbas "Modelling temporal thematic map contents ", *A.C.M. S.I.G.M.O.D. Record*, vol 32, No. 2 - June 2003, pagg 34-41, 2-s2.0-14344252753, WOS:000183334200005
13. A d'Onofrio "Mixed pulse vaccination strategy in epidemic model with realistically distributed infectious and latent times" *Applied Mathematics and Computation* 151(2004) pp 161-167 2-s2.0-1242264916, WOS:000220997900014
14. A.d'Onofrio "On Pulse Vaccination Strategy in SIR model with Vertical Transmission", *Applied Mathematics Letters* 18 pp 729-732 (2005) 2-s2.0-18144413585, WOS:000229990000002
15. A d'Onofrio (Corr. Auth.) and A Gandolfi, "Tumor eradication by antiangiogenic therapy: analysis and extension of the model by Hahnfeldt et al (1999)", *Mathematical Biosciences*, 191, n2, pp 159-184 (2004). 2-s2.0-4444221249, WOS:000224151400004
16. A. d'Onofrio "Vaccination policies and non-linear force of infection: generalization of an observation by Alexander and Moghadas (2004)". *Applied Mathematics and Computation* 168 pp 613-622 (2005) 2-s2.0-25644447966 , WOS:000232501300045
17. A. d'Onofrio "Periodically varying antiviral therapies: conditions for global stability of the virus free state." *Applied Mathematics and Computation*, 168, 945-953 (2005) 2-s2.0-26044466998 , WOS:000232760000018
18. A. d'Onofrio "Biomathematical Analysis and extension of the new class of epidemic models proposed by Satsuma et al. (2004)." *Applied Mathematics and Computation* 170 (2005) 125-134 , 2-s2.0-26844446454, WOS:000232968200010
19. A. d'Onofrio "Prides and prejudices in the relationships between bio-mathematicians and biomedical researchers: a tale of two misbehaviors" in D.Aquilano, M. Bezzi, V. CapassoA. Micheletti (eds.), *Industry Days 2003/2004 - Proceedings of the MIRIAM International Workshops in Applied Mathematics*, 2005
20. A. d'Onofrio "Mathematical analysis of the Tyson model of the regulation of the cell division cycle", *Nonlinear Analysis*, (62), 817-831 (2005) 2-s2.0-21244490800, WOS:000230902400004

