



Andrea De Gaetano, Curriculum Vitae

Personal data:

Born March 5th, 1959 in Milan, Italy.

Nationality: Italian.

Married with children.

C.F. DGTNDR59C05F205X

Contact address:

Viale Pinturicchio, 34 - 00196 Roma, Italy

Ph. (home) +39-06-64.52.08.55,

(cell.) +39-335-5942.411

(office)+39-06-30.15.53.89

(fax) +39-06-305-7845,

Email: andrea.degaetano@cnr.it

Web: www.biomatematica.it

In a nutshell: Andrea De Gaetano, a Director of Research with CNR IASI and current Director of CNR IRIB, is a surgeon, mathematician and lawyer with a long experience of coordinating biomedical research groups, obtaining funded projects and producing publications.

His characteristic strength is rapidly understanding diverse medical research problems; facilitating communication and organizing investigation groups including medical doctors, mathematicians/statisticians and software engineers; designing and delivering mathematical, statistical and computational solutions.

Academic degrees

- M.D., Doctor of Medicine (Università Cattolica, Facoltà di Medicina e Chirurgia, Roma, Italy, 1984; summa cum laude)
- Specialty in Emergency Surgery (Università Statale, Milano, Italy, 1989; 70/70 score)
- M.Sc., Master in Applied Mathematics (UMBC, University of Maryland at Baltimore County, Baltimore, USA, 1991; core curricula in Analysis and Algebra)
- Ph.D. in Applied Mathematics (Universit  de Pau et des Pays de l'Adour, Pau, France, 1995; Dynamical Systems, Mention Tres Honorable et F licitations, full score summa cum laude)
- J.D., *Juris Doctor* (Laurea Magistrale in Giurisprudenza, Facolt  di Giurisprudenza, Universit  di Urbino, 2009, five-year curriculum, score 106/110)
- Italian Bar examination, November 2014 (Court of Appeals district of Rome).

Positions

- 2020-present: Director, Istituto per la Ricerca e l'Innovazione Biomedica del Consiglio Nazionale delle Ricerche (CNR- IRIB).
- 2020-present: Italian National CNR Delegate, EDA European Defense agency, CAPTECH Simulation.

- 2018-present: President, European Society for Mathematical and Theoretical Biology (ESMTB)
- 2018-present: Italian National Academic Delegate, NATO, Scientific and Technical Organization, Human Factors and Medicine Panel.
- 2015-present: Board Member, International Council for Industrial and Applied Mathematics (ICIAM)
- 2014-2017: Board Member, European Society for Mathematical and Theoretical Biology (ESMTB).
- 2012-2017: Coordinator, CNR IASI UOS at Università Cattolica, Policlinico Gemelli.
- 2006-present: Visiting, then Adjunct Professor of Mathematical Statistics, Dept. of Mathematics, Mahidol University, Bangkok, Thailand
- 2003-2005: Visiting Professor of Mathematical Statistics, Dept. of Biostatistics, University of Copenhagen, Denmark
- 2001-2004: Professor of Mathematical Statistics, Università di Urbino, Facoltà di Scienze.
- 2001-present: Dirigente di Ricerca, CNR Istituto di Analisi dei Sistemi ed Informatica "A. Ruberti", Rome.
- 1997-2020: Coordinator, BioMathematics Lab, CNR IASI, Rome.
- 1995-2007: Professor of Statistics, School of Internal Medicine, Catholic University, Rome.
- 1990-2001: Ricercatore, CNR Centro di Studio per la Fisiopatologia dello Shock, Rome.
- 1988-1989: Resident in General Surgery, Union Memorial Hospital, Baltimore, MD.
- 1987-1988: Deputy Director, Mathematical Research, Maryland Institute for Emergency Medical Services Systems, Baltimore, MD.
- 1986-1987: Research Fellow, Mathematical Research, Maryland Institute for Emergency Medical Services Systems, Baltimore, MD.

