

OSCAR R. COLEGIO, MD PhD

525 QUINNIPIAC AVENUE • NEW HAVEN CT 06513
PHONE: (203) 469-1333 • E-MAIL: OSCAR.COLEGIO@YALE.EDU

EDUCATION

Yale University , School of Medicine.	<i>Alpha Omega Alpha.</i>	MD, May 2004
Yale University , Department of Cell Biology.		PhD, May 2003
University of Texas at Austin , College of Pharmacy.	<i>magna cum laude.</i>	BS, May 1995
McAllen High School , McAllen, Texas.	<i>summa cum laude.</i>	May 1990

CAREER

Yale University , Department of Dermatology, Clinical Instructor.	July 2008 – June 2009
Yale University , Department of Immunobiology, Postdoctoral Fellow.	July 2007 – June 2009
Yale-New Haven Hospital , Department of Dermatology, Resident.	July 2005 – June 2008
Yale-New Haven Hospital , Department of Internal Medicine, Intern.	June 2004 – June 2005

HONORS and AWARDS

World Congress of Dermatology American Academy of Dermatology Travel Scholarship	2007
Hugh L. Dwyer Award – Resident Award for Clinical Excellence	2007
Alpha Omega Alpha	2004
Yale M.D./Ph.D. Alumni Award	2004
NIH National Research Service Award – Predoctoral Fellowship	2001-2004
American Society for Cell Biology Annual Meeting – Predoctoral Travel Award	2002
National Hispanic Medical Association – Student Travel Fellowship	2002
National M.D./Ph.D. Conference – Student Travel Award	2001
Wilbur G. Downs International Health Fellowship	1997
American Chemical Society Research Scholarship	1994-1995
Wayne G. Abramson Endowed Presidential Scholarship	1994-1995
Rho Chi National Pharmacy Honor Society – Chapter President	1994-1995
Phi Kappa Phi National Honor Society – Graduate Fellowship	1993-1995
American Association of Colleges of Pharmacy Research Scholarship	1993-1994
Alpha Epsilon Delta Premedical Honor Society – Chapter Class President	1993-1994
Texas Achievement Award Scholarship	1990-1995
Percussive Arts Society International Ensemble Competition – First Prize	1989

ACTIVITIES

Society for Investigative Dermatology Committee for Education – Resident Representative	2008-2010
Society for Investigative Dermatology – Advocacy Training Program for Residents	2006-2007
Society for Investigative Dermatology – Resident Retreat for Future Academicians	2006
Yale University, Pierson College – Graduate Affiliate	2003-2004
Yale School of Medicine Admissions Committee – Member	2001-2002
Yale School of Medicine Education Policy and Curriculum Committee – Student Representative	2000-2002
Yale University Committee on International Health – Medical Student Representative	1997-1998
Graduate and Professional Student Senate at Yale – Medical School Representative	1997-1998
Yale-New Haven Hospital Interpreter Program – Spanish Translator	1997-1998
Yale University Chamber Winds – Lincoln Center, New York and National Concert Hall, Dublin	1996-1999
Klinck's Pharmacy, Alamo, Texas – Pharmacist	1995-1996
Texas Legislature – Legislative Assistant for Texas State Representative Robert Gutierrez	1991-1992

TEACHING EXPERIENCE

Clinical Pharmacology, Yale School of Medicine – Seminar Instructor	2002
Molecules to Systems, Yale School of Medicine – Teaching Assistant	2001-2002
Biochemistry and Cell Biology, Yale School of Medicine – Tutor	1997-1998

LICENCES

Registered Pharmacist, State of Texas – License #35433	1995-Present
--	--------------

RESEARCH EXPERIENCE

Yale University , School of Medicine, Department of Immunobiology, under the supervision of Dr. Ruslan Medzhitov. Postdoctoral studies on immune-mediated epithelial-mesenchymal transitions in metastasis have commenced.	July 2007 to Present
--	-------------------------