21. A. d'Onofrio "A general framework for modeling tumor-immune system competition and immunotherapy: Mathematical analysis and biomedical inferences", *Physica D* 208, 220-235, (2005). 2-s2.0-23144445934, WOS:000231395200006
22. A. d'Onofrio "On a family of models of Cell Division Cycle", *Chaos, Solitons and Fractals*, 27, 1205-1212 (2006) 2-s2.0-24944541821, WOS:000232456100008
23. A. d'Onofrio "Tumor Evasion from Immune Control: strategies of a MISS to become a MASS", *Chaos, Solitons and Fractals* 31 261-268 (2007) 2-s2.0-33746019012, WOS:000240893400001
24. A. d'Onofrio "Tumor-immune system interaction: Modeling the tumor-stimulated proliferation of effectors and immunotherapy" *Mathematical Models and Methods in Applied Sciences* 16, 1375-1401 (2006) 2-s2.0-33747088162, WOS:000240323000005
25. A. d'Onofrio (Corr. Auth.) and A. Gandolfi "The response to antiangiogenic anticancer drugs that inhibit endothelial cell proliferation." *Applied Mathematics and Computation* 181 (2006) 1155-1162 2-s2.0-33750446670 , WOS:000242385400038
26. A. Swierniak, G. Gala, A. Gandolfi and A. d'Onofrio "Optimization of Antiangiogenic Therapy as Optimal Control Problem" in " *Proceedings of the Fourth IASTED International Conference on Biomechanics, BioMech 2006*", Editor: Manuel Doblaré, Acta Press, 2006, pp 56-59, 2-s2.0-38349139013
27. B A Jereczek-Fossa, F Cattani, A d'Onofrio, R Cambria, A Kowalczyk, A Corallo, A Vavassori, D Zerini, G B Ivaldi, O DeCobelli, R Orecchia, Dose distribution in 3-dimensional conformal radiotherapy for prostate cancer: Comparison of two treatment techniques (six coplanar fields and two dynamic arcs), *Radiotherapy and Oncology* 81 294-302 (2006) 2-s2.0-33845334205, WOS:000243210700012
28. A. Swierniak, A. d'Onofrio, A. Gandolfi, Control Problems Related to Tumor Angiogenesis in *Proceeding of IECON 2006 - 32nd Annual Conference on IEEE Industrial Electronics*, IEEE Press (2006) 677-681, 2-s2.0-50249189054
29. A d'Onofrio (Corr. Auth.) and I P M Tomlinson " A nonlinear mathematical model of cell turnover, differentiation and tumorigenesis in the intestinal crypt" *Journal of Theoretical Biology* 244 367-374 (2007) 2-s2.0-33846028581, WOS:000243939700002
30. D. Alterio, B. A. Jereczek-Fossa, B. Franchi, A. d'Onofrio, V. Piazzzi, E. Rondi, M. Ciocca, B. Gibelli, E. Grosso, N. Tradati, L. Mariani, G. Boboc and R. Orecchia "Thyroid disorders in patients treated with radiotherapy for head and neck cancer: a retrospective analysis of seventy-three patients" *International Journal of Radiation Oncology Biology and Physics* 67 144-150 (2007) 2-s2.0-33845615451, WOS:000243292000021
31. A. d'Onofrio, P. Manfredi and E. Salinelli "Vaccinating behaviour, information, and the dynamics of SIR vaccine preventable diseases" *Theoretical Population Biology* 71 301-317 (2007) 2-s2.0-34047187628, WOS:000246093800004
32. Debora Beldi, Barbara A. Jereczek-Fossa, Alberto D'Onofrio, Giuseppina Gambaro Maria Rosaria Fiore, Francesco Pia, Fausto Chiesa, Roberto Orecchia and Marco Krengli "Role of Radiotherapy in the Treatment of Cervical Lymph Node Metastases from an Unknown Primary Site: Retrospective Analysis of 113 Patients." *International Journal of Radiation Oncology, Biology, Physics* 69 1051-1058 (2007) 2-s2.0-35449000192, WOS:000250788900011

33. A. d'Onofrio "Rapidly acting antitumoral antiangiogenic therapies" *Physical Review E* 76 (3): Art. No. 031920 Part 1 SEP 2007 2-s2.0-34748922274 , WOS:000249785800100
34. Alberto d'Onofrio "Comment to 'Epidemic spreading on heterogeneous networks with identical infectivity' [Yang et al., Phys. Lett. A 364, 189-193 (2007)]" (this comment contains new results on network based epidemic models) *Physics Letters A* 372 1722-1724 (2008) 2-s2.0-38949191640, WOS:000254033900032
35. A. d'Onofrio "Noisy oncology: some caveats in using Gaussian Noise in Mathematical models of Chemotherapy", in E. Venturino and R. Hoskings (eds) "*Aspects of mathematical modeling: Applications in Science, Medicine, Economics and Managements*", Series "Mathematics and Biosciences in Interaction", Birkhauser (2008)
36. B. Jereczek-Fossa, A. Kowalczyk, A. d'Onofrio, G. Catalano, C. Garibaldi, G. Boboc, M.C. Leonardi, R. Cambria and R. Orecchia, Three-Dimensional Conformal or Stereotactic Reirradiation of Recurrent, Metastatic or New Primary Tumors : Analysis of 108 patients, *Strahlentherapie und Onkologie* 184 36-40 (2008) 2-s2.0-38149128170, WOS:000252282600006
37. A. d'Onofrio "Metamodeling tumor-immune system interaction, tumor evasion and immunotherapy" *Mathematical and Computer Modelling* 46 614-637 (2008) 2-s2.0-38849187163, WOS:000254179800008
38. A. d'Onofrio, P. Manfredi and E. Salinelli "Bifurcation thresholds in a SIR model with information-dependent vaccination", *Mathematical Modeling of Natural Phenomena* 2 26-43 (2007) 2-s2.0-79960749818, WOS:000207833200002
39. A. d'Onofrio "A note on the global behaviour of the network-based SIS epidemic model." In *Nonlinear Analysis – Real World Applications* 9 1567-1572 (2008) 2-s2.0-43649094607, WOS:000256991100021
40. A. d'Onofrio " 'Fuzzy oncology': Fuzzy noise induced bifurcations and their application to anti-tumor chemotherapy." *Applied Mathematics Letters* 21 662-668 (2008) 2-s2.0-43549102848, WOS:000257001900003
41. C. Robertson, C. Mazzetta and A. d'Onofrio "Regional Variation and Spatial Aggregation" chapter of P. Boyle and M. Smans "The Atlas of Cancer Mortality in European Union and European Economic Area 1993-1997", WHO Press (2009)
42. A. d'Onofrio (Corr. Auth.) and P. Cerrai A bi-parametric model for the tumour angiogenesis and anti-angiogenesis therapy. *Mathematical and Computer Modelling* 49 1156-1163 (2009) 2-s2.0-59149085863 , WOS:000263151100030
43. A. d'Onofrio "Fractal growth of tumors and other cellular populations: Linking the mechanistic to the phenomenological modeling and vice versa." *Chaos, Solitons and Fractals* 41 (2009) 875–880 (doi:10.1016/j.chaos.2008.04.014 ) 2-s2.0-67349108817 , WOS:000267379700035
44. A d'Onofrio (Corr. Auth.), A. Gandolfi and A. Rocca "The dynamics of tumour-vasculature interaction suggests low-dose, time-dense anti-angiogenic schedulings" *Cell Proliferation* 42 , 317-329, 2009 (DOI: 10.1111/j.1365-2184.2009.00595.x) 2-s2.0-65349170905, WOS:000265481300006
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## Submitted Manuscripts:

1. S. De Franciscis, G. Caravagna, A. d'Onofrio (Corr. Auth) Gene switching rate determines response to extrinsic perturbations in the self-activation transcriptional network motif
2. Peter Boyle; Alice Koechlin; Maria Bota; Alberto d'Onofrio; David Zaridze; Paul Perrin; John Fitzpatrick; Arthur L Burnett; Mathieu Boniol Endogenous and exogenous testosterone and the risk of prostate cancer and prostate specific antigen (PSA)

## Refereed Papers published in non-English ISI-indexed Scientific Journals:

1. A. Swierniak, G. Gala, A. d'Onofrio, A. Gandolfi, "Aniogeneza nowotworow jako object sterowania" [Cancer angiogenesis as an object of control], *Przegląd Elektrotechniczny*, **84**, 124-127 (2008) **(in polish; English abstract available in the ISI-Thomson and Scopus Databases)**. 2-s2.0-43149101313

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1. G.Stamatakos, D.Dionysiou, E.Georgiadi, E.Kolokotroni, S.Giatili, A.Hoppe, C.Desmedt, A.Lunzer, M.Erdt, J.Jacques, J.Pukacki, R.Belleman, P.Melis, **A.d'Onofrio**, F.Buffa, B.Claerhout, S.Rueping, K.Marias, M.Tsiknakis, N.Graf The ACGT Oncosimulator: from conceptualization to development via multiscale cancer modeling. in G. Stamatakos and D. Dionysiou (Eds): *Proceeding of the 4th Int. Adv. Res. Workshop on In Silico Oncology and Cancer Investigation (4th IARWISOCI) – The ContraCancrum Workshop, Athens, Greece, Sept. 8-9, 2010* (www.4th-iarwisoci.iccs.ntua.gr). Pages 54-57

## Editorial comments:

1. A. d'Onofrio "The three pillars of Wisdom in Molecular Medicine ", *Ecancermedalscience*, Letters to Editor (04 March 2008) **DOI: 10.3332/eCMS.2008.LTR44**
2. A. d'Onofrio "E-Oncology" *Ecancermedalscience*, Letters to Editor (27 November 2008) **DOI: 10.3332/ecancer.2008.LTR160**

## Economy Working Papers:

3. Luciano Fanti Piero Manfredi Alberto D'Onofrio "Walrasian dynamics and the Phillips curve" Discussion papers of Economics Department of Pisa Univesity n.141. (2012)

## Wikipedia (as main or substantial contributor):

- Compartmental Models in Epidemiology ([http://en.wikipedia.org/wiki/Compartmental\\_models\\_in\\_epidemiology](http://en.wikipedia.org/wiki/Compartmental_models_in_epidemiology))
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- Logistic and Generalized Logistic Law to model the growth of Tumors ([http://en.wikipedia.org/wiki/Logistic\\_function#In\\_Medicine:\\_modeling\\_of\\_growth\\_of\\_tumors](http://en.wikipedia.org/wiki/Logistic_function#In_Medicine:_modeling_of_growth_of_tumors) and [http://en.wikipedia.org/wiki/Generalised\\_logistic\\_function](http://en.wikipedia.org/wiki/Generalised_logistic_function))

