



## **ROBERTO J. RODRIGUES**

+1 (301) 978 7940  
rrodrigues@ehealthstrategies.com

8040 Park Overlook Drive  
Bethesda, MD 20817  
USA

### **QUALIFICATIONS AND EXPERTISE**

- Four-decade national and international career in designing, implementing, and managing development projects involving health systems and technology; knowledge management; institutional and human resource development; national and international technical cooperation projects of the UN and multilateral agencies; and information and telecommunication systems in clinical care and service administration (health informatics, health ICT, e-Health).
- Main assets are: broad experience with biomedical, clinical, social, and education issues in health systems and healthcare; sound knowledge of scientific methodology and research; analytical thinking; extensive experience with development and technical cooperation projects; ability to carry out complex multidisciplinary projects from design to evaluation; coordination of multi-professional teams; and skills in the formulation, implementation, management, assessment, and documentation of projects and programs.
- Expertise in healthcare delivery; infrastructure development; professional education clinical data management; medical records; computerized applications; health sector project and program management; computer and telecommunication systems for direct patient care and administration in community and institutional settings. Worked at national and international philanthropic, academic, and government health and healthcare organizations.
- Held leading positions in international technical cooperation agencies being in charge of projects aimed at the design and deployment of health sector information and communication technologies in Latin America and the Caribbean including pioneer work in the application of those technologies.
- Independent consultant for projects to the following organizations: Dirección de Sanidad de la Armada de Chile (Chilean Naval Hospital of Las Salinas), INTECH Inc, DIRSI - Regional Dialogue on the Information Society (Latin America), Fonemed, UN Economic Commission for Latin America and the Caribbean, Organization of the American States, International Atomic Energy Agency, World Health Organization, and the World Bank.
- Eighty-two publications in the following areas: health informatics and information and communication systems and technologies (63); management (4); clinical medicine (13); pharmacology (1); and military medicine (1). Participation and speaker at national and international scientific and professional societies technical meetings, conferences, and symposia.

## PROFESSIONAL CAREER OVERVIEW

Medical education and training focused on basic research and patient care (emergency and intensive care services). Graduate from the University of São Paulo School of Medicine, Brazil. Was a Resident at the Hospital das Clínicas, University of São Paulo School of Medicine. Awarded with a Fulbright Scholarship from the U.S, Department of State for the period 1967-1970. Resident Physician at the Jewish Memorial Hospital, New York, and at the Beth Israel Medical Center, Mount Sinai School of Medicine, City University of New York. Was a Visiting Researcher at the Medical Informatics Department, Karolinska Hospital, Stockholm. American Board of Surgery Certification with eighteen years of clinical practice in the U.S. and Brazil. Professional career defined by three phases:

### **Period 1974-1990**

Was Assistant Director of Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo and Chief Physician of the Intensive Care Unit, Hospital Gastroclínica, São Paulo.

Was responsible for the design and implementation of a pioneer clinical and administrative information systems in public and private hospitals and care systems in Brazil (Technical Support Services, Hospital das Clínicas, University of São Paulo School of Medicine; Hospital Care Coordination Office, Secretary of Health, Government of the State of São Paulo; Department of Informatics, Secretary of Planning, National Social Security Health Care Administration/INAMPS, Rio de Janeiro; and Hospital Sírio-Libanês, São Paulo).

Multiple short-term and medium-term consulting assignments with intergovernmental institutions (World Health Organization and Pan American Health Organization) and national organizations (Hospital Information Systems for the Chilean Naval Hospital of Las Salinas, Valparaiso, Chile); and a multilateral agency (World Bank).

Established and chaired postgraduate courses for health professionals on Health Information Systems at the Health Services Administration Specialization Course, University of São Paulo School of Public Health; courses on Information Systems in Health Care Administration at the PROAHSA/Fundação Getúlio Vargas, São Paulo; and on Computer Sciences at the Microcomputer Laboratory, PROAHSA/Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo.

### **Period 1991-2003**

Was full-time staff professional with the Pan American Health Organization/World Health Organization in Barbados, W.I. and Washington DC responsible for technical cooperation with WHO Member States in the Region of the Americas in the area of health services information technology applications, policy, strategy, project design, development, and evaluation. During the period successfully organized or assisted the preparation and conduction of major global and regional technical meetings. During this period held academic appointments teaching health informatics at the Science, Technology and International Affairs Program, Edmund A. Walsh School of Foreign Service, Georgetown University, Washington D.C. and the School of Nursing, Johns Hopkins University, Baltimore. Retired from the Pan American Health Organization in January 2003.

### **Period 2003-2014**

From 2003 to 2007, full-time contracted consultant for PAHO/WHO in the pioneer development and implementation of knowledge management methodologies and enabling technologies in the context of technical cooperation initiatives and the mandates of PAHO/WHO. The program was widely shared by WHO Regional Offices.

Since 2003, through eHealthStrategies ([www.ehealthstrategies.com](http://www.ehealthstrategies.com)) worked as advisor or short-term consultant in projects for INTECH Inc., Fonemed, UN Economic Commission for Latin America and the Caribbean, Organization of the American States, International Atomic Energy Agency, World Health Organization, and the World Bank.

## DETAILED CURRICULUM VITAE

	Page
1. Education	3
2. Professional experience – Institutional long-term posts	4
3. Professional experience – Short-term appointments	4
4. Professional experience – Academic appointments	5
5. Licensure and professional certifications	6
6. Scholarships and awards	6
7. Military service	6
8. Membership in professional/scientific associations, committees, and other affiliations	7
9. Language skills	8
10. Areas of expertise and key achievements in the field of health informatics	9
11. Timeline of long-term institutional and academic employment - Period 1973-2007	10
12. Tag cloud and web references for Roberto J Rodrigues	12
13. Publications	13
Annex I. Details of achievements in the field of health informatics	19

### 1. EDUCATION

- (1) MEDICAL DEGREE (1964), University of São Paulo School of Medicine, São Paulo, Brazil
- (2) SURGICAL RESIDENT (1965-1966), Third Surgical Service, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo
- (3) ROTATING INTERNSHIP (1967-1968), Jewish Memorial Hospital, New York
- (4) ASSISTANT RESIDENT IN SURGERY (1968-1969), Jewish Memorial Hospital, New York
- (5) RESIDENT IN SURGERY (1969-1972), Beth Israel Medical Center, City University of New York, New York
- (6) CHIEF RESIDENT IN SURGERY (1973), Beth Israel Medical Center, City University of New York, New York
- (7) FELLOW IN SURGERY AND PHYSICIAN IN CHARGE (1973-1974) Surgical Intensive Care Unit, Beth Israel Medical Center, City University of New York, New York
- (8) VISITING RESEARCHER (1975), Medical Informatics Department, Karolinska Hospital, Stockholm.

## 2. PROFESSIONAL EXPERIENCE – INSTITUTIONAL LONG-TERM POSTS

- (1) LONG-TERM CONSULTANT (2003-2007), Information and Knowledge Management Area, Pan American Health Organization, Washington D.C.
- (2) REGIONAL ADVISOR, HEALTH SERVICES INFORMATION TECHNOLOGY (1999-2003), Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC
- (3) COORDINATOR, HEALTH SERVICES INFORMATION SYSTEMS PROGRAM (1995-1999), Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC
- (4) HEALTH INFORMATION SYSTEMS ADVISOR (1991-1995), Pan American Health Organization/World Health Organization Caribbean Program Coordination Office, Bridgetown, Barbados, W.I.
- (5) TECHNICAL OFFICER (1988-1990). Hospital Statistical System, São Paulo State Health Secretariat, São Paulo
- (6) CHIEF INFORMATION OFFICER (1987-1990), Hospital Sírio-Libanês, São Paulo
- (7) COORDINATOR (1983) São Paulo Metropolitan Health Program Project Preparation Team, São Paulo State Health Secretariat and World Bank, São Paulo
- (8) COORDINATOR (1982) Department of Informatics, Secretary of Planning, National Social Security Health Care Administration (INAMPS), Rio de Janeiro
- (9) ASSISTANT DIRECTOR <ASSISTENTE DE PLANEJAMENTO E CONTROLE III> (1975-1981 and 1984-1988) Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo
- (10) PHYSICIAN IN CHARGE (1975-1977) Intensive Care Unit, Hospital Gastroclínica, São Paulo
- (11) ATTENDING PHYSICIAN (1974) Emergency Services Department, Gouverneur Hospital, Board of Health of the City of New York

## 3. PROFESSIONAL EXPERIENCE – SHORT-TERM APPOINTMENTS

- (1) SHORT TERM CONSULTANT (2014), conducted evaluation of PAHO Health Information Platform (PHIP) for the Communicable Diseases and Health Analysis Unit, Health Information and Analysis. Pan American Health Organization, Regional Office of the World Health Organization. Washington D.C.
- (2) CONSULTANT (2011), conducted evaluation of the Agency's Programme of Action for Cancer Therapy projects directed to the integration of radiotherapy into comprehensive cancer control programmes. Programme Evaluation and Management Services Section, Office of Internal Oversight Services (OIOS) of the International Atomic Energy Agency, Vienna, Austria
- (3) CONSULTANT (2010), conducted evaluation of the functional and structural setting of the Agency's National Liaison Officers and their role and responsibilities in the Technical Cooperation programs. Office of Internal Oversight Services (OIOS) of the International Atomic Energy Agency, Vienna, Austria
- (4) SHORT TERM CONSULTANT (2010), as member of project preparation mission for the World Bank (P.O. No.: 0007749948) related to the Federal University Hospitals Improvement Project of the Ministry of Education Secretariat of Tertiary Education (SESu), Federal Republic of Brazil