Languages

- Bilingual Italian-English
- good spoken and written French
- good spoken and written German
- elementary Thai
- Programs fluently in C++, R and MATLAB.

Affiliations

- Member, Board member and President, ESMTB European Society for Mathematical and Theoretical Biology
- Board member, ICIAM International Council for Industrial and Applied Mathematics
- Member, EASD European Association for the Study of Diabetes

Synthesis of the work performed

Since the early years of Medical School, Dr. De Gaetano developed what would become a lifetime commitment to mathematical and statistical methods in biomedical research. He studied and taught a University Course in biostatistics while still in medical school. He then enrolled in the Master program in Applied Mathematics at UMBC in Baltimore, concurrently with his duties as a post-graduate Resident in General Surgery. After his Italian Emergency Surgery board, he obtained M.Sc. and Ph.D. degrees in Applied Mathematics, focusing on the mathematical statistics of parameter estimation for highly nonlinear and for stochastic dynamical models. He

has taught post-graduate and doctoral courses in mathematical statistics and its applications to biomedicine for many years at universities in Rome, Urbino, Copenhagen and Bangkok. He has participated in and directed many research projects specializing in the formalization of medical problems and in the quantitative analysis of the results of medical experiments.

He enrolled in Law School at the University of Urbino in 2002 (where he was teaching Mathematical Statistics at the time), completing the full Laurea Magistrale curriculum in 2009, with a dissertation in Civil Procedure, on quantitative modeling of the impact of the newly introduced Class Action regulations. He completed his post-graduation Legal Practice with the Studio Legale Pottino in Rome and passed his Italian Bar examination, becoming eligible for counsel and litigation in Italian Tribunals. As a direct link with his activity as a researcher in biomathematics, his legal interests focus on the protection of Intellectual Property Rights, particularly in the framework of European and International Law.

He is an expert in mathematical modelling of (patho-)physiological processes, notably in metabolism, ventilation and circulation. He is the current president of the European biomathematics society.

Scientific activity

Major scientific contributions so far concern diagnostics for flawed estimation in case of high model nonlinearity (as well as numerical schemes to obtain reliable parameter estimates), innovative stochastic differential models in physiology, and the formulation of new models for the glucose/insulin system together with the demonstration of their appropriate physiological behavior and statistical robustness. Through collaboration with Medical Doctors and Physiologists on one side, with Engineers, Mathematicians and Statisticians on the other side, different research topics have been investigated, with publications on energy metabolism, pulmonary circulation, respiratory pathophysiology particularly in intensive care, pharmaco-economy of the control of psychoses, kinetics of bioactive molecules such as hormones and drugs, inhaled drug pharmacokinetics modeling in chronic obstructive pulmonary disease and asthma, immunology of transplant rejection, effects of sublethal exposure to magnetic fields. The reasons for this width of applications lie in the combination of a solid physiological background with the general applicability of statistical and mathematical analysis for biomedical problems, and with the careful fostering of a team approach to research problems, integrating contributions from people with diverse expertise. Such work has been conducted in close collaboration with several national and foreign research groups, among which Copenhagen, Graz, NCSU Raleigh and Mahidol Bangkok Departments of Mathematics; Paris V and Copenhagen Departments of Biostatistics; Rome La Sapienza and Roskilde Departments of BioEngineering; Athens, Rome Catholic University and Harvard Medical Schools.

Main research interests concern parameter estimation for ordinary, delay, stochastic and fractional differential models; modeling energy metabolism, modeling stress to the cardiocirculatory and respiratory systems, contractual protection of Intellectual Property Rights in the scientific collaboration between public research Organizations and private enterprises. In particular, current specific topics of research are: more advanced models for glucose metabolism, insulin secretion and long-term diabetes development; efficient algorithms for (population) parameter estimation; general algorithms for parameter estimation of stochastic differential models; algorithms for estimation of non-local, hence non-Markovian stochastic differential models, such as those based on stochastic delay and fractional differential equations; application of modeling for preparedness against health crises (in particular regarding the physiological assessment of a large number of trauma victims); the development of diagnostic procedures for Cerebral Auto-Regulation dysfunction; modeling ventilation/perfusion maldistribution during mechanical ventilation; modeling possible modifiers to hemorrhagic shock evolution; extension of estimation techniques to Individual Based Models.

