RESUME
RENATO MARCOS ENDRIZZI SABBATINI

Born in 1947, in Campinas, São Paulo, Brazil.

Nationality: Brazilian

Marital status: Married, two sons

EDUCATION

- 1977 Ph.D. (Physiology), School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.
- 1968 B.Sc. (Biomedical Sciences), School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.

PRESENT PROFESSIONAL POSITIONS

- 2000- President and Chairman of the Board, The Edumed Institute for Education in Medicine and Health, Campinas, Sao Paulo, Brazil.
- 1987- Chairman, Medical Informatics, and Associate Professor, School of Medical Sciences, State University of Campinas, Sao Paulo, Brazil.
- 1983- Director, Center of Biomedical Informatics State University of Campinas, Sao Paulo, Brazil.
- 1983- Faculty Member and Supervisor of Graduate Studies:
    - Dept. Medical Genetics, School of Medical Sciences
- Dept. Physiology, Institute of Biology and
- Dept. Biomedical Engineering, School of Electrical Engineering, State University of Campinas, SP, Brazil

PAST PROFESSIONAL EXPERIENCE

- 1995-1999 Director of Informatics, Brazilian Medical Association
- 1980-1983 Technical Director Data Processing Sector, Department of Physiology School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.
- 1979-1983 Director, Laboratory of Neuroethology, and Assistant Professor, Department of Physiology School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil
- 1977-1979 Visiting Scientist, Department of Primate Behavior Max Planck Institute for Psychiatry Munich, Federal Republic of Germany.
- 1972-1977 Instructor, Department of Physiology School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.
- 1972-1977 Instructor, Information Sciences School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.
- 1971-1972 Instructor, Chair of Physiological Psychology Faculty of Philosophy, Sciences

and Letters University of S.Paulo at Ribeirao Preto
- 1969-1972 Research Assistant, Department of Physiology School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.
- 1967-1968 Undergraduate Research Fellow, Dept. of Physiology School of Medicine of Ribeirao Preto University of Sao Paulo, Brazil.

OTHER RELEVANT PROFESSIONAL POSITIONS

- 1997- Founder and Editor-in-Chief, INFORMATICA MEDICA Journal, State University of Campinas, Brazil
- 1997- Editor-in-Chief, INTERMEDIC, Journal on Internet and Medicine, State University of Campinas, Brazil
- 1997- Associate Editor, Chairman of the Board and Editor, Section on the History of Neuroscience, Brain & Mind Magazine, State University of Campinas, Brazil
- 1993-1996 Editor-in-Chief, INFORMEDICA, Journal on Medical Informatics for Physicians, State University of Campinas, Brazil
- 1992-1994 Editor, NIBNEWS, An Electronic Newsletter on Health Informatics. State University of Campinas, Brazil.
- 1992-1993 Secretary, Brazilian Society for Health Informatics
- 1988-1990 President, Brazilian Society for Health Informatics
- 1987-1991 Member, International Study Group on New Technologies in Gynecology and Obstetrics, International Federation of Gynecology and Obstetrics
- 1987-1988 Member, Federal Commission of Health Informatics of the Special Secretary of Informatics (Federal Government)
- 1986-1990 Scientific Editor and Publisher Brazilian Journal of Health Informatics, IBIS Press, Sao Paulo, Brazil.
- 1986-1988 Vice-President, Brazilian Society of Health Informatics
- 1985-1987 Technical Advisor, Division of Information Systems Support, World Health Organization, Geneva, Switzerland.
- 1983- Scientific Advisor, National Council of Scientific and Technological Development (CNPq) and State Research Foundation of Sao Paulo (FAPESP)
- 1983-1986 Scientific Editor for Informatics Editora Nova Cultural, Sao Paulo, Brazil.
- 1980-1983 Secretary General Brazilian Society of Physiology and Editor, Bulletin of the Brazilian Society of Physiology

FIELDS OF RESEARCH

- Computer applications in Neurobiology and Psychology
- Modeling and simulation of neural network systems
- Artificial Intelligence in Medicine and Biology
- Clinical and scientific applications of computers in the Health Sciences
- Computer-aided education in Health Sciences
- Quantitative methods in the analysis of behavior
- Graphical and Image Processing in Medicine
- Applications of Internet in Medicine
- Distance Education in Health Sciences
- Telemedicine