- (5) SHORT TERM CONSULTANT (2009), conducted project assessment mission for the World Bank (P.O. No.: 0007746239) related to the Electronic Health Record Service Project for the State Secretary of Health, Minas Gerais, Brazil
- (6) CONSULTANT (2009), conducted assessment of the national Telehealth Plan for Colombia, a component of the National Plan for Information and Communication of the Ministerios de Comunicaciones y de la Protección Social, Bogotá, Colombia
- (7) CONSULTANT (2008), conducted assessment of national and interregional technical cooperation activities for the Office of Internal Oversight Services (OIOS) of the International Atomic Energy Agency, Vienna, Austria
- (8) SHORT TERM CONSULTANT (2007), deployment of Web-based conferencing services including technology infrastructure, preparation of manuals and user training. World Health Organization Regional Office for Africa, Brazzaville, Republic of Congo
- (9) CONSULTANT (2007), conducted project assessment missions related to Information and Knowledge Management (Latvia) and to Nuclear Medicine (ten Latin American countries) for the International Atomic Energy Agency, Vienna, Austria
- (10) CONSULTANT (2007), preparation of white paper on Information Technology in Health for DIRSI - Regional Dialogue on the Information Society (Latin America), Lima, Peru
- (11) SENIOR CONSULTANT (2003-2007), The Institute for Technical Cooperation in Health Inc. (INTECH), a non-profit consulting group, Potomac, MD, USA
- (12) SHORT-TERM CONSULTANT (1990) on Health Information Systems, Pan American Health Organization, Trinidad and Tobago.
- (13) SHORT-TERM CONSULTANT (1990) on Health Information Systems, Pan American Health Organization, HSD, Washington, D.C.
- (14) SHORT-TERM CONSULTANT (1989) on Hospital Information Systems, Pan American Health Organization, Hospital de Clínicas de La Universidad Mayor de San Andres, La Paz, Bolivia
- (15) TEMPORARY ADVISER (1988) on Health Informatics Policies, Pan American Health Organization, Washington, USA
- (16) CONSULTANT (1987-1988) on Hospital Information Systems for the Dirección de Sanidad de la Armada, Primera Zona Naval (Chilean Naval Hospital Project of Las Salinas), Valparaíso, Chile
- (17) SHORT-TERM CONSULTANT (1988) on Health Information Systems, Pan American Health Organization, Grenada, West Indies
- (18) TEMPORARY ADVISER (1987) on Health Informatics, World Health Organization, Geneva, Switzerland
- (19) SHORT-TERM CONSULTANT (1985) on Health Care Systems, Pan American Health Organization, Lima, Peru
- (20) CONSULTANT (1981) National Commission on Medical Residency Programs, Ministry of Education and Culture, Brasília, Brazil

#### **4. PROFESSIONAL EXPERIENCE – ACADEMIC APPOINTMENTS**

- (1) ADJUNCT FACULTY (2001-2007) School of Nursing, Johns Hopkins University, Baltimore
- (2) ADJUNCT PROFESSOR (2002-2003) Science, Technology and International Affairs Program, Edmund A. Walsh School of Foreign Service, Georgetown University, Washington D.C.

- (3) PROJECT COORDINATOR (1990), Microcomputer Laboratory, Discipline of Hospital Administration, University of São Paulo School of Public Health
- (4) HEAD (1987-1990) Discipline of Health Information Systems at the Health Services Administration Specialization Course, University of São Paulo School of Public Health
- (5) COORDINATOR (1984-1988) Microcomputer Laboratory, PROAHSA/Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo
- (6) HEAD (1977-1990) Information Systems in Health Care Administration, PROAHSA/Fundação Getulio Vargas, São Paulo
- (7) INSTRUCTOR (1986-1987) Discipline of Medical Informatics, University of São Paulo School of Medicine
- (8) INSTRUCTOR OF SURGERY (1973-1974) Mount Sinai School of Medicine, City University of New York, New York

## 5. LICENSURE AND PROFESSIONAL CERTIFICATIONS

- (1) MEDICAL LICENSURE
 

(1965) São Paulo State, Brazil	(# 11 536)
(1974) New York State, U.S.A.	(# 122 460)
(1983) Rio de Janeiro State, Brazil	(# 52 40699-6)
- (2) CERTIFICATION (1966) Educational Council for Foreign Medical Graduates, Standard Certificate # 079005
- (3) DIPLOMATE, AMERICAN BOARD OF SURGERY (1976) Specialty Certification in Surgery Certification, Certificate # 21 728
- (4) CERTIFICATION (1978) Educational Council for Foreign Medical Graduates, Visa Qualifying Examination

## 6. SCHOLARSHIPS AND AWARDS

- (1) FULBRIGHT-HAYS TRAVEL GRANT, U.S. Department of State (1967)
- (2) NORMAN STOLLER AWARD (1969-1970) Beth Israel Medical Center, New York
- (3) LEON GINZBURG AWARD (1970-1971) Beth Israel Medical Center, New York
- (4) PHYSICIAN'S RECOGNITION AWARD FOR CONTINUING MEDICAL EDUCATION (1970-1973) American Medical Association
- (5) ABRAMGE AWARD (1985) First Prize on the National Contest of Essays on Social Medicine promoted by the Associação Brasileira de Medicina de Grupo (ABRAMGE), São Paulo

## 7. MILITARY SERVICE

RESERVE OFFICERS TRAINING CORPS, Army Medical Services, São Paulo (1960/1964)

PHYSICIAN, 2nd Region Army Military Hospital (Hospital Geral 2a. Região Militar), São Paulo, 1964

## 8. MEMBERSHIP IN PROFESSIONAL/SCIENTIFIC ASSOCIATIONS, COMMITTEES, AND OTHER AFFILIATIONS

- (1) ACTIVE MEMBER (1972) New York Academy of Sciences, New York
- (2) MEMBER (1972) American Federation for Clinical Research
- (3) FOUNDING MEMBER (1973) American Trauma Society
- (4) FELLOW (1974) American Society of Abdominal Surgeons
- (5) ACTIVE MEMBER (1976) Société Internationale de Chirurgie
- (6) FOUNDING MEMBER (1977) São Paulo Intensive Care Society (SOPATI)
- (7) MEMBER STATE REPRESENTATIVE (1983-1990) International Medical Informatics Association (IMIA), affiliated to the International Federation of Information Processing (IFIP)
- (8) VICE-PRESIDENT (1983-1986) Federación Regional de Informatica de Salud para la America Latina y el Caribe (IMIA-LAC) affiliated to the International Medical Informatics Association
- (9) MEMBER (1983-1991) Steering Committee, Working Group 9 (Health Informatics and Development), International Medical Informatics Association
- (10) MEMBER, EDITORIAL BOARD (1984-1999) "Methods of Information in Medicine", Springer Verlag
- (11) MEMBER (1986) Scientific Program Committee, MEDINFO 86, Washington
- (12) FOUNDING MEMBER (1986) Brazilian Society for Health Informatics (Sociedade Brasileira de Informática em Saúde)
- (13) PRESIDENT (1986-1988) Brazilian Society for Health Informatics (Sociedade Brasileira de Informática em Saúde)
- (14) PRESIDENT (1986-1990) Federación Regional de Informatica de Salud para la America Latina y el Caribe (IMIA-LAC) affiliated to the International Medical Informatics Association
- (15) VICE-PRESIDENT (1986-1990) International Medical Informatics Association (IMIA), affiliated to the International Federation of Information Processing (IFIP)
- (16) PRESIDENT (1988) of the Second Brazilian Congress on Health Informatics, São Paulo
- (17) MEMBER OF THE BOARD (1988-present), Board of Trustees, Brazilian Society for Health Informatics (Sociedade Brasileira de Informática em Saúde)
- (18) CHAIRMAN (1989-1990) Membership Committee (Committee # 7) International Medical Informatics Association
- (19) MEMBER, EDITORIAL BOARD (1998-2006) Journal of Medical Internet Research
- (20) SCIENTIFIC REVIEWER (1998-present) Bulletin of the Pan American Health Organization, later the Pan American Journal of Public Health
- (21) CORRESPONDING EDITOR (1999-present) Journal of the Brazilian Health Informatics Society
- (22) SCIENTIFIC REVIEWER (1999-present) Bulletin of the World Health Organization
- (23) MEMBER, BOARD (1999-2001) Internet Healthcare Coalition, Washington, D.C.