Bibliographic indicators (July 26th, 2019):

Papers considered: 230 (include most but not all of the journal articles, book chapters and proceedings cited below, as well as other material not reported in the References list below)

Citations: 6869 over 35 years (1984-2019)

Cites/year: 196.26

Cites/paper: 29.87

Authors/paper: 4.20

h-index: 37

g-index: 81

hl-norm: 19

hl-annual: 0.54

(Source: Harzing's Publish-or-Perish software version 7, Google scholar)

Management

As a result of years of application of computational methods to medicine, he founded in 1997 what is now the Bio-Mathematics Laboratory (BioMatLab) at CNR Istituto di Analisi dei Sistemi ed Informatica "A. Ruberti" (IASI). Through BioMatLab, he persistently engaged in the support of young researchers, suggesting scientific themes and providing funding, thus attracting, over the years, a succession of some thirty doctoral and post-doctoral fellows, Italian and foreign, all supported through funding directly acquired by the Laboratory, particularly with EC grants, but also with national and international applied research contracts. BioMatLab now counts eight units of personnel, including researchers with permanent positions, technicians, post-docs and doctoral students.

He has also actively participated in European biomathematics conferences, organizing four EU-funded BioMathematics summer schools as well as contributing to the organization of many different meetings. As President of ESMTB he has co-organized the bi-annual European Conference on Theoretical and Mathematical Biology in Lisbon, 2018, and is organizing the same conference in Heidelberg, 2020. He has collaborated with the "Direzione Generale per l'Internazionalizzazione della Ricerca" of the then Italian Ministry of University and Research (MIUR), helping to improve Italian participation in European-funded programs. He has actively participated in a number of European projects, coordinating the Operating Units concerned with methodological support and analysis of the results. Above all, he has written and helped to write more than 30 grant proposals to be submitted to the different Framework Programs of the European Commission (FP-4 through Horizon 2020), participating as a consequence to a series of financed projects. Within these, he has typically coordinated the Operative Units implicated in methodological support and analysis of results.

As a consequence of his legal background, he has generally been entrusted with the drafting of contracts and agreements on behalf of his Institute; on writing the Intellectual Property sections of the Proposals on behalf of the Consortia with which IASI BioMatLab has competed for EC grants; on compiling the Standard Operating Procedures regulating data management for the research groups he collaborates with.

The development of his peculiar cultural background (biomedical, mathematical and legal) has had the result to improve, facilitate and accelerate the organization of scientific projects: both helping to translate quickly and intelligibly needs and issues between physicians/biologists on one hand and mathematicians/statisticians/engineers on the other, as well as allowing the identification of institutionally and administratively practicable solutions to address needs and ambitions of pure researchers.

He has taken particular care in the development of young researchers, exposing them to a network of international research collaborations (Lab alumni have been working in New Delhi, Ann-Harbor, Berlin, Raleigh, Bangkok, as well as in several Italian universities). Further, he has stimulated his younger colleagues to increase their publishing rate, helping them to find rapid and often creative solutions to the research problems encountered.

Since July 2020 he is the Director of CNR-IRIB, the largest biomedical research Center of CNR in the South of Italy.

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae ai sensi dell'art. 13 del D. Lgs. 196/2003 e all'art. 13 del Regolamento UE 2016/679 relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali.

I hereby authorize the use of my personal data as allowed by the Italian art. 13 D. Lgs. 196/2003 and Article 13 of the European GDPR (EU Regulation 2016/679).

