Curriculum Vitae

Miguel Luis O'Ryan Gallardo, MD

CURRENT APPOINTMENT:

Tenured Professor

Programa de Microbiología y Micología

Instituto de Ciencias Biomédicas, Facultad de Medicina

Date: September 2014

Universidad de Chile

PERSONAL INFORMATION:

Date of Birth: December 13, 1959. Santiago, Chile. Married to Inés Soriano, three sons, two grandchildren.

CONTACT INFORMATION:

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PROFESSIONAL DEGREE AND POST-GRADUATE TRAINING:

1988-1991 Resident in Pediatric Infectious Diseases

University of Texas Health Science Center, Houston Medical School

1984-1987 Resident in Pediatrics

Pontificia Universidad Católica de Chile

1979-1984 M.D.

Pontificia Universidad Católica de Chile

ACADEMIC AND OTHER SIGNIFICANT POSITIONS:

1991	Assistant Professor	Department of Pediatrics, Infectious Diseases Division
		University of Texas, Health Science Center at Houston.
1992	Assistant Professor	Facultad de Medicina, Universidad de Chile.
1998	Associate Professor	Universidad de Chile.
2004	Tenured Professor	Universidad de Chile.
1998-1999	President	Sociedad Chilena de Infectología.
2002	President	III World Congress of Pediatric Infectious Diseases.
2003-2006	Sub-Director	Instituto de Ciencias Biomédicas, Facultad de Medicina,
		Universidad de Chile.
2007-2010	Director	Programa de Microbiología y Micología, Instituto de Ciencias
		Biomédicas, Facultad de Medicina, Universidad de Chile.
2007-2009	Director	MECESUP Proyecto UCH0608: "Inserción Productiva y
		Sustentable de Graduados de Excelencia de los Programas de
		Doctorado en Ciencias Médicas y Biomédicas a Centros de
		Investigación Clínica Avanzada (CICA)."
2010-2012	Vice Rector	Investigación y Desarrollo, Universidad de Chile.
2012	Sub-Director	Innovación y Tecnología, Facultad de Medicina, Universidad
		de Chile.
2012-	Member	Academia de Medicina, Instituto de Chile. Sillón Nº 17.
2013-2014	Director	Investigación y Desarrollo, Facultad de Medicina,
		Universidad de Chile.

TEACHING ACTIVITIES:

Undergraduate Program, Facultad de Medicina, Universidad de Chile:

Professor of 1st, 2nd and 3rd year medical students Professor of 2nd year nursing students 1994 - 2009

Professor of 1st year nutrition and diet students

Tutor for 3rd and 4th year medical students in the course "Research Practicum"

Graduate Program, Facultad de Medicina, Universidad de Chile: **Teaching**

1997 - 2014Director of graduate theses for the masters (4 students) and doctoral programs (5 students)

Director of postdoctoral students (3)

Professor of the course "Advanced infectious diseases: clinical, molecular and

epidemiological aspects"

Research Tutor for the Pediatric Infectious Disease Program (4 MDs)

Professor in the continuing education program: Management and Development of Clinical

Research

Professor of the course "Molecular and Clinical Fundamentals of Infectious Diseases"

Administrative

2009-2010 President Programa de Doctorado en Ciencias Médicas, Facultad de

2007-2009 **Executive Secretary** Medicina, Universidad de Chile

1999-2004 **Sub-Director** Programas de Becas Enfermedades Infecciosas Pediátricas.

1999 Director Facultad de Medicina, Universidad de Chile

1999-2004 President of the Sub-Ciencias Biomédicas de la Facultad de Medicina,

Committee on Microbiology

and Immunology

for the Master's program

Universidad de Chile

RESEARCH GRANTS:

Competitive Chilean Government Grants (Fondecyt)

1993-2014 Principle investigator on 7 Fondecyt projects (currently active projects)

1998-2014 Co-investigator on 5 Fondecyt projects (currently active projects)

All projects are focused on the following themes: viral gastroenteritis, *Helicobacter pylori* and infections in immune compromised children.

Government Sponsored Grants for Improving Institutional Teaching and Productivity

Creator and Principal Investigator on the project MECESUP "Inserción Productiva y Sustentable de Graduados de Excelencia de los Programas de Doctorado en Ciencias Médicas y Biomédicas a Centros de Investigación Clínica Avanzada (CICA)," 2007-2011. This project supports 6 doctors in two public hospitals (Hospital Luis Calvo Mackenna, Hospital San Borja Arriarán) and one university hospital (Hospital Clínico de la Universidad de Chile) in the development of teaching excellence and advanced clinical research. It includes two local postdoctoral positions for young academics, as well as four positions at foreign institutions of excellence.