- (24) EXTERNAL LIAISON AND REVIEWER (1998) Science Panel on Interactive Communication and Health, Office of Disease prevention and Health promotion, U.S. Department of Health and Human Services, Washington, D.C., resulting in the publication of the report Wired for Health and Well-Being (Eng, T.R. and Gustafson, D.H., Editors), U.S. Government Printing Office, April 1999
- (25) MEMBER (1999) AdHoc Review Committee for Research Projects on Training in Medical Informatics, Fogarty International Center, National Library of Medicine, National Institutes of Health, Washington, D.C.
- (26) MEMBER (2000), Scientific Program Committee, Eight National and Sixth International Conference on Information Technology in Community Health (ITCH2000), August 23-27, University of Victoria, Victoria, B.C., Canada
- (27) MEMBER (2000), Scientific Program Committee, Seventh Brazilian Congress of Health Informatics (CBIS2000) and Second International Symposium on Hospital Information Systems (SISIH2000), October 14-18, Centro de Convenções Rebouças, São Paulo, SP., Brazil
- (28) MEMBER (2000), Judging Panel for the Second Annual eHealthcare World Awards 2000 Program, eHealthcare World New York 2000 Conference, Jacob K. Javits Center, December 6-4, New York
- (29) MEMBER (2000), Pan American Health Organization Strategic Planning Working Group, charged with the development of strategic plan for the organization for the period 2003-2007
- (30) MEMBER (2004), Special Emphasis Panel for Review of Research Projects Applications on Informatics Training for Global Health (RFA TW-03-008), Fogarty International Center, National Library of Medicine, National Institutes of Health, Washington, D.C.
- (31) TREASURER (2007-2009), Maryland Bethesda-Chevy Chase Chapter , Isaak Walton League of America
- (32) PEER REVIEWER (2007). Ethics Review Committee (PAHOERC), Pan American Health Organization, Washington, D.C.
- (33) MEMBER (2013). Global Health International Advisors (GHIA), Washington, D.C.
- (34) MEMBER (2014). Program Committee, Sixth International Conference on Knowledge Management and Information Sharing (KMIS 2014). October 21-24, 2014, Rome, Italy

## 9. LANGUAGE SKILLS

Portuguese (mother language)  
 English (as well as mother language)  
 Spanish (nearly as well as mother language)  
 French (limited speaking, advanced reading)

**10. AREAS OF EXPERTISE AND KEY ACHIEVEMENTS IN THE FIELD OF HEALTH INFORMATICS  
(REFER TO ANNEX I FOR DETAILS OF PROJECTS, ACTIVITIES, AND RELATED PUBLICATIONS)**

Clinical Data Processing

- *Signal Analysis*
- *Bedside Physiological Data Processing*
- *Clinical Data Representation*
- *Palmtop for Field Health Data Capture*

Medical Records and Patient Data Management

- *Structured Intensive Care Medical Record*
- *Computerized Hospital Patient Record*
- *Computerized Clinical and Administrative Auditing*
- *Information and Evidence-based Practice*
- *Nursing Information System*
- *Electronic Health Record*
- *Electronic Health Cards (SmartCards)*

Hospital Information System Design, Development, and Implementation

- *Large-scale Hospital Information System*
- *Medium-scale Hospital Information System*
- *National Integrated System*

Reimbursement System for Health Service Providers

- *National Public Reimbursement System*

Primary Care Information Systems Design, Development, and Implementation

- *Information Applications for Local Health Systems*
- *Primary Care Information System*
- *Health Survey Methodology*
- *Systems for New Modalities of Clinical Practice*

Health Information System Project Management and Assessment

- *Specification, Development, Deployment and Operation*

Human Resource Development

- *Education and Training of Health Professionals*

Data Security and Personal Data Protection

- *Privacy and Health Data Repositories*
- *Legal and Regulatory Issues*

Health Services Production and Utilization Information System

- *Computerized Hospital Performance System*

Knowledge Management

- *Institutional Knowledge Management Solutions*





## 12. TAG CLOUD AND WEB REFERENCES FOR ROBERTO J RODRIGUES (APRIL 2010)



Tag cloud generated by <http://www.123people.com/>

The tag cloud shows attributes that are most often connected to Roberto J Rodrigues. The tag cloud visualizes general information connected to the named individual. The size of the word shown indicates the degree of relevance of the topic in connection to the person. 123people computes the items in the tag cloud from search results found in classical search engines such as Yahoo and others. Find information on how tag clouds work by clicking here: <http://en.wikipedia.org/wiki/Tagcloud>

### WorldCat

<http://www.worldcat.org/wcidentities/lccn-no2002-16409>

### Scribd

<http://www.scribd.com/rodrigur8036/documents>

### 13. PUBLICATIONS

- (1) Marin, H; Massad, E; Gutierrez, MA; Rodrigues, RJ and Sigulem, D [Editors]. Global Health Informatics: How Information Technology Can Change Our Lives in a Globalized World, 1st Edition. Academic Press. 312 p, 2016, ISBN-10: 0128045914 ISBN-13: 978-0128045916
- (2) Rodrigues, RJ. Compelling issues for adoption of e-health. The Commonwealth Health Ministers Reference Book 2008, pages 36-40. Published by the Henley Media Group Limited. Commonwealth Secretariat, Marlborough House, Pall Mall, London ISBN 97 80955 44086 1
- (3) Pan American Health Organization. Information and Knowledge Sharing: Report of Task Force No. 4 [Rapporteur]. Area of Information and Knowledge Management (DD/IKM). Washington D.C., 93 p, 2005
- (4) Organization of American States. Telehealth in the Americas. Inter-American Telecommunication Commission (CITEL), in collaboration with the Telecommunication Development Bureau of the International Telecommunication Union (ITU), the Pan American Health Organization (PAHO/WHO), and the Latin American Association of Research Centers and Telecommunication Enterprises (AHCJET). [Collaborator]. Publication OEA/Ser.L/XVII.6.4, December 16, 2003, Washington D.C., 56 p, ISBN 0-8270-4614-6
- (5) Rodrigues, RJ. Opportunities and Challenges in the Deployment of Global e-Health. Int J Healthcare Technology and Management 5(3/4/5): 335-358, 2003
- (6) Rodrigues, RJ. Deploying e-Health Solutions in Latin America and the Caribbean: Development and Policy Issues. Proceedings of the International Telecommunications Union Telecom World 2003, Forum PL11: Workshop on Telemedicine. October 12-18, 2003. Geneva, Switzerland
- (7) Ramsaroop, P; Stull, R; Rodrigues, RJ and Hernandez, A. Cybercrime, Cyberterrorism, and Cyberwarfare: Critical Issues in Data Protection for Health Services. Information System Technology and Health Services Delivery, Health Services Organization Unit (THS/OS), Pan American Health Organization, Washington, DC, 2003, 85 p. ISBN 92 75 12464 7
- (8) Rodrigues, RJ; Oliveri, NC; Monteagudo, JL; Hernández, A and Sandor, T (Editors). e-Salud en Latinoamérica y el Caribe: Tendencias y Temas Emergentes. Organización Panamericana de la Salud en colaboración con Fundación de Informática Médica (Miami, FL) y Instituto de Salud Carlos III, Ministerio de Sanidad y Consumo (Madrid), Washington, DC, 2003, 208 p. ISBN 92 75 32462 X
- (9) Rienhoff, O; Rodrigues, RJ; Piccolo, U.; Hernandez, A and Oliveri N. Tarjetas de Datos Sanitarios con Circuito Integrado (Tarjetas Inteligentes): Manual para los Profesionales de la Salud. Área de Tecnología y Prestación de Servicios de Salud, Unidad de Organización de Servicios de Salud, Organización Panamericana de la Salud (THS/OS), Washington, DC, 2003, 118 p. ISBN 92 75 12463 8
- (10) Rienhoff, O; Rodrigues, RJ; Piccolo, U.; Hernandez, A and Oliveri N. Integrated Circuit Health Data Cards (Smart Cards): A Primer for Health Professionals. Technology and Health Services Delivery, Health Services Organization Unit (THS/OS), Pan American Health Organization, Washington, DC, 2003, 102 p. ISBN 92 75 12463 9
- (11) Rodrigues, RJ and Risk, A. eHealth in Latin America and the Caribbean: Development and Policy Issues. Journal of Medical Internet Research 2003; 5(1):e4
- (12) Rodrigues, RJ. PEP e Bases de Conhecimento na Prática de Saúde Baseada em Evidência. In: O Prontuário Eletrônico do Paciente na Assistência, Informação e Conhecimento Médico. Massad, E; Marin, HF; Azevedo Neto, RS (Editors). Faculdade de Medicina da Univ de S Paulo, Univ Federal de S Paulo, and Organização Pan Americana da Saúde. São Paulo, Brazil, 2003. ISBN 85 903267 1 3
- (13) Rodrigues, RJ. e-Health. In: Building an Information Society: A Perspective from Latin America and the Caribbean, Hilbert, M and Katz, J (Editors). Libros de la CEPAL series No. 72 (LC/G.2199-P), United Nations Economic Commission for Latin America and the Caribbean, Santiago, Chile 2002