## Technical Reports and Didactic publications:

1. E. Pourabbas, A. d'Onofrio, M. Rafanelli: "Analysis and Application of Epidemic Models", Technical Report, Centro Interdipartimentale di Ricerca per l'Analisi dei Modelli e dell'Informazione nei Sistemi Biomedici (CISB), March 1997.
2. A. d'Onofrio "Dalla popolazione all'individuo. Definizioni, strumenti e stime del rischio in medicina." Atti del "Seminario IEO-SNAMID su Terapie Ormonali e Rischio oncologico, Milano 29 Novembre 2003" pagg 46-76

## Invited Talks at International Conferences:

1. Alberto d'Onofrio "Human Behavior and the Spread of Infectious Diseases: a challenge for modeling", **Keynote Invited Speaker & Opening Talk** at the 3RD INTERNATIONAL SYMPOSIUM ON "Modelling and Knowledge Management applications: Systems and Domains (MoKMaSD 2014)" in the 12th "International Conference on Software Engineering and Formal Methods " - Grenoble, France, 2 September 2014
2. A. d'Onofrio "The new mathematical theory of epidemics: cries, whispers and imitations" **Keynote Invited Plenary Speaker** MPDE 2014 – International conference on Models in Population Dynamics and Ecology. University of Turino, Italy. August 25th-29th, 2014
3. A. d'Onofrio "Intracellular Pharmacodynamics of p53-targeting drug Nutlin: the role of stochastic gene switching" **Invited Speaker**. International INDAM Meeting "The Mathematics of Cells and Tissues" September, 2-6, 2013 Cortona, Italy
4. A. d'Onofrio, A. Gandolfi and K. Puzinsky "The pharmacodynamics of p53-targeted drug Nutlin: a stochastic Systems Biology approach" International Conference "Mathways into Cancer II", Carmona, Sevilla, Spain. May 27-30 2013
5. S. de Franciscis, A. d'Onofrio, P. Ubezio "Stem Cells: modeling from individuals to populations (passing through the data)" International Conference "Mathways into Cancer II", Carmona, Sevilla, Spain. May 27-30 2013
6. A. d'Onofrio "Bounded-noise induced transitions in Cancer Dynamics" **Keynote Invited Speaker & Opening Talk** at the International Conference "Mathways into Cancer", Almagro, Ciudad Real, Spain. June 3-6 2012
7. A. d'Onofrio "Mathematical Modelling of Stem Cell Kinetics" **Invited Talk** at the "International Workshop "3rd Disputations on Native and Induced Pluripotent Stem Cell Standardization". Organizers: S. Capaccioli and P. di Nardo
8. A. d'Onofrio "A bistable tale" **Invited Talk** at the "International Workshop in honour of Boris Khodolenko: Different aspects of mathematical modeling applied to systems biology" Organizers: S. Parodi, A. Barla e A. Verra, Genova November 10 2011
9. A. d'Onofrio, Evolutionary aspects in tumor immunoediting, self-**Invited Talk** ☺ at the conference "Mathematical Oncology: new Challenges for Systems Biomedicine", Erice (Italy), September 26 – September 30 2011. Scientific Committee: Z. Agur, P. Cerrai, A. d'Onofrio (chair), A. Gandolfi.