Non-Competitive Grants

Of five clinical research projects related to enteric pathogens and/or vaccine development from 2002-2014, I would like to highlight the following:

1. Multinational, double-blind, phase III, randomized, placebo-controlled study to determine the efficacy and safety of 2 doses of GSK Biologicals' rotavirus vaccine in healthy infants

- o I was the principle academic researcher on this study, which included 63,000 children in 11 Latin American countries.
- o This work was published in the *New England Journal of Medicine* and *The Lancet* (with myself as corresponding author)
 - Ruiz-Palacios GM, Perez-Schael I, Velazquez FR...O'Ryan M, Human Rotavirus Vaccine Study Group. Safety and efficacy of an attenuated vaccine against severe rotavirus gastroenteritis. New England Journal of Medicine 2006;354(1):11-22
 - Linhares AC, Velazquez FR, Perez-Schael I...**O'Ryan M**...Human Rotavirus Vaccine Study Group. Efficacy and safety of an oral live attenuated human rotavirus vaccine against rotavirus gastroenteritis during the first 2 years of life in Latin American infants: a randomised, double-blind, placebo-controlled phase III study. Lancet 2008;**371**(9619):1181-89
- 2. Multicenter, observer-blind, controlled phase IIb/III study on the safety, tolerability and immunogenicity of Novartis's Recumbent Meningococcal Vaccine in adolescents 11-17 years of age according to different vaccination schedules
 - o I was the principal co-investigator on this study, which included 1,600 Chilean adolescents.
 - This study was the basis for licensing of the first effective vaccine against Meningococcal b for use in adolescents.
 - o This work was published in *The Lancet* (with myself as corresponding author)
 - Santolaya ME, **O'Ryan ML**, Teresa Valenzuela M, et al. Immunogenicity and tolerability of a multicomponent meningococcal serogroup B (4CMenB) vaccine in healthy adolescents in Chile: a phase 2b/3 randomised, observer-blind, placebo-controlled study. Lancet 2012;**379**(9816):617-24
- 3. Randomized, non-blind, phase IV study evaluating the induction of humoral and intestinal immunity to polio after three-doses of trivalent Inactive Polio Vaccine (I'PV) compared to two-doses of IPV followed by bivalent Oral Polio Vaccine (OPV) administered during the first year of life.
 - o I was the principal researcher on this study, which was funded by the Bill & Melinda Gates Foundation.

MEMBERSHIP IN SCIENTIFIC SOCIETIES:

- Pediatric Infectious Disease Society of America: member since 1991
- Sociedad Chilena de Infectología: member since 1992, Director 1995-1997, President 1998-1999
- Asociación Panamericana de Infectología: member since 1994
- American Society for Microbiology: member 1995-2009
- Sociedad Latinoamericana de Infectología Pediátrica: member since 1993, President of the Committee on Enteric Infections 1995-1998
- Sociedad Médica de Santiago: member since 1999
- World Pediatric Infectious Disease Society: member since 2003,
- Educational Committee: Board Member since September 2010
- International Scientific Committee: member since 2014
- Consejo International Society for Infectious Diseases ISID: member 2012-2018

HONOR AND AWARDS

Academics

- Kroc Visiting Professorship, Eastern Virginia Medical School, January 15 March 1, 2001
- Medal of Honor, Universidad de Chile, Tenured Professor, 2004
- Andres Bello Medal for work as vice rector of Investigation and Development, Universidad de Chile,
 2010
- Member of the Academia de Medicina del Instituto de Chile, May 2012

Biomedical Research

- "Sociedad Chilena de Infectología a la Línea de Investigación" awarded at the XIII Congreso Chileno de Infectología. Viña del Mar, Chile, October 23-25, 1996
- XXVII Nestlé Award: Theme: "Diarrea por Rotavirus, lo que sabemos y no sabemos." Awarded by the Sociedad Panameña de Pediatría and Nestlé Panamá. Ciudad de Panamá, Panamá. October 24, 1997
- Medal of Academic Excellence in Research, Facultad de Medicina, Universidad de Chile, awarded in the years 2006, 2008 and 2009
- Young Investigator Award, Sociedad Chilena de Infectología, awarded to Dr. Yalda Lucero (doctoral thesis student), XXVI Congreso Chileno de Infectología. Viña del Mar, Chile, October 24, 2009
- Invitation to form part of a 6 person global expert group on Acute Gastroenterites (ISACS) formed by the Bill and Melinda Gates Foundation with the mission of supervising the Global Enteric Multi-Center Study (GEMS) project. Baltimore, MD, USA. July 28–29, 2011
- Academia de Medicina Award for research on Enteric Viruses, Instituto de Chile, 2011

PUBLICATIONS

Impact of publications (ISI Web of Knowledge)

Total citations: 2,895

H-index: 25

Publications in Chilean Journals (6 articles highlighted of a total of 31)