- (14) Rodrigues, RJ; Wilson, P and Schanz, SJ. The Regulation of Privacy and Data Protection in the Use of Electronic Health Information: An International Perspective and Reference Source on Regulatory and Legal Issues Related to Person-Identifiable Health Databases. Pan American Health Organization, Washington DC, 2001, 217 p ISBN 92 75 12385 3
- (15) Pan American Health Organization. Information Technology in the Health Sector of Latin America and the Caribbean: Challenges and Opportunities for the International Technical Cooperation. Division of Health Systems and Services Development, Essential Drugs and Technology Program, Washington DC, 2001, 32 p. ISBN 92 75 12381 0
- (16) Marin, HF; Rodrigues, RJ; Delaney, C; Nielsen, GH and Yan, J (Editors). Building Standard-Based Nursing Information Systems. Pan American Health Organization, Washington DC, 2001, 141 p. ISBN 92 75 12364 0
- (17) Marin, HF; Rodrigues, RJ; Delaney, C; Nielsen, GH and Yan, J (Editors). Desarrollo de Sistemas Normalizados de Información de Enfermería. Organización Panamericana de la Salud, Washington DC, 2001, 160 p. ISBN 92 75 12364 X
- (18) Martínez, A; Rodrigues, RJ; Infante, A; Campillo, C and Gattini, C. Bases Metodológicas para Evaluar la Viabilidad y el Impacto de Proyectos de Telemedicina. Universidad Politécnica de Madrid and Pan American Health Organization, Washington DC, 2001, 138 p. ISBN 92 75 32363 1
- (19) Rodrigues, RJ; Sigulem, D; Anção, M; Albuquerque, RH and Aubers, ACT. Palmtop Computers for Field Data Capture and Transport in Community Health and Public Health Practice and Research. In Proceedings of the Eight National and Sixth International Conference on Information Technology in Community Health (ITCH2000), University of Victoria, Victoria, B.C., Canada, August 23-27, 2000. ISBN 1 55058 216 X
- (20) Rodrigues, RJ. Information Systems and Evidence-based Practice. In: Proceedings of the Eight National and Sixth International Conference on Information Technology in Community Health (ITCH2000), University of Victoria, Victoria, B.C., Canada, August 23-27, 2000. ISBN 1 55058 216 X
- (21) Rodrigues, RJ. Ethical and Legal Issues in Interactive Health Communications: A Call for International Cooperation (Editorial). Journal of Medical Internet Research 2 (1): March 2000
- (22) World Health Organization. Investing in Evidence and Information Base: a WHO Strategy to Support Member States. A Report on an Informal Consultative Meeting 11-12 May 2000, WHO-HQ, Geneva
- (23) Rodrigues, RJ. Telemedicine and the Transformation of Healthcare Practice in the Information Age. In: Speakers' Book of the ITU Telecom Americas 2000 Telecom Development Symposium, Session TDS.2, Rio de Janeiro April 10-15, 2000, pag 91-105
- (24) Rodrigues, RJ. Information Systems: the Key to Evidence-based Health Practice. Bull World Health Org 78 (11): 1344-1351, 2000
- (25) Rodrigues, RJ; Gattini, C; and Almeida, G (Editors). Setting Up Healthcare Services Information Systems: A Guide for Requirement Analysis, Application Specification, and Procurement. Pan American Health Organization Essential Drugs and Technology Program, Division of Health Systems and Services Development. PAHO/WHO, Washington, D.C., July 1999, ISBN 92 75 12266 0
- (26) Pan American Health Organization. Information Systems and Information Technology in Health: Challenges and Solutions for Latin America and the Caribbean. Health Services Information Systems Program, Division of Health Systems and Services Development. PAHO/WHO, Washington, D.C. April 1998. ISBN 92 75 12246 6
- (27) Pan American Health Organization. Sistemas de Información y Tecnología de Información en Salud: Desafíos y Soluciones para América Latina y el Caribe. Programa de Sistemas de Información sobre Servicios de Salud, División de Desarrollo de Sistemas y Servicios de Salud. OPS/OMS, Washington, D.C., Abril 1998. ISBN 92 75 12246 6

- (28) Krasnow, D and Rodrigues, RJ. International Perspective. In: Telemedicine : Practicing in the Information Age, Viegas, SF and Dunn, K (Editors), Lippincott-Raven Publishers, June 1998, ISBN: 0397518439
- (29) Rodrigues, RJ; Crawford, C; Koss, S and McDonald, M. Telecommunications in Health and Healthcare for Latin America and the Caribbean. Series Health Services Information Systems/ HSP, No. 1, PAHO/WHO, 1997
- (30) Rodrigues, RJ. Health Systems in an Environment of Change. In: Internet, Telematics and Health, IOS Press & Ohmsha, Amsterdam, page 55-60, 1997 ISBN 90 5199 289 0
- (31) Rodrigues, RJ. El Desarrollo de Sistemas de Información para la Salud en un Ambiente de Cambio. In Internet, Telemática y Salud, Editorial Medica Panamericana, Buenos Aires, page 63-68, 1997 ISBN 950 06 1615 7
- (32) Rodrigues, RJ. Information Systems Development and Health Sector Reform. In: Proceedings of the Sixth National and Fourth International Conference on Information Technology and Community Health (ITCH96), November 3-6, 1996, Victoria, Canada, page 2-7
- (33) Rodrigues, RJ; Oxman, G; Israel, K and Priale, R. Marco Conceptual y Pautas para el Establecimiento de Sistemas Locales de Información. HSS/SILOS/UNI Volumen 8, PAHO/WHO, 1995
- (34) Rodrigues, RJ and Israel, K. Conceptual Framework and Guidelines for the Establishment of District-Based Information Systems. PAHO/WHO Office of Caribbean Program Coordination, Bridgetown, 1995 Publication PAHO/CPC/3.1/95.1 ISBN 976-8083-75-1
- (35) Mandil, SH; Ibrahim, A; Moidu, K; and Rodrigues, RJ. The Development and Enhancement of the National Health Information System of Kuwait (NHIS/Kuwait). Consultancy Report, World Health Organization, Geneva, Doc WHO/AOI/94.9, December 1994
- (36) Rodrigues, RJ and Malik, AM (Editors). Preparing Health Care Managers for a Changing World - What is our Role?. Proceedings of the International Seminar in Health Administration, University of Chile. W.K.Kellogg Foundation and INSORA. Santiago Oct 1-7, 1993 ISBN 9 567424 01 2
- (37) Rodrigues, RJ; Israel, K and Wickramasuriya, TV. A Reference Manual on Health Survey Methodology for Use by Community Health Services Professionals. PAHO and Inter American Development Bank, Bridgetown, August 1993
- (38) Rodrigues, RJ and Gohman, S. Case Mix Indicators for Monitoring Utilization and Performance of Health Care Services. In Proceedings of the British Computer Society Conference "Healthcare Computing 1990", Brighton, U.K., 2 4 April, 1990
- (39) Rodrigues, RJ and Gohman, S. Sistemas de Informação para Gestão dos Sistemas Locais de Saúde. Bol Of Sanit Panam 109 (5 6):488 501, 1990
- (40) Rodrigues, RJ. Microcomputers and Hospital Information Systems. In: Towards New Hospital Information Systems, Proceedings of the IFIP IMIA Working Conference, Nijmegen, The Netherlands. North Holland, page 227 233, 1988
- (41) Rodrigues, RJ. O Componente Ensino na Formação de Recursos Humanos em Informática em Saúde. Rev Bras Informatica Saúde 1 (5):10 11, 1988
- (42) World Health Organization. Informatics and Telematics in Health: Present and Potential Uses (as Collaborator), Geneva, 1988 ISBN 92 4 156117 3
- (43) Rodrigues, RJ. A Informatização da Sociedade e das Organizações. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 13 19, Livraria Pioneira Editora, São Paulo, 1987
- (44) Rodrigues, RJ. Informática na Area da Saúde. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 27 33, Livraria Pioneira Editora, São Paulo, 1987

- (45) Rodrigues, RJ. Informática na Prática Clínica e na Administração Hospitalar. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 35 44, Livraria Pioneira Editora, São Paulo, 1987
- (46) Rodrigues, RJ. Planejamento, Desenvolvimento e Contrôlo do Sistema de Informação. In Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 45 57, Livraria Pioneira Editora, São Paulo, 1987
- (47) Rodrigues, RJ. O Ensino de Microinformática para Profissionais de Saúde: a Experiência do PROAHSA. Rev Bras Informatica em Saude 1:8 14, 1986
- (48) Rodrigues, RJ. Introducing Microcomputers to Health Professionals in a Large Public Hospital Environment. In: Proceedings of the Fifth Conference on Medical Informatics (MEDINFO 86), Salamon/Blum/Jorgensen (Editors), IFIP IMIA, North Holland, pages 380 384, 1986
- (49) Rodrigues, RJ. Metodologia para la Formulación de Proyectos de Salud. Documento Tecnico, Organización Pan Americana de la Salud, Lima, Peru, 1985
- (50) Rodrigues, RJ; Montandon, AA; Jouval, H and Galvão Lobo, LC. The Role of Information Processing in the Reorganization of the Social Security Health Care System of Brazil. In: Van Eimeren,W; Engelbrecht,R and Flage,CD (Editors) Proceedings of the Third International Conference on System Science in Health Care, pages 1291 1293, 1984
- (51) Rodrigues, RJ. The Human Element in Systems Development. In: De Talens,AFP et al. (Editors) Health Informatics and Developing Countries: Experiences and Viewpoints. Proceedings of the IFIP IMIA World Congress on Medical Informatics and Developing Countries, North Holland Publishing Company, pages 139 147, 1983
- (52) Rodrigues, RJ. Informação, Computadores e Sistemas de Saúde. In Lima Gonçalves,E (Editor) O Hospital e a Visão Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 183 201, 1983
- (53) Rodrigues, RJ. Problemas Humanos e Organizacionais no Desenvolvimento de Sistemas de Informação. In: Lima Gonçalves,E (Editor) O Hospital e a Visao Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 231 241, 1983
- (54) Rodrigues, RJ. Aplicações do Processamento de Dados na Prática Clínica e na Pesquisa Biomédica. In:Lima Gonçalves,E (Editor) O Hospital e a Visao Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 261 282, 1983
- (55) Rodrigues, RJ; Arcon, LC and Rozenbojm, J. Avaliação de Utilização e Qualidade de Serviços Médicos Auditoria da Atividade Hospitalar e Profissional no Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo. Residencia Medica 3 (1):93 120, 1981
- (56) Rodrigues, RJ. Experience with the Design and Implementation of a Large Medical Information System in a Developing Country. In: Lindberg,D and Kaihara,S (Editors) Proceedings of the Third World Conference on Medical Informatics (MEDINFO 80) Tokyo. North Holland Publishing Company, pages 1075 1078, 1980
- (57) Rodrigues, RJ. A Importancia e Objetivos da Educação de Profissionais de Saúde em Informática Médica. Vida Hospitalar 14 (2):99 100, 1980
- (58) Curado, F; Elfes, A and Rodrigues, RJ. Preliminary Report on the Problem of Knowledge Representation and Decision Process Description for Acid Base Disorders. Universidade Estadual de Campinas Instituto de Matemática, Estatística e Ciencia da Computação, Relatório Interno #148, 1979
- (59) Rodrigues, RJ. Problem Oriented Medical Record in Intensive Care. In: Acute Care -Proceedings of the 6th International Symposium on Acute Care, Rio de Janeiro. Springer Verlag, Heidelberg, pages 128 132, 1979