10. A. d’Onofrio, Systems Biology of Tumor Dormancy, **Invited Talk** at the “First Workshop on Systems Biology of Tumor Dormancy” (Organizers: H. Enderling, N. Elmog, L. Hlatky), Center for Cancer Systems Biology, Tufts University, Boston (US), July 25th to July 28th, 2011.
11. A. d’Onofrio, The interplay between delays and bounded noises in immune reaction to tumors, **Invited Talk at the Minisymposium** “Delay Differential Equations and Applications I”, (Organizers: U. Forys and M. J. Piotrowska) *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
12. A. d’Onofrio, The Noisy life of Tumors, self-**Invited Talk** ☺ at the ” **Minisymposium** “Analysis of mathematical models for cancer growth and treatment, Part I, (Organizers: U. Ledzewicz and A. d’Onofrio) *ECMTB 2011: 8th European Conference on Mathematical and Theoretical Biology, and Annual Meeting of The Society for Mathematical Biology*, Kraków, Poland, June 28 - July 2, 2011
13. A. d’Onofrio, Modelling the evasion of tumors from immune control, **Invited Talk** to Workshop “Mathematical Cancer Modelling” (organizers T. Hillen, U. Ledzewicz and A. Chauviere), 8<sup>th</sup> AIMS conference on dynamical systems, Differential Equations and Applications, Dresden (GE), May 25-28 2010
14. A. d’Onofrio, Mathematical modelling of Neo-angiogenesis and of antiangiogenic therapies, **Invited Talk** to Workshop “Mathematical and Computational Approaches in Biology and Medicine”, June 15-16 2009, Warsaw University, Warsaw
15. A. d’Onofrio, The strange case of DR. Immune system and Mr. Cancer, **invited full lecture** at *Lectures on Modelling Cancer Growth and Treatments* December 8-9, 2008, Estoril, Portugal Organizer: Prof. Adelia Sequeira
16. A. d’Onofrio, A. Gandolfi and A. Rocca, Population-based models of anti-tumor anti-angiogenesis therapy: theory and biomedical inferences, **Invited talk** for the minisymposium on “Modelling, Control and Optimization of Dynamical Systems: Theory and Applications to Biomedicine” (organizers: U. Ledzewicz, H. Schattler and A. Swierniak), 23rd IFIP TC 7 Conference on System Modelling and Optimization, Cracow, Poland, July 23-27, 2007
17. A. d’Onofrio ““Metamodeling tumor-immune system interaction and immunotherapy: the interplay between basic science and clinical applications. " **Invited talk** at "International Workshop on Cancer Modelling and Therapeutic Innovation: From Theory to Clinic" Lyon, September 26-27 2006. Organizers: Benjamin Ribba and Jean Clairambault
18. A. d’Onofrio “Metamodels in tumor-immune system interaction and immunotherapy”. **Invited talk** for the minisymposium on “Mathematical models in tumor therapy” (organizers: M. Chaplain and H. Enderling). SMB-SIAM 2006 conference, July 31 – August 5 2006. **(not held for health problems)**
19. A. d’Onofrio, A. Gandolfi and A. Rocca “Mathematical oncology: modeling anti angiogenic therapy”, **Invited talk** for the m<sup>45</sup><sup>th</sup> workshop of international school of mathematics ‘G. Stampacchia’ : Mathematics and Medical Diagnosis“ (organizers: V.F. Demyanov, M. Gaudio, F. Giannessi and B. Schoellkopf) at “Ettore Majorana center for Scientific Culture”, Erice (TP) Italy, 10-20 July 2006.

20. A. d’Onofrio “*Interactions between biomathematicians and biomedical researchers*” **Invited talk** for the session “*Are the recent advances of mathematics known by biomedical researchers ?*” (chair: Prof. V. Capasso) at the international workshop “Random Geometries in biomedicine”, Milan Math Dept., Jan 16 2003.
21. A. d’Onofrio, “Eradicationology: the mathematical art of eradicating diseases”. **Invited Talk** to the Minisymposium on mathematical models in biology (organizers: H. Kuang and A. Makroglou), at HERCMA International Conference 2005, Athen , 21-24 September 2005 (Greece)

### Invited Talks at National Conferences:

1. A.d’Onofrio, “The role of extrinsic noise and its interplay with intrinsic stochasticity in biomolecular Networks” **Invited Keynote Speaker**, WORKSHOP BIOLOGICAL COMPLEXITY: PAST COMMITMENTS AND FUTURE CHALLENGES (Organizers: L. Fronzoni, G. Santangelo, P. Cerrai), Arcidosso (Italy) 19 - 21 September, 2013
2. A. d’Onofrio, A. Gandolfi and K. Puzinsky “The pharmacodynamics of p53-targeted drug Nutlin: an hibrid stochastic model” **Invited Keynote Talk** CIMAB & GASVA SIMAI Workshop on “Theoretical Approaches and Related Mathematical Methods in Biology, Medicine and Environment” (Organizers : V. Capasso and L. Preziosi). April 4-6 2013
3. A. d’Onofrio, P. Manfredi and E. Salinelli “Information, Vaccinations and Bifurcations” (**Invited Speaker**) Workshop on “La Matematica Oggi per l’Uomo e per l’Ambiente” (Organizers: E. Beretta and A. Fasano), Montecatini, 28-31 March 2007
4. A. D’Onofrio, R. Barbuti, P. Cerrai and F. Gatti “Reti complesse di regolazione genica della proliferazione-differenziamento-tumorigenesi: applicazioni della Systems Biology” (**Invited Speaker**) Workshop on “Mathematical dyagnosis” (Chairmans: F. Giannessi and A. Pinchera), School of Medicine of Pisa university, 9 jan 2007