- 1. **O'Ryan M**, Mamani N, Avendaño LF, Cohen J, Peña A, Villarroel J, Chávez A, Prado V, Valdivieso F, Kaltwaser G, Matson DO. Tipos Antigénicos de Rotavirus Circulantes en Santiago, Chile. Revista Medica De Chile 1995;**123**:549-559. (*a work in which I integrated new advanced concepts in the country*) 4 citations
- 2. Valenzuela MT, **O'Ryan M**. Achievements and challenges of the expanded immunization program in the Americas. Revista Medica De Chile 2000;**128**(8):911-22. (representative of a group of publications related to the implementation of vaccination policies) 2 citations
- 3. Lucero Y, Brucher R, Alvarez AM, Becker A, Cofre J, Enriquez N, Paya E, Salgado C, Santolaya ME, Tordecilla J, Varas M, Villarroel M, Viviani T, Zubieta M, **O'Ryan M.** Infección micótica profunda en niños chilenos con cáncer, neutropenia y fiebre. Revista Medica De Chile 2002;130:1139-1146. (representative of a group of publications on febrile neutropenia research at the Hospital Calvo Mackenna) 5 citations
- 4. **O'Ryan M,** Valenzuela MT. Papillomavirus and cervical cancer in Chile. Revista Medica De Chile. 2008 Nov;136(11):1367-70. (representative of a series of publications that show leading national opinions on the area of immunization) 2 citations
- 5. Díaz J, Olea A, **O'Ryan M**, Mamani N, Galeno H, Mora J. Resultados de la Vigilancia centinela de gastroenteritis por rotavirus en Chile. Revista Chilena De Infectologia 2008;25(6): 453-456. (*Provides relevant information for decision-making based on the introduction of rotavirus vaccine*)
- 6. Lucero Y, Mamani N, Cortes H, Pena A, Vergara R, **O'Ryan M**. Rotavirus genotypes in children with gastroenteritis assisted in two public hospitals from Chile: viral strains circulating in a country without a universal vaccination against rotavirus. Revista Chilena De Infectologia 2012;**29**(2):142-48. (*Provides relevant information for decision-making based on the introduction of rotavirus vaccine*) 2 citations

Publications in International Journals (14 articles highlighted of a total of 71)

- 1. **O'Ryan ML**, Matson DO, Estes MK, Pickering LK. Molecular epidemiology of rotavirus in children attending day care centers in Houston. The Journal of infectious diseases 1990;**162**(4):810-6. (*first study published in a premier journal, introducing my main themes of investigation*) 60 citations
- 2. **O'Ryan ML**, Matson DO, Pickering LK. Pediatric gastroenteritis. Current Opinion in Infectious Diseases 1992;**5**(1):99-105. (*international leadership in the field, associated with a prominent international figure Dr. Larry Pickering*)

- 3. **O'Ryan ML**, Matson DO, Estes MK, et al. Anti-rotavirus G type-specific and isotype-specific antibodies in children with natural rotavirus infections. The Journal of infectious diseases 1994;**169**(3):504-11. (representative of a series of studies relevant in the advancement of the concept of vaccine development) 115 citations
- 4. **O'Ryan ML**, Mamani N, Avendano LF, et al. Molecular epidemiology of human rotaviruses in Santiago, Chile. The Pediatric infectious disease journal 1997;**16**(3):305-11. (*internationalization of my research in Chile*) 28 citations
- 5. **O'Ryan ML**, Vial PA, Mamani N, et al. Seroprevalence of Norwalk virus and Mexico virus in Chilean individuals: assessment of independent risk factors for antibody acquisition. Clinical infectious diseases: an official publication of the Infectious Diseases Society of America 1998;**27**(4):789-95. (my introduction in the theme of calicvirus/norovirus that has gained global significance) 38 citations
- 6. Erney RM, Malone WT, Skelding MB, et al. Variability of human milk neutral oligosaccharides in a diverse population. Journal of Pediatric Gastroenterology and Nutrition 2000;**30**(2):181-92. *84 citations*
- 7. **O'Ryan M**, Perez-Schael I, Mamani N, et al. Rotavirus-associated medical visits and hospitalizations in South America: a prospective study at three large sentinel hospitals. Pediatric Infectious Disease Journal 2001;**20**(7):685-93. (publication that established me as a leader in the study of ant-rotavirus vaccines) 108 citations
- 8. Santolaya ME, Alvarez AM, Becker A, et al. Prospective, multicenter evaluation of risk factors associated with invasive bacterial infection in children with cancer, neutropenia, and fever. Journal of Clinical Oncology 2001;19(14):3415-21. (representative of the internationalization in one of the world's most prestigious magazines on "febrile neutropenia" by Dr. Santolaya, which has been heavily cited) 165 citations
- 9. Ruiz-Palacios GM, Perez-Schael I, Velazquez FR...O'Ryan M (corresponding author), Human Rotavirus Vaccine Study Group. Safety and efficacy of an attenuated vaccine against severe rotavirus gastroenteritis. New England Journal of Medicine 2006;354(1):11-22. Received the distinction "Paper of the Year 2006" from the Editorial Committee of The Lancet. (one of the studies with the greateds global impact, whose corresponding author is Chilean) 1,321 citations
- 10. Linhares AC, Velazquez FR, Perez-Schael I...**O'Ryan M** (corresponding author), et al. Efficacy and safety of an oral live attenuated human rotavirus vaccine against rotavirus gastroenteritis during the first 2 years of life in Latin American infants: a randomised, double-blind, placebo-controlled phase III study. Lancet 2008;371(9619):1181-89. (part of a series, along with the previous article, in one of the world's most prestigious magazines) 254 citations
- 11. Siebenga JJ, Vennema H, Zheng DP, et al. Norovirus Illness Is a Global Problem: Emergence and Spread of Norovirus GII.4 Variants, 2001-2007. Journal of Infectious Diseases 2009;**200**(5):802-12. 285 citations
- 12. **O'Ryan ML**, Hermosilla G, Osorio G. Rotavirus vaccines for the developing world. Current Opinion in Infectious Diseases 2009;**22**(5):483-89. (representative of a series of publications that demonstrate leading opinions at a global level) 18 citations
- 13. **O'Ryan ML**, Lucero Y, Prado V, et al. Symptomatic and asymptomatic rotavirus and norovirus infections during infancy in a Chilean birth cohort. The Pediatric infectious disease journal 2009;**28**(10):879-84. (representative of a number of current and future publications related to the expansion of our research on the agent-host relationship) 22 citations
- 14. **O'Ryan M**, Linhares AC. Update on Rotarix (TM): an oral human rotavirus vaccine. Expert Review of Vaccines 2009;**8**(12):1627-41. (*Present leading publication on the issue*) 48 citations
- 15. **O'Ryan M**, Lucero Y, O'Ryan-Soriano MA, et al. An update on management of severe acute infectious gastroenteritis in children. Expert Review of Anti-Infective Therapy 2010;**8**(6):671-82. (international leadership on the topic of infantile gastroenteritis ballon) 13 citations
- 16. Mattison K, Corneau N, Berg I, et al. Development and validation of a microarray for the confirmation and typing of norovirus RT-PCR products. Journal of Virological Methods 2011;**173**(2):233-50. *5 citations*
- 17. Santolaya ME, Farfan MJ, De La Maza V, et al. Diagnosis of Bacteremia in Febrile Neutropenic Episodes in Children With Cancer Microbiologic and Molecular Approach. Pediatric Infectious Disease Journal 2011;30(11):957-61. (the culmination of three years of research conducted entirely in Chile, published in one of the world's most prestigious journals) 8 citations