● CREATION OF NEW SCIENTIFIC GROUPS

- 2000- Created and directs the Edumed Institute for Education in Medicine and Health and the Edumed.net Consortium (National Consortium for Distance Education in Medicine and Health and Telemedicine).
- 1988- Created and directs the Chair of Medical Informatics of the Medical School, State University of Campinas.
- 1983- Created and directs the Center of Biomedical Informatics State University of Campinas, in Campinas, Sao Paulo, Brazil; a pioneering interdisciplinary research center.
- 1973-1983 Created and directed the Laboratory of Neuroethology Department of Physiology of the Medical School of Ribeirao Preto, University of Sao Paulo, Brazil; the first of its kind in Latin America.

● SCIENTIFIC SUPERVISION

Undergraduate research fellows: 46. Graduate research fellows: 23 Master dissertations: 18 Doctoral dissertations: 4

● LECTURES AND CONGRESSES

Invited Conferences, Lectures and Seminars: 410 Scientific Symposia, Congresses and Meetings: 300

● EDUCATIONAL ACTIVITIES

Grand total of 189 activities, in 84 different courses

Courses Ministered at Undergraduate Level: 5

- Physiology (Schools of Medicine and Nursing)
- Physiological Psychology (Liberal Arts College)
- Scientific Methodology and Documentation (School of Medicine)
- Medical Informatics (Schools of Medicine and Nursing)
- Biostatistics (School of Medicine)

Courses Ministered at Graduate Level: 20

- Methods and Instrumentation in Neurophysiology
- Neurophysiology
- Neurophysiology of Behavior
- Neuropharmacology
- Ethology and Animal Behavior
- Neuroethology
- Scientific Methodology and Documentation
- Computer Analysis of Behavior
- Biomedical Informatics
- Applications of Artificial Intelligence to Medicine
- Microcomputer Applications to Research and Education
- Computer-based Instruction

- Computer Programming Fundamentals
- Modeling and Simulation in Physiology
- Introduction to Neural Networks
- Topics in Biomedical Engineering and Medical Informatics
- Biomedical Statistics
- Distance Education in Health
- Summer Course on Medical Informatics Teacher Training
- Summer Course on Distance Education Teacher Training

Courses Ministered at Continuing Education Level: 25

- Microcomputers in Clinical Practice
- Informatics in Dentistry
- Informatics in Nursing
- Introduction to BASIC Computer Programming in Medicine
- Microinformatics for Users in Health Care
- Basic Operation of Microcomputers
- Introduction to dBASE III Programming
- Computer Applications in Hospitals
- Microcomputer Applications in Health Service Management
- Informatics and Radiology
- Image Processing in Biology and Medicine
- Quantitative Analysis of Behavior
- Informatics in Occupational Health
- Computer applications in Neurology
- Computer applications in Veterinary Medicine
- Introduction to Internet for Physicians
- HTML Programming: Basic and Advanced
- Electronic Publications on the WWW
- Scientific Methodology in Medical Informatics
- Telemedicine
- Computer Based Medical Record
- Videoconferencing in the Hospital
- Health Informatics Continued Education Journal Club
- Distance Education in Health
- Introduction to the History of the Neurosciences

AFFILIATION TO PROFESSIONAL ASSOCIATIONS

- The Computer Society (IEEE, USA) - Senior Member Elect
- American Association for Medical Informatics (USA)
- International Brain Research Organization (IBRO)
- Brazilian Society for Health Informatics
- Brazilian Society for Biomedical Engineering
- Brazilian Society for Neurosciences and Behavior
- Brazilian Society for Physiology

EXPERIENCE IN INDUSTRIAL RELATIONS

- Private and university-based computer consultance projects to 45 professional associations,

corporations, hospitals, universities and clinics, and governmental bureaus.
- Has managed successfully several technology-transfer agreements between University and industry.
- Member of the Board of Trustees, Academic Projects, of Itautec Informatics Corp., the largest Brazilian industry of computers (1985-1989)
- Director and owner of Dataquest Informatica Ltd. (a consultancy firm) (1987-1993)
- Director and partner of CCNI Consultancy & Projects (a consultancy and medical software firm) 1993-2000.
- Director and partner of Webpraxis International Consulting LLC (a consultancy, web development and medical software firm). 1997-present.