### Contributed Talks at International Conferences:

1. A. d’Onofrio, The interplay between extrinsic bounded noises and various levels of intrinsic noises, Lyon BioSys 2014 International Conference on Systems Biology, Lyon I University at Villeurbanne, France, 19-21 November 2014
2. A. d’Onofrio, The impact of side-effects on the life-time of immunization programmes, Third conference on Mathematical and computational dynamics, Bordeaux, May 31- June 4 (2010)
3. A. d’Onofrio, Kill bill quickly: rapidly acting antitumor antiangiogenic therapies, European Conference on Mathematical and Theoretical Biology, Edinburgh June 29 – July 5 2008
4. A. d’Onofrio and Piero Manfredi, Information and rumours on vaccine-related side effects: modelling their influence on spreading a vaccine-controllable SIR infectious disease, European Conference on Mathematical and Theoretical Biology, Edinburgh June 29 – July 5 2008
5. Urszula Ledzewicz, Heinz Schaettler and Alberto d’Onofrio, Minimizing the Tumor Size in Mathematical Models for Novel Cancer Treatments, 1st Joint Meeting of the American Mathematical

Society and the New Zealand Mathematical Society, "Victoria University" of Wellington, Wellington, New Zealand December 12-15, 2007

6. E. Pourabbas, A. d'Onofrio: "A SIR Epidemic Model and the Parametric Resonance", 3rd European Conference on Mathematics Applied to Biology and Medicine, Heidelberg (Germany), 6-10 October 1996. ECMTB'96.
7. B Jereczek-Fossa, G. Catalano, C Bocci, C Garibaldi, A d'Onofrio, M. Ciocca, H. R. Marsiglia, R. Lazzari and G Orecchia "Analysis of mandibular dose distribution in radiotherapy (RT) for oropharyngeal cancer", ECCO 11: the European Cancer Conference, Lisbon October 21/25 2001, European Journal of Cancer, Vol 37 Supplement 6 (Conference Abstract Book), pag. S106
8. A.Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Response of tumour cords to therapeutic agents", Workshop in Mathematical Models of Cancer, Vanderbilt University, Nashville, Tennessee (USA), May 3 - 5, 2002
9. A.Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Modelling the regression and regrowth of tumour cords after cytotoxic treatments", Conference on Mathematical Modelling of Population Dynamics, Bedlewo, Poland, June 24-28, 2002
10. A.d'Onofrio: "Pulse Vaccination Strategy in SIR Epidemic Model in presence of Vaccine Failures", 7th European Conference on Mathematics Applied to Biology and Medicine, Milano (Italy), 2-7 July 2002, ECMTB2002 Abstract Book pag 231.
11. A.Bertuzzi, A. d'Onofrio, A. Fasano and A. Gandolfi: "The Response of Tumor Cords to Therapeutic Agents", 7th European Conference on Mathematics Applied to Biology and Medicine, Milano (Italy), 2-7 July 2002, ECMTB2002 Abstract Book pag 104.
12. A.Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Growth and regression of tumour cords following to therapeutic agents" in "International Workshop on modelling cancer growth and therapy" Turin 3-5 march 2003
13. P Boyle C Robertson T Wilson A d'Onofrio J Benichou "Risk Factors for Acute Urinary Retention in men with benign prostatic hyperplasia" XVIIIth Congress of the European Association of Urology, Madrid, 12-15 March 2003. European Urology Supplement 2 (Conference Abstract Book) n.1 pag 26 (2003).
14. A. d'Onofrio and A. Gandolfi "Tumor regression by periodic anti-angiogenic therapy" International Conference On Mathematical Biology 2003, Annual Meeting of the Society for Mathematical Biology (SMB), University of Dundee (UK) 6-9 August 2003, Abstract Book pag.
15. A. d'Onofrio and I.P.M. Tomlinson "A simple bifurcation study of a model of tumorigenesis in colon crypts" CMPD-5 (International Conference on Mathematical Population Dynamics), Trento, June 21-25 2004
16. A. Bertuzzi, A. d'Onofrio, A. Gandolfi and C. Sinisgalli "Cell resensitization after single-dose anticancer treatment: learning from tumour cords" CMPD (International Conference on Mathematical Population Dynamics), Trento, June 21-25 2004