Grants

- Italian Work Ministry 1990-1992, responsible statistician: "Determinants of the mortality from trauma" (multi-center, principal investigator Daniele Gui).
- Telethon 1998-1999, responsible modeller-statistician: "Botulinum toxin in hypertrophic pyloric stenosis (single-center, principal investigator Daniele Gui)
- CNR, National Research Council, 1998-2000, within the strategic project "Mathematical Methods and Models in the Biological Sciences" (principal investigator Mimmo Iannelli): coordinator of subproject "Delay Differential Equations for Endocrine Modelling"
- European Commission 1999, principal investigator : "Summer School on Mathematics in Cell Physiology and Proliferation, Termoli 1999".
- European Commission 2000, principal investigator : "BIOMATHMFRANCA2000 Biomathematics Euro Summer School on 'Spatial Structures in Biology and Ecology: Models and Methods', Martina Franca September 2000".
- Italian Health Ministry 2000-2002, responsible modeller-statistician: "Homocysteine kinetics and health risk" (multi-center, principal investigator Letizia Petroni).
- MURST (Italian Ministry for University and Scientific Research) 2000-2001 "Botulinum toxin action pathways in the central nervous system" (principal investigator Giovanni Zaninotto): responsible statistician for the subunit "Human studies" (Daniele Gui).
- MURST (Italian Ministry for University and Scientific Research) 1999-2001, responsible modeller-statistician: "Integrated strategies for the reduction of mortality in ICU-admitted multiple trauma patients" (multi-center, principal investigator Marco Castagneto).
- European Commission 2001, principal investigator : "URBIOMATH2002: Biomathematics Euro Summer School on 'Dynamical Systems in Physiology and Medicine', Urbino, July 2002".
- European Commission 2002, head of Operating Unit CNR IASI for project "IST-2001-37403 **HEARTS** Health Early Alarm Recognition and Telemonitoring System", FP5 Information Society Technologies (IST).
- Eli Lilly and Co., 2005 -2007: Research Grant on the modeling of the development of Type 2 Diabetes Mellitus (Principal Investigator)
- European Commission 2006, BioMathTech 07-10: Mathematical Modeling of Physiological Systems with Biomedical Applications (FP6 Marie Curie Series of Events): Coordinator of the 2009 School on Parameter Estimation for Dynamical Systems.
- European Commission 2008, Scientific Coordinator and Head of CNR IASI Operating Unit for project "FP7-SEC-2007-1-217855 **SICMA** Simulation of Crisis Management Activities", FP7 Security: Intelligent Decision Support.
- European Commission 2013, Task leader and Head of CNR Operating Unit for project "FP7-SEC-2013 **IMPRESS** Improving Preparedness and Response of hHealth Services in major crises" (Health Emergency Management decision support system), contribution to Operating Unit 408 K€ (3.4 M€ total).
- European Commission 2013 responsible for modeling and statistical assessment of the results, "FP7-SEC-2013 **EDEN** End-user Driven dEmo for cbrNe", contribution to Operating Unit 289 K€ (24.8 M€ total).
- European Commission 2013 responsible for overall modeling and statistical assessment of the results, "FP7-SEC-2013 **PULSE** Platform for European Medical Support during major emergencies", contribution to Operating Unit 745 K€ (2.8 M€ total).
- European Commission 2013 responsible for Type 1 Diabetes clinical trials, overall modelling and assessment of the results, "FP7-ICT-2011 **COMMODITY12** COntinuous Multi-parametric and Multi-layered analysis Of Diabetes TYpe 1 & 2 for enhanced care of the diabetic patient, contribution to Operating Unit 190 K€ (4 M€ total).
- Italian Ministry of Education, University and Scientific Research (MIUR) 2017, responsible for the Operating Units BioMathematics, "**CISAS** International Center for Advanced Studies in

Environment and Health”, contribution to Operating Unit 900 K€ (6.5 M€ total contribution), **ongoing**.