● PROFICIENCY IN LANGUAGES

- Portuguese - mother tongue
- English - reads, writes, understands and speaks fluently
- German - reads, writes, understands and speaks fluently
- Spanish - reads, writes, understands and speaks fluently
- Italian - reads, understands and speaks fluently, writes well.
- French - reads, understands fluently, speaks and writes little.

● COMPUTER EXPERIENCE

- Mainframes and Superminis: Burroughs, Digital (DEC-10,VAXes), IBM
- Minicomputers: IBM, Digital, Unix compatible
- Microcomputers and workstations: MS/DOS, Windows, SUN Sparcstation
- Programming Languages: FORTRAN, BASIC and CLIPPER (extensive), PASCAL, MUMPS, LOGO, PROLOG, LISP, C, JAVA, HTML

● PUBLICATIONS

Grand total of 1232.publications.

Books, Dissertations and Monographs

- Species-specific behavior and brain electrical stimulation: a quantitative and neuroethological approach. Doctoral Dissertation, University of S.Paulo, Brazil, 1977. (in Portuguese)
- The TRS-80 Resource Book. Munich, W.Germany: Vortex, 1979
- The Microcomputer in Clinical Practice. Sao Paulo Academy of Sciences, 1983 (in Portuguese)
- Introduction to BASIC Microcomputer Programming. Sao Paulo: Nova Cultural, 1985 (in Portuguese)
- Microcomputers Applications in Medicine: a Review. Geneva: World Health Organization, 1985
- Informatics in Medicine. Sao Paulo: McGraw-Hill, 1994 (in Portuguese). In press.
- Introduction to Microcomputing in Medicine. Sao Paulo: Brazilian Institute for Health Information, 96 pp., 1988 (in Portuguese).

- Course on Microinformatics to Healthcare Users. 168 pp, six editions, 1988-1993, Dataquest Informatics, Campinas, Brazil (in Portuguese).
- Applications of Artificial Neural Networks in the Support to Medical Decision Making. Associate Professorship Thesis, State University of Campinas, june 1993 (in Portuguese).

Book Chapters

- Automation of Medical Record Systems Based on Microcomputers. In: Rodrigues, R.J. (Ed.). Informatics and the Hospital Manager. Sao Paulo: Pioneira, p. 71-82, 1987 (in Portuguese).
- Chapter 3: Informatics Support for Health Programmes; Chapter 4: Informatics Support for the Provision of Health Care. Chapter 5.6: Using Computers in Training and Education. Chapter 6: The Choice of Informatics Technology. In: Informatics and Telematics in Health Care. Geneva: World Health Organization, 1987

Papers in specialized journals and proceedings

1. Related to Medical Informatics

- Sabbatini, R.M.E. - How to get the best out of automated information systems. World Health Forum, 8(4): 432-434, 1987.
- Sabbatini, R.M.E. - A practical course on knowledge engineering for Health professionals. In: Barber, B.; Cao, D.; Qin, D.; Wagner, G. (Eds.) - Proceedings Sixth World Congress of Medical Informatics (MEDINFO'89, Beijing, China, Singapore): International Medical Informatics Association, North-Holland Press, Amsterdam, Netherlands, p. 949-952, 1989.
- Sabbatini, R.M.E. - A microcomputer software laboratory for teaching informatics to medical students. In: O'Moore, R.; Bengtsson, S.; Bryant, J.R. & Bryden, J.S. (Eds.) - Medical Informatics Europe'90. Proceedings, Glasgow, Scotland. Berlin: Springer-Verlag, p. 416-421, 1990.
- Sabbatini, R.M.E. - An improved undergraduate curriculum for teaching Medical Informatics to medical and nursing students. In: Van Bemmel, J.H. & Zvarova , J. (Eds.) - Knowledge, Information and Medical Education. Amsterdam: North Holland, p. 67-78, 1991.
- Zepka, R.F.; Sabbatini, R.M.E. - Computer simulation of a quantitative model for reflex epilepsy. In: Dvorak, I.; Holden, A.V. (Eds.) - Mathematical Approaches to Brain Functioning Diagnostics. (Proceedings in Non-Linear Science). Manchester: Manchester University Press, p. 249-256, 1991.
- Sabbatini, R.M.E. - Applications of connectionist systems in Bimedicine. In: Lun, K.C. et al. (Eds) - Proceed. VII World Congress on Medical Informatics (MEDINFO'92). Amsterdam: North Holland, p. 418-425, 1992.
- Felipe Jr., P.; Sabbatini, R.M.E.; Carvalho-J£nior, P.; Beseggio, R.E.; Terzi, R.G.G. - Outcome prediction for critical patients under intensive care, using backpropagation neural networks. Anais I Forum Nacional de Ciencia e Tecnologia em Saude, Caxambu, MG, pp. 344-47, November 1992.
- Sabbatini, R.M.E.; Lobo da Costa Jr, M.; Becker, R.A.; Tardelli, A. - A microcomputer-based system for distributed statistical analysis of mortality data using a CD-ROM database. Proceed. Int.Congress on Medical Informatics (MIE'93). London: Freund Publ., 1993.
- Sabbatini, R.M.E. - Neural networks for classification and pattern recognition of biological signals. Proceed. Annual International IEEE Conference of the Engineering in Medicine and Biology Society. San Diego, CA, November 1993. Los Alamitos: IEEE Press, 1993.
- Sabbatini, R.M.E.; Ortiz, J. - Neural network based approach to outcome prognosis for patients with dyastolic disfunction. In: Comparative Approaches in Medical Reasoning