- 18. **O'Ryan M**, Lucero Y, Linhares AC. Rotarix (R): vaccine performance 6 years postlicensure. Expert Review of Vaccines 2011;**10**(12):1645-59. 22 citations
- 19. Santolaya ME, **O'Ryan ML** (**corresponding author**), Valenzuela MT, et al. Immunogenicity and tolerability of a multicomponent meningococcal serogroup B (4CMenB) vaccine in healthy adolescents in Chile: a phase 2b/3 randomised, observer-blind, placebo-controlled study. Lancet 2012;**379**(9816):617-24. *93 citations*
- 20. **O'Ryan ML**, Rabello M, Cortes H, et al. Dynamics of Helicobacter pylori detection in stools during the first 5 years of life in Chile, a rapidly developing country. The Pediatric infectious disease journal 2013;**32**(2):99-103. *4 citations*
- 21. **O'Ryan M**, Stoddard J, Toneatto D, et al. A Multi-Component Meningococcal Serogroup B Vaccine (4CMenB): The Clinical Development Program. Drugs 2014;**74**(1):15-30. *5 citations*
- 22. Santolaya ME, Alvarez AM, Aviles CL, et al. Prospective Validation of a Risk Prediction Model for Severe Sepsis in Children With Cancer and High-risk Febrile Neutropenia. Pediatric Infectious Disease Journal 2013;32(12):1318-23. *1 citation*

Letters to the Editor: 9 in total, including 3 to The New England Journal of Medicine

Book Chapters:

National Publishers

- 1. Avendaño P, **O'Ryan M**, Soriano HE. "Medicamentos de uso pediátrico". Apéndice I. In Meneghello J. Ed. Pediatria. Mediterráneo, Santiago, Chile; Editions 1985 and 1991.
- 2. Avendaño P, **O'Ryan M**, Soriano HE. "Valores normales de laboratorio". Apendice II. In Meneghello J. Ed. Pediatría. Mediterráneo, Santiago, Chile; Editions 1985 and 1991.
- 3. **O'Ryan M**. "Infecciones Entéricas Virales" In: Meneghello J, Fanta E, Paris E, Puga TF, Eds. Pediatría Meneghello, Quinta Edición. Editorial Médica Panamericana, 1997, 1543-1549.
- 4. Gambra MP, **O'Ryan M**. "Enfermedad de Lyme" In: Meneghello J, Fanta E, Paris E, Puga TF, eds. Pediatría Meneghello, Quinta Edición. Editorial Médica Panamericana, 1997, 822-827.
- 5. **O'Ryan ML**. "Gastroenteritis viral". In Enfermedades Infecciosas en Pediatría, 3ra. Edición, Eds. A. Banfi, W. Ledermann, J. Cofré, J. Cohen, ME. Santolaya. Editorial Mediterráneo 2004, 144-150.
- 6. **O'Ryan ML**. "Infecciones en guarderías infantiles". In Enfermedades Infecciosas en Pediatría, 3ra. Edición, Editores A. Banfi, W. Ledermann, J. Cofré, J. Cohen, ME. Santolaya. Editorial Mediterráneo 2004, 295-301.
- 7. **O'Ryan ML**. "Infecciones por enterovirus no polio". In Enfermedades Infecciosas en Pediatría, 3ra. Edición, Eds. Banfi S, Ledermann W, Cofré J, Cohen H, Santolaya ME. Editorial Mediterráneo 2004, 476-480.