- (60) Rodrigues, RJ. Projeto de Processamento de Informações Clínicas e Administrativas do Hospital das Clínicas da Faculdade de Medicina da USP: Aspectos Pertinentes ao Desenvolvimento, Implantação e Gerenciamento. In: Anais do IV Simpósio de Pesquisas em Administração de Ciência e Tecnologia. FINEP/PROTAP, Faculdade de Economia e Administração da USP e Secretaria da Indústria, Comércio e Tecnologia do Estado de São Paulo, 1979
- (61) Rodrigues, RJ. Banco de Dados e Privacidade das Informações. Suplemento Cultural do "O Estado de São Paulo" ano II, volume 88 de 2 de julho de 1978, pages 12 13
- (62) Rodrigues, RJ; Arcon, LC and Pimentel, LAA. Estado Actual del Sistema de Control de Pacientes del Hospital das Clínicas. Bol Of Sanit Panam 84:493 504, 1978
- (63) Fujimura, I; Lemos, PC; Wrade, PJ; Fujimura, MD; Rodrigues, RJ and Oliveira, MR. Linfoma Primário do Estomago: Revisão da Literatura e Apresentação de Cinco Casos. Rev Paul Med 91(3-4):47-53, 1978
- (64) Rodrigues, RJ. Processamento de Dados em Medicina: o Paciente como Sistema. AMB Rev Ass Med Brasil 23:202 204, 1977
- (65) Rodrigues, RJ. Assistência Ventilatória com Aparelhos. In: Feintuch, J et al. (Editors) Manual de Pré e Pós Operatório, Editora Manole, São Paulo, Capítulo 81, pages 723 751, 1977
- (66) Rodrigues, RJ. Problemas Pulmonares em Cirurgias de Grande Porte. In: Feintuch, J et al. (Editors) Manual de Pré e Pós Operatório, Editora Manole, São Paulo, Capítulo 65, pages 567 593, 1977
- (67) Rodrigues, RJ. Fungal Septicemia in Surgical Patients. Curr Top Crit Care Med 3:185 191, 1977
- (68) Spira, IA; Rodrigues, RJ and Wolff, WI. Pseudo Obstruction of the Colon. Amer Journal of Gastroent 65:397 408, 1976
- (69) Rodrigues, RJ. Complicações da Alimentação Parenteral. In: Feintuch, J (Editor) Alimentação Parenteral Prolongada, Editora Manole, São Paulo, Capítulo XXVII, 1976
- (70) Rodrigues, RJ; Aun, F and Arcon, LC. O Prontuário Problema Orientado (PPO): Importante Passo para a Racionalização do Fluxo de Informação Médica. Rev Hosp Clin Fac Med S Paulo 31 (1):73 84, 1976
- (71) Rodrigues, RJ and Wolff, WI. Septicemia by Fungi. Comp Rend XXV Congres Soc Intern Chir, Impr Med & Scient, Bruxelles, pages 145 158, 1975
- (72) Rodrigues, RJ and Wolff, WI. Fungal Septicemia in Surgical Patients. Ann Surg 180:741 746, 1974
- (73) Rodrigues, RJ and Wolff, WI. Desk top Computer Program for Bedside Calculation of Hemodynamic Parameters. Clin Research 21:445, 1973
- (74) Rodrigues, RJ and Wolff, WI. Fungal Septicemia. Clin Research 21:610, 1973
- (75) Rodrigues, RJ. Pharmacology of South American Freshwater Stingray Venom (Potamotrigon motoro). Trans New York Acad Sci 34:677 686, 1972
- (76) Rodrigues, RJ and Lewis, HH. Eosinophilic Granuloma of Bone: Review of the Literature and Case Presentation. Clin Orth & Relat Research 77:183 192, 1971
- (77) Rodrigues, RJ; Shinya, H; Wolff, WI and Puttlitz, D. Torulopsis glabrata Fungemia during Prolonged Intravenous Alimentation Therapy. New England J Med 284:540 541, 1971
- (78) Baron, HC; Schwarz, AW; Cabaluna, W and Rodrigues, RJ. Gas endarterectomy in the Treatment of the Ischemic Lower Extremity. Arch Surg 98:754 757, 1969

- (79) Oliveira, MR; Fujimura, I; Speranzini, MB; Ferreira, AA; Branco, PD and Rodrigues, RJ. O Problema do Volvo Gástrico Idiopático: Estudo de 15 Casos. Rev Assoc Med Bras 13(5):167-174, 1967
- (80) Oliveira, MR; Speranzini, MB; Raia, A; Pires, FA; Fujimura, I; Rodrigues, RJ; Branco, PD and Widman, A. Divertículo Justa Cárdico do Estômago. Rev Hosp Clin Fac Med S Paulo 22 (2):82 89, 1967
- (81) Rodrigues, RJ. Meningioma e Gravidez. O Residente (Hosp Clin Fac Med USP) 2 (2):3 7, 1966
- (82) Rodrigues, RJ. Aspectos Modernos da Guerra Química e Biológica. Revista do Centro Preparatório de Oficiais da Reserva de São Paulo (CPOR SP), pages 128 132, 1960

## ANNEX I. DETAILS OF ACHIEVEMENTS IN THE FIELD OF HEALTH INFORMATICS

### 1 Clinical Data Processing

- **Signal Analysis** - During 1969 and 1970, while a Resident at Beth Israel Medical Center, City University of New York, New York, conducted experimentation on electrocardiographic and hemodynamic signal analysis using programmable calculators.
- **Bedside Physiological Data Processing** - During 1971 and 1972, while a Resident at Beth Israel Medical Center, City University of New York, New York, developed a mobile hemodynamic unit and wrote a program for Olivetti-101 magnetic card programmable calculator effectively bringing physiology lab resources to the patient bedside. The setup was used from mid-1971 to the end of 1972 in clinical studies and therapeutic decision making in patients with shock syndrome in a Surgical Intensive Care Unit. Related publication:

*Rodrigues, RJ and Wolff, WI. Desk top Computer Program for Bedside Calculation of Hemodynamic Parameters. Clin Research 21:445, 1973*

- **Clinical Data Representation** - During 1978 collaborated in research aimed at clinical knowledge representation in the area of acid-base disorders (ABD) and the development of logical schema to guide machine decision processes related to ABD. Project conducted at the Universidade Estadual de Campinas Instituto de Matemática, Estatística e Ciência da Computação. A segment of the project included a post-graduate student thesis. Related publication:

*Curado, F; Elfes, A and Rodrigues, RJ. Preliminary Report on the Problem of Knowledge Representation and Decision Process Description for Acid Base Disorders. Universidade Estadual de Campinas Instituto de Matemática, Estatística e Ciencia da Computação, Relatório Interno #148, 1979*

- **Palmtop for Field Health Data Capture** - In 1998 and 1999 as Coordinator, Health Services Information Systems Program, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC, collaborated with the Chair of Health Informatics, Escola Paulista de Medicina, Federal University of São Paulo in the development and field evaluation (Northeast Brazil) of a palmtop computer application for health survey data capture and transport. This was an early use of handheld data acquisition equipment that proved highly useful. Related publication:

*Rodrigues, RJ; Sigulem, D; Anção, M; Albuquerque, RH and Aubers, ACT. Palmtop Computers for Field Data Capture and Transport in Community Health and Public Health Practice and Research. In Proceedings of the Eight National and Sixth International Conference on Information Technology in Community Health (ITCH2000), University of Victoria, Victoria, B.C., Canada, August 23-27, 2000. ISBN 1 55058 216 X*

### 2. Medical Records and Patient Data Management

- **Structured Intensive Care Medical Record** - From 1975 to 1977, while at the Intensive Care Unit, Hospital Gastroclínica, São Paulo, designed and implemented a problem-oriented medical record based on the Weed model with the objective of organizing clinical data for better recording and professional communication. The record was used for all cases admitted to the ICU and was used for patient care, data mining, and resident education. Related publications:

*Rodrigues, RJ; Aun, F and Arcon, LC. O Prontuário Problema Orientado (PPO): Importante Passo para a Racionalização do Fluxo de Informação Médica. Rev Hosp Clin Fac Med S Paulo 31 (1):73 84, 1976*

*Rodrigues, RJ. Problem Oriented Medical Record in Intensive Care. In: Acute Care -Proceedings of the 6th International Symposium on Acute Care, Rio de Janeiro. Springer Verlag, Heidelberg, pages 128 132, 1979*

- **Computerized Hospital Patient Record** - From 1975 to 1977, as Assistant Director of Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo led the design and development of a patient administrative and clinical (discharge summary) computerized record as a module of the Hospital das Clínicas Information System, implemented in a mainframe system

(UNIVAC) and operated by PRODESP (State of São Paulo Data Processing Company). This project involved comparative studies of existing systems in Sweden, UK, and the US and the definition of data sets, nomenclatures, and data protection issues. The application was successfully deployed in all departments of a large 2,400-bed public academic hospital. Related publications:

*Rodrigues, RJ. Processamento de Dados em Medicina: o Paciente como Sistema. AMB Rev Ass Med Brasil 23:202 204, 1977*

*Rodrigues, RJ; Arcon, LC and Pimentel, LAA. Estado Actual del Sistema de Control de Pacientes del Hospital das Clínicas. Bol Of Sanit Panam 84:493 504, 1978*

- **Computerized Clinical and Administrative Auditing** - From 1978 to 1980, as Assistant Director of Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo led the design and development of an auditing system utilizing the patient administrative and clinical database of the Hospital das Clínicas Information System, implemented in a mainframe system (UNIVAC). The objective of the application was to support evidence-based decisions. A portfolio of standardized and ad-hoc reports were defined, generated on a regular basis, and distributed to managers and clinical directors. Related publication:

*Rodrigues, RJ; Arcon, LC and Rozenbojm, J. Avaliação de Utilização e Qualidade de Serviços Médicos Auditoria da Atividade Hospitalar e Profissional no Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo. Residencia Medica 3 (1):93 120, 1981*

- **Information and Evidence-based Practice** - As Regional Advisor, Health Services Information Technology (1999-2003), Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC promoted the use of information systems as core of evidence-based medical practice. Related publications:

*Rodrigues, RJ. Information Systems: the Key to Evidence-based Health Practice. Bull World Health Org 78 (11): 1344-1351, 2000*

*Rodrigues, RJ. Information Systems and Evidence-based Practice. In: Proceedings of the Eight National and Sixth International Conference on Information Technology in Community Health (ITCH2000), University of Victoria, Victoria, B.C., Canada, August 23-27, 2000. ISBN 1 55058 216 X*

- **Nursing Information System** - In 2000, As Regional Advisor, Health Services Information Technology, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC and in collaboration of the School of Nursing, Johns Hopkins University, Baltimore, and a team of international experts developed guidelines for the structure and nomenclature of nursing information systems. Related publications:

*Marin, HF; Rodrigues, RJ; Delaney, C; Nielsen, GH and Yan, J (Editors). Desarrollo de Sistemas Normalizados de Información de Enfermería. Organización Panamericana de la Salud, Washington DC, 2001, 160 p. ISBN 92 75 12364 X*

*Marin, HF; Rodrigues, RJ; Delaney, C; Nielsen, GH and Yan, J (Editors). Building Standard-Based Nursing Information Systems. Pan American Health Organization, Washington DC, 2001, 141 p. ISBN 92 75 12364 0*

- **Electronic Health Record** - In 2002, as Regional Advisor, Health Services Information Technology, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC, researched and produced guidelines for the design of patient electronic health record. Related publication:

*Rodrigues, RJ. PEP e Bases de Conhecimento na Prática de Saúde Baseada em Evidência. In: O Prontuário Eletrônico do Paciente na Assistência, Informação e Conhecimento Médico. Massad, E; Marin, HF; Azevedo Neto, RS (Editors). Faculdade de Medicina da Univ de S Paulo, Univ Federal de S Paulo, and Organização Pan Americana da Saúde. São Paulo, Brazil, 2003. ISBN 85 903267 1 3*

- **Electronic Health Cards (SmartCards)** - In 2002, as Regional Advisor, Health Services Information Technology, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC, in collaboration with international experts (University of

Göttingen, Germany and the Fundación de Informatica Medica, Miami) researched and produced guidelines for the design and implementation of integrated circuit data cards. Related publications:

*Rienhoff, O; Rodrigues, RJ; Piccolo, U.; Hernandez, A and Oliveri N. Tarjetas de Datos Sanitarios con Circuito Integrado (Tarjetas Inteligentes): Manual para los Profesionales de la Salud. Área de Tecnología y Prestación de Servicios de Salud, Unidad de Organización de Servicios de Salud, Organización Panamericana de la Salud (THS/OS), Washington, DC, 2003, 118 p. ISBN 92 75 12463 8*

*Rienhoff, O; Rodrigues, RJ; Piccolo, U.; Hernandez, A and Oliveri N. Integrated Circuit Health Data Cards (Smart Cards): A Primer for Health Professionals. Technology and Health Services Delivery, Health Services Organization Unit (THS/OS), Pan American Health Organization, Washington, DC, 2003, 102 p. ISBN 92 75 12463 9*

### 3. Hospital Information System Design, Development, and Implementation

- **Large-scale Hospital Information System** - From 1975 to 1981 as Assistant Director of Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo, was the leader of the health professional team charged with the design, development, implementation, and operation of a pioneer large Hospital Information System, the first to be deployed in Brazil. The system was developed in-house with the technical support of PRODESP (State of São Paulo Data Processing Company) and running in COBOL in a UNIVAC mainframe. Related publications:

*Rodrigues, RJ. Projeto de Processamento de Informações Clínicas e Administrativas do Hospital das Clínicas da Faculdade de Medicina da USP: Aspectos Pertinentes ao Desenvolvimento, Implantação e Gerenciamento. In: Anais do IV Simpósio de Pesquisas em Administração de Ciência e Tecnologia. FINEP/PROTAP, Faculdade de Economia e Administração da USP e Secretaria da Indústria, Comércio e Tecnologia do Estado de São Paulo, 1979*

*Rodrigues, RJ. Experience with the Design and Implementation of a Large Medical Information System in a Developing Country. In: Lindberg, D and Kaihara, S (Editors) Proceedings of the Third World Conference on Medical Informatics (MEDINFO 80) Tokyo. North Holland Publishing Company, pages 1075 1078, 1980*

- **Large-scale Hospital Information System** – During 1987 and 1988 was a member of an internationally contracted team of consultants responsible for the implementation of the Chilean Naval Hospital Project of Las Salinas, Dirección de Sanidad de la Armada Primera Zona Naval, Valparaiso, Chile. In a two-year period made frequent missions lasting 2 to 3 weeks working with national technical counterparts and naval personnel from the clinical and information system areas. Was responsible for the design of the information systems plan including: data content specification, required hardware and communication support, systems operational requirements, and user training needs. Produced all the pertinent documentation.
- **Medium-scale Hospital Information System** - From 1987 to 1990, as Chief information Officer of Hospital Sírio-Libanês, São Paulo, a large philanthropic institution and center of excellence, was responsible for the definition and approval of the organization's plan for information systems and the establishment of a health informatics area. Was directly responsible for the technical and administrative decisions regarding the procurement, acquisition, installation and operation of hardware and software. Systems ran on a LABO minicomputer using third-party software which was adapted in-house by team of programmers. Patient Registration and Discharge, Patient Accounts, Inventory Control, and Auditing applications were implemented. A number of administrative support applications were implemented in microcomputers running databases and spreadsheet software as stand-alone solutions to support managers. Related publication:

*Rodrigues, RJ. Microcomputers and Hospital Information Systems. In: Towards New Hospital Information Systems, Proceedings of the IFIP IMIA Working Conference, Nijmegen, The Netherlands. North Holland, page 227 233, 1988*

- **National Integrated System** - In 1994, following the liberation of Kuwait (First Gulf War), was member of team indicated by the World Health Organization to conduct an assessment and recommend on the reconstruction and enhancement of health information systems destroyed by the Iraq invasion of that country. The team wrote the draft of a project for the National Health Information System of Kuwait presented to national authorities. Related publication:

Mandil, SH; Ibrahim, A; Moidu, K; and Rodrigues, RJ. *The Development and Enhancement of the National Health Information System of Kuwait (NHIS/Kuwait). Consultancy Report, World Health Organization, Geneva, Doc WHO/AOI/94.9, December 1994*

#### 4. Reimbursement System for Health Service Providers

- **National Public Reimbursement System** - During 1982, as Coordinator of the Department of Informatics, Secretary of Planning, National Social Security Health Care Administration (INAMPS), Rio de Janeiro, worked with DATAPREV, a federal data processing agency, in the deployment of a mainframe-based information application to support a new modality (payment by diagnosis) of reimbursement of health service providers. Related publication:

Rodrigues, RJ; Montandon, AA; Jouval, H and Galvão Lobo, LC. *The Role of Information Processing in the Reorganization of the Social Security Health Care System of Brazil. In: Van Eimeren, W; Engelbrecht, R and Flage, CD (Editors) Proceedings of the Third International Conference on System Science in Health Care, pages 1291-1293, 1984*