(Cohen, M.E. and Hudson, D.L., editors), Elsevier, 1993

2. Related to Neurosciences

- Sabbatini, R.M.E. - A head-mounted stereotaxic platform for intracranial exploration with movable electrodes. Brazilian Journal of Medical and Biological Research, 15(1): 65-71, 1982.
- Marino Neto, J. & Sabbatini, R.M.E. - The effects of telencephalic lesions in the habituation of startle and orienting responses in the Siamese Fighting Fish (Betta splendens). Brazilian Journal of Medical Biological Research, 14: 1982.
- Peron, J.E.; Fontes, J.C.S. & Sabbatini, R.M.E. - Effects of previous REM sleep deprivation on the acquisition of different topographies of discriminated avoidance in the rat. Brazilian Journal of Medical and Biological Research, 18:381-389, 1985.
- Marino Neto, J. & Sabbatini, R.M.E. - A stereotaxic atlas for the telencephalon of the Siamese fighting fish (Betta splendens). Brazilian Journal of Medical and Biological Research, 21(5): 971-986, 1988
- Garcia-Cairasco, N. & Sabbatini, R.M.E. - Neuroethological evaluation of audiogenic seizures in hemidetelencephalated rats. Behavioural Brain Research, 33: 65-77, 1989.
- Garcia-Cairasco, N.; Sabbatini, R.M.E. - Possible interaction between the inferior colliculus and the substantia nigra in audiogenic seizures in rats. Physiology and Behavior, 50(2): 421-427, 1991.

FORTHCOMING PUBLICATIONS

- Sabbatini, R.M.E. - "Artificial Neural Networks in Biomedical Engineering". Monograph. CRC Critical Reviews in Biomedical Engineering (Ed. J. Bourne). CRC Press, 1993 (accepted for publication).

OTHER PUBLICATIONS

- Abstracts in Congress Proceedings: 151
- Editorials and Book Reviews: 30
- Technical Reports and Manuals: 95
- Articles in popular and technical magazines: 250
- Technical articles in newspapers: 975
- Translations: 43

PERSONAL REFERENCES

- Dr Marion J. Ball (Chancellor, Information Systems, University of Maryland at Baltimore, and Ex-President, International Medical Informatics Association).
- Dr Otto Rienhoff (Director, Institute of Medical Informatics, Phillips University, Bunsenstrasse 3, D-3550 Marburg, West Germany, and President, International Medical Informatics Association).
- Dr Dennis J. Protti (Director, School of Health Information Science, University of Victoria, P.O. Box 1700, Victoria, BC, Canada V8W 2Y2)
- Dr Salah Mandil (Information Systems Support Division, World Health Organization,

Geneva, Switzerland)
- Dr Sergio Mascarenhas (International College of Theoretical Physics, Chairman, College of Biophysics, P.O. Box 586, I-34100 Trieste,Italy)