International Publishers

- 1. Pickering LK, **O'Ryan M**. "Serotypes of RV that infect infants symptomatically and asymptomatically". In Immunology of Milk and the Neonate. Eds. Mestecky J, Blair C, Ogra PL. New York: Plenum Press 310:241-7, 1991.
- 2. **O'Ryan M,** Cleary TG. "Cholera". In Rakel RE, Eds. Conn's Current Therapy. Philadelphia, WB Saunders Company, 62-64, 1990.
- 3. **O'Ryan M**, Pickering LK. "*Cryptosporidium*, *Isospora* and *Microspora* infections in humans". In Textbook of Pediatric Infectious Diseases, 3rd edition, Eds. Feigin RD, Cherry JD. Florida, WB Saunders Company, 1992.
- 4. **O'Ryan M**, Matson DO, Pickering LK. "Rotavirus, Enteric Adenoviruses, Norwalk virus and other gastrointestinal viruses". In Clinical Virology Manual, Eds. Spector S, Lancz G, Elsevier Science Publishing Co., New York, 1992, 361-396.
- 5. **O'Ryan M**, Pickering LK. "Gastroenteritis virales". In Infectología Clínica Pediátrica, Sexta edición, Eds. González Saldaña N, Torales Torales N, Gómez Barreto D, Trillas. México, 1996.
- 6. Matson DO, **O'Ryan ML**, Jiang X, Mitchell DK. Rotavirus, enteric adenoviruses, caliciviruses, astroviruses, and other viruses causing gastroenteritis. In Clinical Virology Manual, 3rd Edition. Eds. Spector S, Hodinka RL, Young SA. Washington DC, ASM Press, 2000, 270-294.

- O'Ryan M. Rotavirus. In Manual de Vacunas en Pediatría, 2ª Edición Latinoamericana, Eds. Asociación Española de Pediatría, M Treghnagi, A Ceballos, Asociación Americana de Infectología, Asociación Española de Pediatría y Sociedad Latinoamericana de Infectología Pediátrica. 2000, 229-234.
- 8. **O'Ryan ML**, Santolaya ME. Sepsis Viral. In Sepsis Neonatal. McGraw-Hill Interamericana Eds. Sáez-Llorens X, Director Huésped. Temas de Perinatología. Asociación Latinoamericana de Pediatría, A.C., 2002, 109-147.
- 9. **O'Ryan MI.** "Vacuna Antirotavirus". In Manual de Vacunas, SLIPE 2005. Capítulo 8 "Vacunas no sistémicas", 3a Edición, Coordinador Dr. Miguel Tregnaghi, 295-303.
- 10. **O'Ryan M,** Nataro J, Cleary T. "Microorganisms Responsible for Neonatal Diarrhea" In_Infectious Diseases of the Fetus and Newborn Infant. 6th Edition, Eds. Remington JS, Klein JO, Wilson CB, Baker CJ. Elsevier Saunders 2005, 604-663.
- 11. **O'Ryan M**. "Vacunas frente a Rotavirus: al fin una realidad". Eds. Campins Martí M, Moraga Llop FA. Prous Science, 2005, 47-62.
- 12. **O'Ryan M**. "Rotavirus: Nacimiento de nuevas vacunas para el principal agente causal de diarrea aguda infantil grave". In Infección por Rotavirus 2006. Ed. Román Reichmann E in collaboration with GlaxoSmithKline. ISBN: 84-690-2294-6, 2006, 7-9.
- 13. **O'Ryan ML**, Nataro JP, Cleary TG. "Microorganisms Responsible for Neonatal Diarrhea", In Infectious Diseases of the Fetus and Newborn Infant, 7th Edition, Eds. Remington & Klein, Wilson, Nizet, Maldonado. Chapter 11, 2010, 359.
- 14. **O'Ryan ML**. "Virus y Diarreas". In Virologia Clinica, Eds Avendaño LF, Ferrés M, Spencer E. Chapter 13, 2011, 138-148.
- 15. **O'Ryan ML**, Lucero Y. "Yersinia Species", In Principles and Practice of Pediatric Infectious Diseases, 4th Edition, Eds. Long SS, Pickering LK, Prober CG. 2012, Chapter 148.
- 16. **O'Ryan** ML, Ochoa T. "Aeromonas Species", In Principles and Practice of Pediatric Infectious Diseases, 4th Edition, Eds. Long SS, Pickering LK, Prober CG. 2012, Chapter 150.
- 17. Lucero YC, **O'Ryan ML**, Matson DO. "Caliciviruses", In Feigin & Cherry's Textbook of Pediatric Infectious Diseases. Eds. Cherry JD, Demmler-Harrison GJ, Kaplan SL, Hotez P, Steinbach WJ. 7th Edition, 2014, Chapter 168, 2147-2158.
- 18. **O'Ryan ML**, Matson DO. "Clinical manifestations and diagnosis of rotavirus infection". In UpToDate, Eds. Rose BD, et al. Wellesley, Massachusetts, updated February, 2014.
- 19. Matson DO, **O'Ryan ML**. "Epidemiology, clinical manifestations and diagnosis of norovirus and other gastroenteritis virues, excluding rotavirus". In UpToDate, Eds. Rose BD, et al. Wellesley, Massachusetts, updated February, 2014.
- 20. **O'Ryan M.** "Microorganisms Responsible for Neonatal Diarrhea". In Remington and Klein's Infectious Diseases of the Fetus and Newborn Infant, 8th Edition, Chapter 11 to be published by Elsevier, 2014.