Italian Ministry of Defense, 2017, Principal Investigator and Coordinator, "**MoSES** joint Italian/Israeli project on Modelling Shock in the Experimental Setting”, contribution to the CNR Operating Unit 350 K€ (700 K€ total budget).

Italian Ministry of Defense, 2019, Principal Investigator, "**ABRAN**” (100 K€ budget).

Italian Ministry of Defense, 2019, "**ESPOJAM**” (250 K€ budget for the CNR IASI Operating Unit).

Italian Ministry of Defense, 2019, "**RFBIO**” (900 K€ budget for the CNR IASI Operating Unit).

European Commission 2019 "H2020 **Search&Rescue**” contribution to Operating Unit 300 K€.

Teaching

He has taught Statistics in Medicine for several years at Catholic University School of Medicine Rome. He has taught courses in Mathematical Statistics at the universities of Urbino (Faculty of Science), Copenhagen (Dept. of Statistics) and Mahidol-Bangkok (Dept. of Mathematics and Statistics). Even though teaching is not part of the standard duties of a CNR researcher, this intense teaching activity has been determined by two kinds of reasons. First, the need to review again and again, through teaching (particularly teaching different topics than those routinely treated) the methodological bases of his research activity. Secondly, the opportunity to attract good students and fellows to his laboratory and Institute.

Academic duties (graduate program advisor)

Faculty of Computer Science, State University at Milan

Faculty of Statistics, State University at Rome 1

Faculty of Medicine, Catholic University, Rome

Faculty of Engineering, State University at Rome 1

PhD Program, Operations Research, State University at Rome 1

PhD Program, Methodological Statistics, State University at Rome 1

PhD Program, Mathematical Statistics, Copenhagen University, Denmark

PhD Program, Mathematics, Mahidol University, Bangkok, Thailand

PhD Program, Mathematics, King Mongkut University of Technology, North Bangkok, Thailand

Member of PhD evaluation committees: Université de Nantes, Mahidol University Bangkok.

Editorial and evaluation work

- Editor, Mathematical Physiology (in EOLSS, the UNESCO Encyclopedia of Life Support System)
- Associate Editor, International Journal of Mathematics and Mathematical Sciences.
- Associate Editor (Statistics), Intensive Care Medicine 06/2008 – 12/2008
- Past Editor, European Communications in Mathematical and Theoretical Biology
- Reviewer for several peer-review journals, among which Clinical Chemistry, Diabetologia, American Journal of Physiology, Discrete and Continuous Dynamical Systems, Bulletin of Mathematical Biology, PLOS One, PLOS Computational Biology, Journal of Mathematical Biology, Mathematical Biosciences, etc..
- French National Project evaluator INRIA 2014

Clinical Activity

He has obtained a specialty in Emergency Surgery and has attended the Residency program in General Surgery at Union Memorial Hospital in Baltimore (MD, USA), where he has practiced surgery for two years before being recalled to Rome as CNR researcher. While his original specialty is Surgery, he has a specific competence in pathophysiology, particularly in the cardiocirculatory, ventilatory/respiratory, excretory and hormonal/metabolic areas. He actively collaborates with the Departments of Clinical Surgery and Anesthesiology/Intensive Care of Catholic University Gemelli Hospital in Rome, where he conducts research on ventilation devices both by designing and analyzing clinical trials and by developing mathematical models of the mechanics and control of ventilation.

Extended papers on international indexed, peer-review journals:

- 001) J.H. Siegel; A. De Gaetano; O. Chiara; P. Padalino; A. Nespoli (1983) **Quantification of survival prognosis in human sepsis using an index of physiologic adequacy.** *The Journal of Trauma: Injury; Infection; and Critical Care* 23(7), p663, ISSN 0022-5282, Ovid Technologies (Wolters Kluwer Health), doi:10.1097/00005373-198307000-00169
- 002) G. Bevilacqua; P. Guadalupi; O. Chiara; A. De Gaetano; R. Pizzi (1987) **IL PAZIENTE IN TERAPIA INTENSIVA: DATA BASE MODULARE PER LA GESTIONE E L'ELABORAZIONE DEI DATI RILEVATI.** *URGENTIS CHIRURGIAE COMMENTARIA* 10, p67-73
- 003) R. Pizzi; A. De Gaetano; P. Guadalupi; O. Chiara (1988) **On-and off-line surveillance of the critically ill patient..** *Journal of Clinical Monitoring and Computing* 17(3), p67-72, Springer
- 004) Franco Laghi; John H. Siegel; Avraham I. Rivkind; Carlo Chiarla; Andrea De Gaetano; Stephen Blevins; Joan C. Stoklosa; Ulf R. Borg; Howard Belzberg (1989) **Respiratory index/pulmonary shunt relationship: quantification of severity and prognosis in the post-traumatic adult respiratory distress syndrome..** *Critical Care Medicine* 17(11), p1121-1128, ISSN 0090-3493, Ovid Technologies (Wolters Kluwer Health), doi:10.1097/00003246-198911000-00006
- 005) William P. Coleman; John H. Siegel; Ivo Giovannini; Andrea De Gaetano; Shirin Goodarzi; Roberto M. Tacchino; Gabriele Sganga (1990) **Probability and the patient state space.** *International journal of clinical monitoring and computing* 7, p201-215, Springer
- 006) William P. Coleman; David P. Sanford; Andrea De Gaetano; Fred Geisler (1990) **Functional models of neurobiological processes.** *Mathematical and Computer Modelling* 14, p317-321, Elsevier
- 007) A.I. Rivkind; J.H. Siegel; M. Littleton; A. De Gaetano; T. Mamantov; F. Laghi; J.C. Stoklosa (1991) **Neutrophil oxidative burst activation and the pattern of respiratory physiologic abnormalities in the fulminant post-traumatic adult respiratory distress syndrome..** *Circulatory Shock* 33, p48-62
- 008) P.M. Arbós; M.A. Schwartz; S. García; E. López; J. Andreu; A.G. Gängen; G. Sganga; P. Carducci; S. Lippa; A. De Gaetano; E. Landolfi; M. Castagneta; F. Crucitti; G.I. Carlson; P. Gray; J. Arnold; R.A. Little; M.I.L. Irving Schricker; T. Träger; K. Braun; G. Kugler; B. Georgieff; C. Chiarla; I. Giovannini; J.H. Siegel; M. Castagneto; B. Morlion; E. Toryesten; K. Lessire; T.N.N. Nguyen; C. Feldmarm; G. Sturm; M. Pfisterer; P. Stehle; C. Puchstein; P. Fürst (1992) **Nutrition in sepsis.** *Intensive Care Med* 18
- 009) G. Gangeri; G. Sganga; G. Nanni; A. De Gaetano; S. Lippa; P. Carducci; M. Castagneto (1992) **Oxygen free radical damage in sepsis and Multiple Organ Failure: plasma levels of conjugated dienes and endogenous antioxidants.** *Journal of the Royal College of Edinburgh*, p276-277
- 010) A.V. Greco; G. Mingrone; C. Raguso; Tataranni A; Finotti E; R.M. Tacchino; E. Capristo; A. De Gaetano; M. Castagneto (1992) **Metabolic effects and disposition of sebacate; an alternate dicarboxylic fuel substrate.** *Ann Nutr Metab.* 36(1), p1-11
- 011) Antonio Tataranni; Geltrude Mingrone; Andrea De Gaetano; Comasia Raguso; Virgilio Greco (1992) **Tracer Study of Metabolism and Tissue Distribution of Sebacic Acid in Rats.** *Annals of Nutrition and Metabolism* 36(5), p296-303, ISSN 1421-9697, S. Karger AG, doi:10.1159/000177733