17. A. Bertuzzi, A. d'Onofrio, A. Gandolfi and C. Sinisgalli "Cell resensitization after single-dose anticancer treatment" International Conference On Mathematical Biology 2003, Annual Meeting of the Society for Mathematical Biology (SMB), University of Ann Arbor (USA) 20-27 July 2003
18. A. d'Onofrio "A general framework for modeling tumor-immune system competition and immunotherapy: mathematical analysis and biomedical inferences", Sixth European Conference on Mathematical and Theoretical Biology - ECMTB05, Dresden (GE), July 18-22 2005, Abstract Book pag I- 360.

### **Posters at International Conferences:**

1. A. d'Onofrio and A. Gandolfi "Tumour control by periodic anti-angiogenic therapy" CMPD (International Conference on Mathematical Population Dynamics), Trento, June 21–25 2004
2. D.Alterio et al. "Thyroid disorders in patients treated with radiotherapy for head and neck cancer: a retrospective analysis of seventy-five patients"
3. A. d'Onofrio, "Biomathematical analysis and extension of the new class of epidemic models proposed by Satsuma et al. (2004)", Sixth European Conference on Mathematical and Theoretical Biology - ECMTB05, Dresden (GE), July 18-22 2005, Abstract Book pag II-159
4. A. d'Onofrio, "Periodically varying antiviral therapies: conditions for global stability of the virus free state" , Sixth European Conference on Mathematical and Theoretical Biology - ECMTB05, Dresden (GE), July 18-22 2005, Abstract Book pag II-199
5. A. d'Onofrio "Monsieur Lienard goes to the cell cycle", Sixth European Conference on Mathematical and Theoretical Biology - ECMTB05, Dresden (GE), July 18-22 2005, Abstract Book pag II-40
6. D. Beldi, B. Jereczek-Fossa, A. D'onofrio, R. Orecchia and M. Krengli ole of radiotherapy in the treatment of cervical lymph node metastases from unknown primary site: results of a retrospective analysis of 113 patients, ECCO 13 conference, published in *EJC SUPPLEMENTS* Volume: 3 Issue: 2 Pages: 313-313 Supplement: Suppl. S Published: OCT 2005
7. B.A. Jereczek-Fossa, A. Kowalczyk, G. Catalano, V. Vitolo, A. D'Onofrio, M.C. Leonardi, R. Lazzari, G. Ivaldi, R. Orecchia Re-irradiation: analysis of consecutive patient, *EJC SUPPLEMENTS* Volume: 3 Issue: 2 Pages: 313-313 Supplement: Suppl. S Published: OCT 2005
8. S. Camporesi, A. d'Onofrio and JG McVie Targeted agents reshape cancer clinical trials, ESMO Conference 2010, Abstract published in *Annals of Oncology*, (2010), Supplement 8

### **Presentations at National Conferences:**

5. B Jereczek-Fossa, G. Catalano, C Bocci, C Garibaldi, A d'Onofrio, M. Ciocca, M.C. Leonardi. D. Alterio, L Bianchi, H. R. Marsiglia and G Orecchia "Mandibular dose distribution in radiotherapy (RT) for oropharyngeal cancer treated with bifractionated therapy", Congresso Nazionale A.I.R.O. , Grado September 29-October 2, Tumori, Vol 87 n. 4, (Conference Abstract Book), pagg. S41-S42