Abstracts Scientific Meetings

National Scientific Meetings: Over 70 abstracts submitted as either principal or co-investigator International Scientific Meetings: Over 60 abstracts submitted as either principal or co-investigator

MEETINGS

National Meetings: Of 68 conferences attended in Chile, I would like to highlight the following:

- 1. *Coordinator:* Curso de extensión para profesionales relacionados con jardines infantiles. Auspiciado por el Departamento de Microbiología, Universidad de Chile. Theme: "Prevención y Control de Enfermedades Infecciosas Relevantes en Jardines Infantiles". Santiago, Chile, January 18-20, 1995.
- 2. *Invited Speaker:* Reunión Clínica General del Servicio de Pediatría del Hospital Luis Calvo Mackenna. Theme: Actualización en Virus Entéricos. Santiago, Chile, December 22, 1995.
- 3. *Invited Speaker:* III Congreso de Infectología del Cono Sur y XIV Congreso Chileno de Infectología. Symposium: "Vacunas"; Theme: "Vacuna anti-rotavirus: una realidad". Valdivia, Chile, December 2-5, 1997.

- 4. *Presenter*: "¿Cómo es el desarrollo de una nueva molécula antimicrobiana? Desde el descubrimiento a su comercialización". IX Curso de Terapia Antimicrobiana. Sociedad Chilena de Infectología. Santiago, Chile, July 31-August 1, 1998.
- 5. *Invited Speaker*: "Investigación Clínica en Chile: Presente y Futuro". XV Congreso Chileno de Infectología, Santiago, August 12-14, 1998.
- 6. Conference Director: XI Curso de Terapia Antimicrobiana. Sociedad Chilena de Infectología. Santiago, Chile, November 10-11, 2000.
- 7. *Conference President and Member of the Scientific Committee:* XXV Congreso Chileno de Infectología. La Serena, Chile. November 5-8, 2008.
- 8. Comprensión e implicancias de la interacción entre rotavirus, norovirus, y H pylori y el hospedero durante la niñez: la relevancia de estudios de cohorte. XXIII Coloquios de Microbiología 2013, Sociedad de Microbiología de Chile. August 29, 2013, Facultad de Ciencias Biológicas, Pontifica Universidad de Católica.
- 9. "La relevancia de la vacunación para más y mejor salud de la población: Mitos y realidades que todos deben conocer". 87° Conferencia del Distrito 4355, Rotary, Valdivia. April 26, 2014.

International Meetings: Of 141 conferences attended globally, I would like to highlight the following:

- 1. Pediatric Grand Rounds. "Epidemiology of Rotavirus Gastroenterology in Houston, Texas". University of Texas, Medical School at Houston. Houston, TX. May 29, 1990.
- 2. *Invited Speaker:* "Advances in the Prevention of Rotavirus-Associated Pediatric Gastroenteritis". Auspiciadores Dannemiller Memorial Educational Fund. International Conference on Antimicrobials and Chemotherapy, New Orleans, LA. September 16-18, 1996.
- 3. *Invited Speaker*: "Rotavirus". Jornadas Internacionales de Infectología Pediátrica. Organized by the Sociedad Catalana de Pediatría y la Sección Española de Infectología Pediátrica, Barcelona, Spain. January 20, 1999.
- 4. Meet-the-experts roundtable update on Pediatric Infectious Diseases. 39th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). San Francisco, California, USA. September 26-29, 1999.
- 5. Grand Rounds, Eastern Virginia Medical School. "A Millennium Update on Gastroenteritis". February 8, 2001.
- 6. Convener and Invited Speaker, Session: "Pediatric Infectious Diseases II: Update on Current Issues", Theme: "Clinical Implications of Enteric Virus Infections", 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). San Diego, California, USA. September 27-30, 2002.
- 7. Meet the Professor "Diarrhea at the Extremes: Persistent or Bloody". 42nd Annual Meeting of Infectious Diseases Society of America (IDSA), Boston, USA. September 30-October 3, 2004
- 8. *Invited Speaker*, Symposium: "Ethical Issues Surrounding the Conduct of Trials in Infectious Disease Therapy and Prevention in Developing Countries". 45th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). Meet the experts. New Orleans, USA. December 16-19, 2005.
- 9. *Invited Speaker*: "Present and future of Rotavirus Vaccines". 12 ICID Symposium Vaccines for Children. Lisbon, Portugal. June 13, 2006.
- 10. *Invited Speaker*: "Rotavirus worldwide epidemiology: a brief overview. Early protection using 2-dose Rotarix". Taiwan Pediatric Association. Taipei, China. December 07, 2006.
- 11. *Invited Speaker*: "Rotavirus Protection against a Disease of High Impact in Children Worldwide" Patient Safety Congress, Infection Control Conference. Abu Dhabi, United Arab Emirates. September 2-4, 2007.
- 12. *Invited Speaker*: Asia-Pacific Rotavirus Metaforum. Conference: "Introducing Rotavirus Vaccines in to National Immunization Programs: Latin American experience". Bangkok, Thailand. November 12-14, 2007.
- 13. *Invited Speaker*: World Congress of Pediatric Gastroenterology, Hepatology and Nutrition WCPGHAN 3. Symposium: "Rotavirus Infection in Children: what are the complications, how effective is vaccine prevention, at what price?" Iguazu, Brazil. August 16-20, 2008.

- 14. *Invited Speaker*, Symposium: "Hot Topics in Pediatric Infectious Diseases". 48th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) and The Infectious Diseases Society of America (IDSA) 46th Annual Meeting. Washington DC, USA. October 25-28, 2008.
- 15. *Invited Speaker*: 26th International Congress of Chemotherapy and Infection and the AMMI Canada-CACMID Annual Conference 2009. Symposium: "Childhood Vaccines: Science Meeting the Challenges of Prevention" Conference: "Rotavirus Vaccines". Toronto, Canada. June 18-21, 2009.
- 16. *Invited Speaker:* International Forum for Child Intractable Diseases. Symposium Rotavirus: Conference: Attenuated human Rotavirus vaccine: Vaccine. Tokyo, Japan. July 17-18, 2010.
- 17. Conference Coordinator, Fourth International Calicivirus Conference. Santa Cruz, Chile. October 16-19, 2010. (Conference organizer with 200 attendees from around the world).
- 18. *Invited Panelist*, Symposium: 51th Annual Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) and The American Society for Microbiology (ASM). Chicago, USA. October 17-20, 2011. Session: Clinical case in pediatric infectious diseases, sponsored by the Pediatric Infectious Disease Society, USA.
- 19. *Invited Expert:* The second ISAC meeting for the Global Enteric Multi-Center Study (GEMS) Enterics Project funded by the Bill and Melinda Gates Foundation. July 23-24, 2012.
- 20. 4th Asian Vaccine Congress (ASVAC): Reducing the burden of RVGE" at Rotarix Speakers Forum and Rotavirus Vaccination- Why Asia Pacific is moving forward, at GSK Luncheon Symposium. Cebu, Philippines, June 12-14, 2013.
- 21. *Invited Speaker:* XV Congreso Latino-Americano de Infectología Pediátrica SLIPE 2013. Sao Paulo, Brazil. June 2013: XV Jornada Nacional de Inmunizaciones de SBIm: "Rol de helicobacter pylori en niños pequeños asintomáticos".
- 22. MEDSCAPE EDUCATION: Meningococcal Serogroup B Vaccines: New Data, Recommendations, and Implementation CME: Section 4. Immunogenicity and Safety of the Meningococcal Serogroup B Vaccine. CME Released: 07/26/2013; Valid for credit through 07/26/2014.
- 23. MEDSCAPE EDUCATION: Vaccine Solutions for the Prevention of Meningococcal Disease: State of the Art CME. Marco A. P. Sáfadi, MD, PhD; Ciro de Quadros, MD, MPH; Federico Martinón-Torres, MD, PhD; **Miguel L. O'Ryan, MD**. Released: 08/29/2013; Valid for credit through 08/29/2014.
- 24. WSPID 8th World Congress of the World Society for Pediatric Infectious Diseases. How to realize good quality research in resource-deprived countries. At the Educational Workshop for Fellows. November 19, 2013. Cape Town, South Africa.
- 25. "Gastroenteritis por Norovirus: ¿una nueva amenaza?". XIV Congreso Argentino de la Sociedad Argentina de Infectología, SADI 2014, Rosario. May 29-30, 2014.