Yale University , School of Medicine, Department of Cell Biology, under the supervision of Dr. James M. Anderson. Determined the role of the claudins, a family of tight junction proteins, in paracellular ion selectivity. Findings from these studies were recently published (see Publications) and selected for oral presentation at the American Society for Cell Biology Meeting, December 2002. Ph.D. thesis was defended in November 2002 and degree was awarded in May 2003.	October 2000 to December 2002
--	----------------------------------

Yale University , School of Medicine, Section of Microbial Pathogenesis, under the supervision of Drs. Jorge E. Galan and Nigel D. Grindley. Developed an <i>in vitro</i> transposition system for the generation of random mutants of <i>Campylobacter jejuni</i> .	January 1999 to September 2000
--	-----------------------------------

Armed Forces Research Institute of Medical Sciences , Bangkok, Thailand, Department of Bacteriology, under the supervision of Dr. Peter D. Echeverria and sponsorship of Dr. Henry J. Binder. Studied the molecular epidemiology of <i>Campylobacter jejuni</i> and <i>Vibrio cholera</i> in Thai children. The project was supported through a Wilbur G. Downs International Health Fellowship and orally presented in the October 1997 at the Downs Symposium.	May 1997 to August 1997
--	----------------------------

National Institutes of Health , National Cancer Institute, Experimental Immunology Branch, under the supervision of Dr. Paul A. Roche. Studied the targeting of MHC II transmembrane proteins to endosomes. This project was completed in fulfillment of the Summer Internship Program at NIH.	July 1995 to October 1995
--	------------------------------

University of Texas at Austin , College of Pharmacy, Division of Medicinal Chemistry, under the supervision of Dr. Patrick J. Davis. Developed a microbial model of mammalian metabolism for the stereochemical inversion of ibuprofen. This project was supported by the American Association of Colleges of Pharmacy Student Research Program. The findings of this work were orally presented at the Merck Symposium in November 1994.	July 1991 to July 1995
---	---------------------------

Mayo Clinic , Center for Basic Research in Digestive Diseases, under the supervision of Dr. Nicholas F. LaRusso. Characterized the molecular heterogeneity of bile duct cells in normal and cholestatic rats. This project was completed in fulfillment of the Mayo Graduate School's Summer Undergraduate Research Fellowship Program.	May 1993 to August 1993
--	----------------------------

PUBLICATIONS

RESEARCH PAPERS

Eisenbarth SC, **Colegio OR**, O'Connor W, Sutterwala FS, Flavell RA. Crucial role for the Nalp3 inflammasome in the immunostimulatory properties of aluminum adjuvants. *Nature*. Published online May 21, 2008. doi:10.1038/nature06939.

Van Itallie CM, Holmes J, Bridges A, Gookin JL, Coccaro MR, Proctor W, **Colegio OR**, Anderson JM. The density of small tight junction pores varies among cell types and is increased by expression of claudin-2. *J Cell Sci*. 2008 Feb 1;121(Pt 3):298-305.

Van Itallie CM, **Colegio OR**, Anderson JM. The cytoplasmic tails of claudins can influence tight junction barrier properties through effects on protein stability. *J Membr Biol* 2004 May; 199(1):29-38.

Colegio OR, Van Itallie CM, Rahner C, Anderson JM. Extracellular domains of claudins determine paracellular charge selectivity and resistance but not tight junction fibril architecture. *Am J Physiol Cell Physiol* 2003 Jun; 284(6):C1346-54.

Colegio OR, Van Itallie CM, McCrea HJ, Rahner C, Anderson JM. Claudins create charge-selective channels in the paracellular pathway between epithelial cells. *Am J Physiol Cell Physiol* 2002 Jul; 283(1):C142-C147.

Colegio OR, Griffin TJ 4th, Grindley ND, Galan JE. In vitro transposition system for efficient generation of random mutants of *Campylobacter jejuni*. *J Bacteriol* 2001 Apr; 183(7):2384-8.

Alpini G, Ulrich C, Roberts S, Phillips JO, Ueno Y, Podila P, **Colegio O**, LeSage G, LaRusso NF. Molecular and functional heterogeneity of cholangiocytes from rat liver after bile duct ligation. *Am J Physiol* 1997 Feb; 272 (2 Pt 1):G289-G297.