- 012) W.P. Coleman; J.H. Siegel; I. Giovannini; D.P. Sanford; A. De Gaetano (1993) **Computational logic: a method for formal analysis of the ICU knowledge base**. *International Journal of Clinical Monitoring and Computing* 10, p67-79
- 013) Andrea De Gaetano; William P. Coleman; Rita Pizzi; Edoardo Tomasella; Marco Castagneto; Aldo V. Greco (1993) **Hydra: a C-language environment for real-time DOS multitasking at the bedside**. *International Journal of Clinical Monitoring and Computing* 10(3), p147-154, ISSN 0167-9945, Springer Science and Business Media LLC, doi:10.1007/bf01246448
- 014) A.V. Greco; G. Mingrone; P.A. Tataranni; C. Raguso; A. De Gaetano; R.M. Tacchino; R. Lavielle; G. Ghirlanda (1993) **Turnover and Oxidation Rates of Plasma-Free Fatty Acids in Obese Patients Treated with Dexfenfluramine**. *Annals of Nutrition and Metabolism* 37(5), p237-244, ISSN 1421-9697, S. Karger AG, doi:10.1159/000177773
- 015) G. Mingrone; A. De Gaetano; A.V. Greco; E. Capristo; C. Raguso; P.A. Tataranni; M. Castagneto (1993) **A rapid GLC method for the direct analysis of plasma medium chain fatty acids**. *Clinica Chimica Acta* 214(1), p21-30, ISSN 0009-8981, Elsevier BV, doi:10.1016/0009-8981(93)90299-j
- 016) G. Mingrone; A.V. Greco; M. Castagneto; A. De Gaetano; P.A. Tataranni; C. Raguso (1993) **Kinetics and Thermogenesis of Medium-Chain Monocarboxylic and Dicarboxylic Acids in Man: Sebacate and Medium-Chain Triglycerides**. *Journal of Parenteral and Enteral Nutrition* 17(3), p257-264, ISSN 0148-6071, Wiley, doi:10.1177/0148607193017003257
- 017) G. Mingrone; A. De Gaetano; A.V. Greco; E. Capristo; C. Raguso; P.A. Tataranni; M. Castagneto (1993) **A rapid GLC method for the direct analysis of plasma medium chain fatty acids**. *Clinica Chimica Acta* 214, p21-30
- 018) M. Castagneto; A. De Gaetano; G. Mingrone; R. Tacchino; G. Nanni; E. Capristo; G. Benedetti; P.A. Tataranni; A.V. Greco (1994) **Normalization of insulin sensitivity in the obese patient after stable weight reduction with bilio-pancreatic diversion**. *Obesity surgery* 4(2), p161-168, Springer
- 019) William P. Coleman; Geltrude Mingrone; Andrea De Gaetano; Aldo V. Greco; Marco Castagneto; John H. Siegel (1994) **A Theoretical Design for Investigating Leucine Metabolism**. *IFAC Proceedings Volumes* 27(1), p383-384, ISSN 1474-6670, Elsevier BV, doi:10.1016/s1474-6670(17)46272-0
- 020) Andrea De Gaetano; Marco Castagneto; Geltrude Mingrone; William P. Coleman; Gabriele Sganga; Pietro Antonio Tataranni; Giuliano Gangeri; Aldo Virgilio Greco (1994) **PC-based differential model fitting as a support for clinical research**. *International journal of clinical monitoring and computing* 11(1), p35-41, ISSN 0167-9945, Springer Science and Business Media LLC, doi:10.1007/bf01132842
- 021) Andrea De Gaetano; Marco Castagneto; Geltrude Mingrone; Giuliano Gangeri; Gabriele Sganga; Pietro A. Tataranni; Comasia Raguso; Aldo V. Greco (1994) **Kinetics of Medium-Chain Triglycerides and Free Fatty Acids in Healthy Volunteers and Surgically Stressed Patients**. *Journal of Parenteral and Enteral Nutrition* 18(2), p134-140, ISSN 0148-6071, Wiley, doi:10.1177/0148607194018002134
- 022) G. Mingrone; A.V. Greco; A. De Gaetano; A. Tataranni; C. Raguso; M. Castagneto (1994) **Pharmacokinetic Profile of Dodecanedioic Acid; a Proposed Alternative Fuel Substrate**. *Journal of Parenteral and Enteral Nutrition* 18(3), p225-230, ISSN 0148-6071, Wiley, doi:10.1177/0148607194018003225