#### 5. Primary Care Information Systems Design, Development, and Implementation

- **Information Applications for Local Health Systems** - In 1990, as a Technical Officer with the São Paulo State Health Secretariat conducted studies in collaboration with the Department of Epidemiology, Escola Paulista de Medicina, Federal University of São Paulo on the general requirements specification for health services management information systems based on microcomputers for deployment at the local level in primary care units. Related publication:

Rodrigues, RJ and Gohman, S. *Sistemas de Informação para Gestão dos Sistemas Locais de Saúde. Bol Of Sanit Panam 109 (5 6):488-501, 1990*

- **Primary Care Information System** - As Health Information Systems Advisor (1991-1995), Pan American Health Organization/World Health Organization Caribbean Program Coordination Office, Bridgetown, Barbados, W.I., was responsible for the leadership of a major Community Health Information System for eleven Eastern Caribbean countries. The project was partially funded by the Inter American Development Bank and the Caribbean Development Bank (US\$1.84 million) as a non-reimbursable contribution under TC-89-04-46-0-RE. The US\$ 3.2 million project involved development of software, acquisition and deployment of computers and telecommunication equipment, preparation of user manuals, training of national health professionals, and the strengthening of institutional mechanisms to ensure coordination and continuation. Related publications:

Rodrigues, RJ and Israel, K. *Conceptual Framework and Guidelines for the Establishment of District-Based Information Systems. PAHO/WHO Office of Caribbean Program Coordination, Bridgetown, 1995 Publication PAHO/CPC/3.1/95.1 ISBN 976-8083-75-1*

Rodrigues, RJ; Oxman, G; Israel, K and Priale, R. *Marco Conceptual y Pautas para el Establecimiento de Sistemas Locales de Información. HSS/SILOS/UNI Volumen 8, PAHO/WHO, 1995*

- **Health Survey Methodology** - As Health Information Systems Advisor (1991-1995), Pan American Health Organization/World Health Organization Caribbean Program Coordination Office, Bridgetown, Barbados, W.I., developed a health survey tool for field use in the English-speaking Caribbean. Related publication:

Rodrigues, RJ; Israel, K and Wickramasuriya, TV. *A Reference Manual on Health Survey Methodology for Use by Community Health Services Professionals. PAHO and Inter American Development Bank, Bridgetown, August 1993*

- **Systems for New Modalities of Clinical Practice** - In 1995-1997, as Coordinator, Health Services Information Systems Program, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC researched the role of information systems in the context of health system reform in Latin America and the Caribbean and proposed guidelines. Related publication:

Rodrigues, R.J. *Information Systems Development and Health Sector Reform. In: Proceedings of the Sixth National and Fourth International Conference on Information Technology and Community Health (ITCH96), November 3-6, 1996, Victoria, Canada, page 2-7*

## 6. Health Information System Project Management and Assessment

- **Specification, Development, Deployment and Operation** - From 1985 onward, based on experience acquired since 1975 with the design, implementation, operation, and evaluation of hospital and community information systems produced guidelines and how-to manuals to orient and assist health and systems professionals. Some of those publications were widely disseminated and utilized by new system developers. During his tenure at the Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo (1975-1981 and 1984-1988) and at the Pan American Health Organization/World Health Organization (1991-2003) was responsible for technical assistance in the design, implementation, operation, and evaluation of numerous information system projects in Latin America and the Caribbean. Participated in the definition of objectives and strategy for health information systems for the 1998 Summit of the Americas, the Informatics 2000 Initiative of the Inter American Development Bank, and the United Nations 2003-2005 World Summit on the Information Society. Related publications:

Rodrigues, R.J. *Metodología para la Formulación de Proyectos de Salud. Documento Tecnico, Organización Pan Americana de la Salud, Lima, Peru, 1985*

Rodrigues, R.J. *Planejamento, Desenvolvimento e Contrôlo do Sistema de Informação. In Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 45 57, Livraria Pioneira Editora, São Paulo, 1987*

Rodrigues, R.J. *Informática na Prática Clínica e na Administração Hospitalar. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 35 44, Livraria Pioneira Editora, São Paulo, 1987*

Rodrigues, R.J. *Informática na Area da Saúde. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 27 33, Livraria Pioneira Editora, São Paulo, 1987*

Rodrigues, R.J. *A Informatização da Sociedade e das Organizações. In: Rodrigues,RJ (Editor) Informática e o Administrador de Saúde, pages 13 19, Livraria Pioneira Editora, São Paulo, 1987*

World Health Organization. *Informatics and Telematics in Health: Present and Potential Uses (as Collaborator), Geneva, 1988 ISBN 92 4 156117 3*

Rodrigues, R.J. *El Desarrollo de Sistemas de Información para la Salud en un Ambiente de Cambio. In Internet, Telemática y Salud, Editorial Médica Panamericana, Buenos Aires, page 63-68, 1997 ISBN 950 06 1615 7*

Rodrigues, R.J. *Health Systems in an Environment of Change. In: Internet, Telematics and Health, IOS Press & Ohmsha, Amsterdam, page 55-60, 1997 ISBN 90 5199 289 0*

Pan American Health Organization. *Sistemas de Información y Tecnología de Información en Salud: Desafíos y Soluciones para América Latina y el Caribe. Programa de Sistemas de Información sobre Servicios de Salud, División de Desarrollo de Sistemas y Servicios de Salud. OPS/OMS, Washington, D.C., Abril 1998. ISBN 92 75 12246 6*

Pan American Health Organization. *Information Systems and Information Technology in Health: Challenges and Solutions for Latin America and the Caribbean. Health Services Information Systems Program, Division of Health Systems and Services Development. PAHO/WHO, Washington, D.C. April 1998. ISBN 92 75 12246 6*

Rodrigues, R.J; Gattini, C; and Almeida, G (Editors). *Setting Up Healthcare Services Information Systems: A Guide for Requirement Analysis, Application Specification, and Procurement. Pan American Health Organization Essential Drugs and Technology Program, Division of Health Systems and Services Development. PAHO/WHO, Washington, D.C., July 1999, ISBN 92 75 12266 0*

World Health Organization. *Investing in Evidence and Information Base: a WHO Strategy to Support Member States. A Report on an Informal Consultative Meeting 11-12 May 2000, WHO-HQ, Geneva*

Martínez, A; Rodrigues, R.J; Infante, A; Campillo, C and Gattini, C. *Bases Metodológicas para Evaluar la Viabilidad y el Impacto de Proyectos de Telemedicina. Universidad Politécnica de Madrid and Pan American Health Organization, Washington DC, 2001, 138 p. ISBN 92 75 32363 1*

Pan American Health Organization. *Information Technology in the Health Sector of Latin America and the Caribbean: Challenges and Opportunities for the International Technical Cooperation. Division of Health Systems and Services Development, Essential Drugs and Technology Program, Washington DC, 2001, 32 p. ISBN 92 75 12381 0*

Rodrigues, RJ. *e-Health. In: Building an Information Society: A Perspective from Latin America and the Caribbean, Hilbert, M and Katz, J (Editors). Libros de la CEPAL series No. 72 (LC/G.2199-P), United Nations Economic Commission for Latin America and the Caribbean, Santiago, Chile 2002*

Marin, H; Massad, E; Gutierrez, MA; Rodrigues, RJ and Sigulem, D [Editors]. *Global Health Informatics: How Information Technology Can Change Our Lives in a Globalized World, 1st Edition. Academic Press. 312 p, 2016, ISBN-10: 0128045914 ISBN-13: 978-0128045916*

## 7. Human Resource Development

- **Education and Training of Health Professionals** - From 1977 until 1990 was responsible for the establishment and held docent positions related to education and training programs in informatics for health professionals and clinical practitioners in the following academic institutions:(1987 1990) Discipline of Health Information Systems at the Health Services Administration Specialization Course, University of São Paulo School of Public Health; (1984 1988) Microcomputer Laboratory, PROAHSA/Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo; (1977 1990) Information Systems in Health Care Administration, PROAHSA/Fundação Getulio Vargas, São Paulo; and (1986 1987) Discipline of Medical Informatics, University of São Paulo School of Medicine. Those were the first formal educational activities in Brazil in the area of information and communication technologies for health practitioners and managers and received wide recognition nationally and internationally for raising awareness to the importance of digital technologies in health practice and management. In 1995-1997, as Coordinator, Health Services Information Systems Program, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC prepared and submitted project proposal to the W.K.Kellogg Foundation for the training of human resources in health systems for the English-speaking Caribbean. The project (P-0042748) approved by the W.K.Kellogg Foundation totaled US\$921,527 including a Kellogg grant of US\$456,020 and was implemented at the Barbados Community College, Barbados. Supervised the 4-year project that provided in-country and Barbados-site training of 367 national professionals of Anguilla, Antigua and Barbuda, Barbados, British Virgin Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago researched the role of information systems in the context of health system reform in Latin America and the Caribbean and proposed guidelines. Related publications:

Rodrigues, RJ. *A Importancia e Objetivos da Educação de Profissionais de Saúde em Informática Médica. Vida Hospitalar 14 (2):99 100, 1980*

Rodrigues, RJ. *Introducing Microcomputers to Health Professionals in a Large Public Hospital Environment. In: Proceedings of the Fifth Conference on Medical Informatics (MEDINFO 86), Salamon/Blum/Jorgensen (Editors), IFIP IMIA, North Holland, pages 380 384, 1986*