OTHER ACTIVITIES:

Committees and Advisory Panels

University Level: Member of the Evaluation Council, Universidad de Chile. March-August 2010; Member of the Central Ethics Committee, Facultad de Medicina 2007-2010; Member (1998-2010) and President (2010) Ethics Committee for Research on Human Subjects, Facultad de Medicina, Universidad de Chile; Counsil of the Facultad de Medicina, Universidad de Chile, elected member: 1999-2000.

National Level: Member (1996-2009) and Founder/Coordinator (1996-1998) Advisory committee on Imunization (Comité Consultivo de Inmunizaciones; CCI) for the Sociedad Chilena de Infectología; Vaccine Advisory Committee (PAI) member, Ministerio de Salud de Chile, 1994-1998; Expert Advisory Committee on AH1N1, Ministerio de Salud, Chile 2009-2010; Panel Member on the Expert Advisory Committee on Vaccine and Immunization Strategies (CAVEI), Ministerio de Salud 2010-present; Evaluator of Graduate Programs in Medicine for the Accreditation Agency of Programs and Training Centers in Medical Specialties (APICE), December 2009; FONDECYT Reviewer (Medicine II): 2007-2009; Chairman of the Advisory Council of the Program of Recruitment and Integration of Advanced Human Capital for CONICYT (PAI). April 2011-present; President of the Commission on Science, Technology and Innovation for CRUCH, 2012. Member of the Advisory Committee for the Scientific Information Program of CONICYT. September 2012; Member of the Evaluation Committee for the "Competition for Proposed"

Program Improvements for Performance Agreements," Ministerio de Educación-Mecesup, 2013; Member of the Advisory Committee on Bioethics for FONDECYT, June 2014-May 2015.

International Level: Advisory Council, Organización Panamericana de la Salud, Rotavirus Surveillance in Latin America, 2000-2003; Member of the Committee for the Future of Vaccines in Latin America of the Instituto Carso de Salud, 2007-2010; Member of the IPA Program Committee in the Area of Better Medicines for Children 2008-present; Invited member of a group of 6 international experts on Acute Gastroenteritis (ISACS) convened by the Bill and Melinda Gates Foundation with the task of supervising the Global Enteric Multi-Center Study (GEMS), Baltimore. July 2011-present.

JOURNAL AND WEB PAGE COMMITTEES:

- The Journal of Pediatrics (USA), 2003-2005
- Pediatric Infectious Disease Journal (USA), 2004-present
- Journal Human Vaccines (USA), 2009-present
- Pan-Amazonian Journal of Health (Brazil), 2010-present
- Case Reports in Pediatrics (Open access journal), 2011-present
- Journal of the Pediatric Infectious Diseases Society (USA), 2011-present
- International Editor: WEB page www.Pneumo.com, 2000-2003
- Founding Editor & President of the Editorial Committee: WEB page www.sochinf.cl, official page of the Sociedad Chilena de Infectología, 2001-2004
- Permanent reviewer of articles submitted to: Revista Médica de Chile, Revista Chilena de Infectología, Pediatric Infectious Disease Journal, Vaccine, Expert Review in Vaccines, Human Vaccines
- Advisor for the British Medical Journal (England), November 2012-present

PRESS

Interviews with all national and international television channels an radio programs, including BBC London, over the past 17 years on issues such as Rotavirus helaht, Infectious Diseases, Public Health, Vaccines and Biomedical Research. I would like to highlight two prorams focused on my carerr as a researcher and/or my research themes: 1) Programa Enlaces 2006 (Televisión Nacional) and 2) Programa "Calidad de Vida" 2011 (Canal 13 cable). Countless interviews, editorials, articles in national newspapers, including 37 registered appearances since 1995.

THREE HIGHLIGHTS OF MY MEDICAL LIFE

Trained in Pediatric Infectious Diseases and Biomedical Research, I have contributed to research in Chile and the development of a vaccine against rotavirus, a contribution that has received international recognition at the highest level. This vaccine is considered to be one of the vaccines with the greatest impact that has been introduced worldwide in the last decade. My research group and collaborators have been published in journals with high international prestige (additionally I am an international editor at several prestigious journals), I have been an invited speaker at important conferences in my specialty. I recently received the highest accolades from SOCHINF and the Academia de Medicina. In Chile, I would like to highlight my work training new generations of physician-researchers in the Doctoral Program in Medical Sciences, Universidad de Chile, of which I served as chair, as well as in public hospitals through the MECESUP program for the Insertion of Researchers of Excellence into Advanced Clinical Research Centers, which I founded. These programs, and those derived from them, area currently impacting the quality of national medicine and should be a role model for the future. Finally, I would like to highlight my work in public service, both at the Universidad de Chile, where I was Vice President for Research and Development, in the Sociedad Chilena de Infectología, which I chaired for two years, and on Ministerial Commissions, such as the Commission on Influenza AH1N1 and CAVEI (Advisory Committee on Vaccines and Immunization Strategies), which have played an important role in improving the health of Chile's population.