- 023) C.A. Raguso; G. Mingrone; A.V. Greco; P.A. Tataranni; A. De Gaetano; M. Castagneto (1994) **Dicarboxylic Acids and Glucose Utilization in Humans: Effect of Sebacate**. *Journal of Parenteral and Enteral Nutrition* 18(1), p9-13, ISSN 0148-6071, Wiley, doi:10.1177/014860719401800109
- 024) G. Scambia; P.P. Benedetti; E. Foti; M. Amoroso; G. Salerno; G. Ferrandina; F. Battaglia; S. Greggi; A. De Gaetano; G. Puglia (1994) **Squamous cell carcinoma antigen: prognostic significance and role in the monitoring of neoadjuvant chemotherapy response in cervical cancer**. *J Clin Onco* 12, p2309-2316
- 025) P. Tataranni; G. Mingrone; A.V. Greco; P. Caradonna; E. Capristo; C.A. Raguso; A. De Gaetano; R.M. Tacchino; M. Castagneto (1994) **Glucose-induced thermogenesis in postobese women who have undergone biliopancreatic diversion**. *American journal of Clinical Nutrition* 60(3), p320-3267
- 026) A.V. Greco; P.A. Tataranni; G. Mingrone; A. De Gaetano; A. Manto; P. Cotroneo; G. Ghirlanda (1995) **Daily energy metabolism in patients with type 1 diabetes mellitus**. *Journal of the American College of Nutrition* 14(3), p286-291, ISSN 0731-5724, Informa UK Limited, doi:10.1080/07315724.1995.10718509
- 027) A.V. Greco; G. Mingrone; E. Capristo; A. De Gaetano; G. Ghirlanda; M. Castagneto (1995) **Effects of dexfenfluramine on free fatty acid turnover and oxidation in obese patients with type 2 diabetes mellitus**. *Metabolism* 44, p57-61, ISSN 0026-0495, Elsevier BV, doi:10.1016/0026-0495(95)90212-0
- 028) G. Mingrone; A. De Gaetano; A.V. Greco; E. Capristo; M. Castagneto; G. Gasbarrini (1995) **Medium-chain triglycerides for parenteral nutrition: kinetic profile in humans**. *Nutrition* 11(5), p418-422
- 029) A. De Gaetano; G. Mingrone; M. Castagneto (1996) **NONMEM improves group parameter estimation for the minimal model of glucose kinetics**. *American Journal of Physiology-Endocrinology and Metabolism* 271(5), ISSN 0193-1849, American Physiological Society, doi:10.1152/ajpendo.1996.271.5.e932
- 030) D. Gui; P.L. Spada; A. De Gaetano; F. Pacelli (1996) **Hypocholesterolemia and risk of death in the critically ill surgical patient**. *Intensive care medicine* 22, p790-794, Springer
- 031) G. Mingrone; A.V. Greco; G. Benedetti; E. Capristo; R. Semeraro; G. Zoli; G. Gasbarrini (1996) **Increased resting lipid oxidation in Crohn's disease**. *Digestive Diseases and Sciences* 41(1), p72-76, Springer
- 032) Geltrude Mingrone; Andrea De Gaetano; Aldo V. Greco; Giuseppe Benedetti; Esmeralda Capristo; Marco Castagneto; Giovanni Gasbarrini (1996) **Plasma Clearance and Oxidation of Dodecanedioic Acid in Humans**. *Journal of Parenteral and Enteral Nutrition* 20(1), p38-42, ISSN 0148-6071, Wiley, doi:10.1177/014860719602000138
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