Rodrigues, RJ. *Informação, Computadores e Sistemas de Saúde. In Lima Gonçalves,E (Editor) O Hospital e a Visão Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 183 201, 1983*

Rodrigues, RJ. *Problemas Humanos e Organizacionais no Desenvolvimento de Sistemas de Informação. In: Lima Gonçalves,E (Editor) O Hospital e a Visao Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 231 241, 1983*

Rodrigues, RJ. *Aplicações do Processamento de Dados na Prática Clínica e na Pesquisa Biomédica. In:Lima Gonçalves,E (Editor) O Hospital e a Visao Administrativa Contemporanea, Livraria Pioneira Editora, São Paulo, pages 261 282, 1983*

Rodrigues, RJ. *The Human Element in Systems Development. In: De Talens,AFP et al. (Editors) Health Informatics and Developing Countries: Experiences and Viewpoints. Proceedings of the IFIP IMIA World Congress on Medical Informatics and Developing Countries, North Holland Publishing Company, pages 139 147, 1983*

Rodrigues, RJ. O Componente Ensino na Formação de Recursos Humanos em Informática em Saúde. *Rev Bras Informatica Saúde* 1 (5):10 11, 1988

Rodrigues, RJ and Malik, AM (Editors). *Preparing Health Care Managers for a Changing World - What is our Role?. Proceedings of the International Seminar in Health Administration, University of Chile. W.K.Kellogg Foundation and INSORA. Santiago Oct 1-7, 1993 ISBN 9 567424 01 2*

Rodrigues, RJ. O Ensino de Microinformática para Profissionais de Saúde: a Experiência do PROAHSA. *Rev Bras Informatica em Saude* 1:8 14, 1986

## 8. Data Security and Personal Data Protection

- **Privacy and Health Data Repositories** - From 1975 to 1981 as Assistant Director of Technical Supporting Services, Hospital das Clínicas, University of São Paulo School of Medicine, São Paulo, researched and developed guidelines for the protection of personal health information. Related publication:

Rodrigues, RJ. Banco de Dados e Privacidade das Informações. *Suplemento Cultural do "O Estado de São Paulo" ano II, volume 88 de 2 de julho de 1978, pages 12 13*

- **Legal and Regulatory Issues** - In the period 1999-2003, as Regional Advisor for Health Information Technology, Pan American Health Organization/World Health Organization, Division of Health Systems and Services Development, Washington, DC, researched issues related to ethics, legal and regulation, data security, and personal data protection, confidentiality, and access control. A global review of pertinent legislation and regulations was carried out in collaboration with legal experts and the European Commission Directorate General for Information Society Applications Related to Health, Brussels. A research study was conducted on critical aspects related to cybercrime, cyberterrorism, and cyberwarfare as they affect health information systems. Related publications:

Rodrigues, RJ. *Ethical and Legal Issues in Interactive Health Communications: A Call for International Cooperation (Editorial). Journal of Medical Internet Research* 2 (1): March 2000 Available online at: <http://www.symposion.com/jmir/index.htm>

Rodrigues, RJ; Wilson, P and Schanz, SJ. *The Regulation of Privacy and Data Protection in the Use of Electronic Health Information: An International Perspective and Reference Source on Regulatory and Legal Issues Related to Person-Identifiable Health Databases. Pan American Health Organization, Washington DC, 2001, 217 p ISBN 92 75 12385 3*

Ramsaroop, P; Stull, R; Rodrigues, RJ and Hernandez, A. *Cybercrime, Cyberterrorism, and Cyberwarfare: Critical Issues in Data Protection for Health Services. Information System Technology and Health Services Delivery, Health Services Organization Unit (THS/OS), Pan American Health Organization, Washington, DC, 2003, 85 p. ISBN 92 75 12464 7*

## 9. Health Services Production and Utilization Information System

- **Computerized Hospital Performance System** - In 1988 and 1989, as a Technical Officer with the São Paulo State Health Secretariat and utilizing the automated Hospital Statistical Database for the State of São Paulo developed a dataset using an adaptation of diagnostic-related groups (DRGs) methodology with the objective of monitoring the utilization and performance of hospitals. The application was implemented in microcomputers running Dbase and Lotus 123. Related publication:

Rodrigues, RJ and Goihman, S. *Case Mix Indicators for Monitoring Utilization and Performance of Health Care Services. In Proceedings of the British Computer Society Conference "Healthcare Computing 1990", Brighton, U.K., 24 April, 1990*

## 10. Telecommunications and Telemedicine

- During his tenure at the Pan American Health Organization/World Health Organization (1991-2003) researched and collaborated with public, private, international, and academic organizations and individual professionals regarding the application of telecommunication resources as a component of health information systems particularly in reference to telemedicine applications. Was responsible for the definition of requirements or the health sector in the context of the ITU/CITEL Agenda for Connectivity in the Americas (Agenda of Quito) and the Ministries of Health of the Commonwealth. Related publications:

*Rodrigues, RJ; Crawford, C; Koss, S and McDonald, M. Telecommunications in Health and Healthcare for Latin America and the Caribbean. Series Health Services Information Systems/ HSP, No. 1, PAHO/WHO, 1997*

*Krasnow, D and Rodrigues, RJ. International Perspective. In: Telemedicine : Practicing in the Information Age, Viegas, SF and Dunn, K (Editors), Lippincott-Raven Publishers, June 1998, ISBN: 0397518439*

*Rodrigues, RJ. Telemedicine and the Transformation of Healthcare Practice in the Information Age. In: Speakers' Book of the ITU Telecom Americas 2000 Telecom Development Symposium, Session TDS.2, Rio de Janeiro April 10-15, 2000, pag 91-105*

*Rodrigues, RJ. Opportunities and Challenges in the Deployment of Global e-Health. Int J Healthcare Technology and Management 5(3/4/5): 335-358, 2003*

*Rodrigues, RJ and Risk, A. eHealth in Latin America and the Caribbean: Development and Policy Issues. Journal of Medical Internet Research 2003; 5(1):e4*

*Rodrigues, RJ. Deploying e-Health Solutions in Latin America and the Caribbean: Development and Policy Issues. Proceedings of the International Telecommunications Union Telecom World 2003, Forum PL11: Workshop on Telemedicine. October 12-18, 2003. Geneva, Switzerland*

*Rodrigues, RJ; Oliveri, NC; Monteagudo, JL; Hernández, A and Sandor, T (Editors). e-Salud en Latinoamérica y el Caribe: Tendencias y Temas Emergentes. Organización Panamericana de la Salud en colaboración con Fundación de Informática Médica (Miami, FL) y Instituto de Salud Carlos III, Ministerio de Sanidad y Consumo (Madrid), Washington, DC, 2003, 208 p. ISBN 92 75 32462 X*

*Organization of American States. Telehealth in the Americas. Inter-American Telecommunication Commission (CITEL), in collaboration with the Telecommunication Development Bureau of the International Telecommunication Union (ITU), the Pan American Health Organization (PAHO/WHO), and the Latin American Association of Research Centers and Telecommunication Enterprises (AHCJET). [Collaborator]. Publication OEA/Ser.L/XVII.6.4, December 16, 2003, Washington D.C., 56 p, ISBN 0-8270-4614-6*

*Rodrigues, RJ. Compelling issues for adoption of e-health. The Commonwealth Health Ministers Reference Book 2008, pages 36-40. Published by the Henley Media Group Limited. Commonwealth Secretariat, Marlborough House, Pall Mall, London ISBN 97 80955 44086 1*

## 11. Knowledge Management

- **Institutional Knowledge Management Solutions** – From 2003 to 2007, as full-time longterm consultant with the Information and Knowledge Management Area, Pan American Health Organization, Washington D.C. was responsible for the development and implementation of knowledge management methodologies and enabling technologies in the context of a United Nations technical cooperation organization. Work included the creation of the Area of Information and Knowledge Management (DD/IKM) including organization and governance, personnel, content management, methodologies and technologies with the goal of making PAHO/WHO an authoritative source on health information and knowledge, an effective collaboration-based organization, a learning organization, and a partnership- and network-building organization. Achievements included:

(a) Conducting the scoping exercise, tentative work plan, early discussion and surveys, and the extensive consultations to respond to PAHO's Executive Management directives; (b) Participating in the deployment of SharePoint throughout the Organization; (c) Evaluation, testing of options, and the deployment and operation of corporate web conferencing resources, leading to unprecedented impact in the day-to-day work of the staff and technical cooperation processes; (d) Requirement analysis, specification, and

management of an Expertise Locator, an application aimed at supporting the identification and selection of professionals for fixed-term contracts; (e) Requirement analysis and specification of the Staff Travel, Consultant and Meeting Report System, an application designed to manage the massive amount of information and knowledge generated by staff and consultant technical cooperation activities; (f) Requirement analysis, specification, and testing of the Lessons Learned System, a product that facilitates the capture and reuse of tacit knowledge throughout the Organization; (g) Conduction of in-depth evaluation, deployment, and support of a number of methodologies and enabling technologies of importance for knowledge sharing and collaborative work including cognition mapping, content management, and communities of practice; (h) Preparing Request for Proposals, evaluation, contracting, and coordinating external consultants and their technical activities. Related publication:

*Pan American Health Organization. Information and Knowledge Sharing: Report of Task Force No. 4 [Rapporteur]. Area of Information and Knowledge Management (DD/IKM). Washington D.C., 93 p, 2005*