6. A. Bertuzzi, A. d'Onofrio, A. Fasano, A. Gandolfi: "Response of tumour cords to therapeutic agents" Sesto Congresso della Societa' Italiana di Matematica Applicata e Industriale, Chia Laguna, 27/31 Maggio 2002
7. B Jereczek-Fossa, A Kowalczyck, G. Catalano, V Vitolo, A. d'Onofrio et al. "Re-irradiation with the use of 3D-conformal an/or stereotactic techniques: analysis of 106 consecutive patients", XVmo congresso nazionale AIRO 2005, abstract published in the ISI-indexed journal *Tumori*, 4 S8
8. B Jereczek-Fossa, A Corallo, A Kowalczyck, R. Cambria, F Cattani, A. d'Onofrio et al. "Analysis of dose distribution in 3D-conformal radiotherapy for prostatic cancer: comparison of two treatment techniques (six fields and two dynamic arcs) in 30 patients", XVmo congresso nazionale AIRO 2005, abstract published in the ISI-indexed journal *Tumori*, 4 S61-62
9. B Jereczek-Fossa, G. Catalano et al. (including myself) "Head and neck tumors with unknown primary site" AIRO 2005
10. B Jereczek-Fossa et al. (including myself) "... " AIRO 2007
11. D. Alterio et. Al (including myself) "... " AIRO 2007
12. D. Alterio et. Al (including myself) "... " AIRO 2007

### **Referee for the following ISI-indexed Journals:**

- Nature Medicine
- PLOS Computational Biology
- PLOS One
- Physical Review Letters
- Physical Review E
- Journal of Theoretical Biology
- Vaccine
- Biology Direct
- Proceedings of The Royal Society B: Biological Sciences
- Cell Proliferation
- Physical Biology
- IEEE Transactions in Biomedical Engineering

- Ecancermedicallsciences
- Mathematical Biosciences
- Artificial Intelligence In Medicine
- Mathematical Medicine and Biology
- Bulletin of Mathematical Biology
- Journal of Mathematical Biology
- Mathematical Biosciences and Engineering
- Journal of Biological Dynamics
- Computational and Mathematical Methods in Medicine
- Theoretical Population Biology
- Physica A
- Physics Letters A
- New Journal of Physics
- Journal of Optimization: Theory and Applications
- Mathematical Reviews (including bio-mathematical books)
- Journal of Mathematical Analysis and Applications
- Proceedings of the London Mathematical Society
- Statistical Modelling
- Nonlinear Analysis
- SIAM Journal of Applied Mathematics
- Mathematical Modelling of Natural Phenomena
- Chaos, Solitons and Fractals
- Mathematical and Computer Modelling
- Advances in Complex Systems

- International Journal of Bifurcation and Chaos
- Applied Mathematics Letters
- Dynamics of Continuous Discrete and Impulsive Systems B: Applications and Algorithms
- Computers and Mathematics with Applications
- Applied Mathematical Modelling
- International Journal of Systems Science

### **Referee for the following non ISI-indexed International Journals:**

- Journal of Numerical Analysis, Industrial and Applied Mathematics
- Journal of Mathematical Control Science and Applications
- Advances in Difference Equations
- Communications in Applied and Industrial Mathematics

### **Software:**

- **Operating Systems:** Windows Vista (and previous releases down to 3.0), Unix, Linux , Mac OS X (and previous versions);
- **Programming languages:** Java, C, C++, SQL, Fortran, Visual Basic. Also used in the past: Pascal , Object Pascal, Prolog and ADA;
- **Mathematical SW:** Advanced use and programming of Mathematica (including the communication protocol MathLink) and Matlab. Very Basic use of Maple;
- **Statistical SW:** Use and programming of R (and SPLUS). Basic use of SAS.
- **Databases:** Advanced use and programming of Microsoft Access, and (in the past) CNR MOSAICO, AT&T ODE;
- **Internet:** good knowledge of Internet. Developing of Web. In the past: Developing of net software in Java;
- **Standard Academic and Commercial Software:** Good Knowledge of LaTeX, Power Point, MS-Word etc..

- **1/March/00 - 1/1/2003** As a side activity of my post-doc research activity at E.I.O., I also worked as Software Consultant for my Department and for the co-working medical division of the Hospital. In particular, in my first months in Milan, I wrote a MSAccess-based Distributed Computerized Clinical Folder System, used in the Senology Division. Then, I wrote the first implementation of the randomization sw for the large-scale “H.O.T.” clinical trial on “Tamoxifen used as a chemo-preventive drug”.