CASE REPORTS

Colegio OR, McNiff JM, Antaya RJ. Nevoid acanthosis nigricans with subtle melanocytic hyperplasia. *J Am Acad Dermatol* 2008 May; 58(5):S102-S103.

Eisenbarth SC, **Colegio OR**, Iyer A, Cooper D, Bannykh S, Baehring J. Images in neuro-oncology: a case of POEMS (Polyneuropathy, Organomegaly, Endocrinopathy, Monoclonal protein and Skin changes) in a patient with multicentric Castleman's disease. *J Neurooncol* 2006 Nov; 81(2):163-5.

BOOK CHAPTERS

Alpini G, Glaser S, Rodgers RED, Robertson W, Phinzy JL, **Colegio O**, Roberts S, Pham L, LeSage G, LaRusso NF. Morphological and functional heterogeneity of the rat intrahepatic biliary tree. p 32-51. In D Alvaro, A Benedetti, and M Strazzabosco (ed.), Vansihing Bile Duct Syndrome - Pathophysiology and Treatment. Kluwer Academic Publishers, 1996.

ABSTRACTS

Colegio OR, Subtil A, Heald PW. Provisional entities of the WHO-EORTC classification system of cutaneous lymphomas; a case series. *World Congress of Dermatology* 2007 Oct; 5526.

Colegio OR, Glusac E, Heald PW. Digitate Dermatitis. *New England Dermatological Society Meeting* 2007 Sep; 3.

Colegio OR, McNiff JM, Braverman IM. Ashy dermatosis. *New England Dermatological Society Meeting* 2007 Sep; 16.

Colegio OR, Girardi M. Wiskott-Aldrich syndrome – X-linked thrombocytopenia. *New England Dermatological Society Meeting* 2005 Oct; 10A.

Colegio OR, Subtil A, Heald, P. Subcutaneous panniculitis-like T-cell lymphoma. *New England Dermatological Society Meeting* 2005 Oct; 13A.

Anderson JM, **Colegio OR**, Van Itallie CM. The unique paracellular charge selectivity of claudins is revealed by comparing expression in a Na⁺ (MDCK) vs. Cl⁻ selective (LLC-PK₁) cell monolayer. *FASEB J* 2003 Mar; 17(4): A51.

Colegio OR, Van Itallie C, Rahner C, Anderson JM. The role of claudin extracellular domains in tight junction fibril architecture and paracellular charge selectivity. *Mol Biol Cell* 2002 Nov; 13: 1607.

Colegio OR, Van Itallie C, Anderson JM. The extracellular domains of claudins determine paracellular ion selectivity. *Gastroenterology* 2002 Apr; 122(4): W946.

Van Itallie C, McCrea H, **Colegio OR**, Anderson JM. Claudin tight junction proteins create charge-selective channels in the epithelial paracellular pathway. *Gastroenterology* 2002 Apr; 122(4): W951.

Colegio OR, Van Itallie CM, Anderson JM. The role of claudins in paracellular permeability and ion selectivity. *Mol Biol Cell* 2001 Nov; 12: 1187.

Alpini G, Roberts S, Phinizy J, Robertson W, Gubba S, **Colegio O**, LeSage G, LaRusso NF. Heterogeneity of the proliferative capacity of rat cholangiocytes. *Gastroenterology* 1995 Apr; 108(4): A1025.

Alpini G, Phillips JO, Kuntz SM, Pham LD, Ueno Y, **Colegio O**, LaRusso NF., Morphologic and functional heterogeneity of intrahepatic bile duct epithelial cells from normal rat liver. *Hepatology* 1993 Oct; 18: A209.

LECTURES

- | | |
|---|------|
| American Society for Cell Biology – Annual Meeting , San Francisco, CA.
Invited Speaker at Cell-Cell Junctions Minisymposium. “ <i>The role of claudin extracellular domains in tight junction fibril architecture and paracellular charge selectivity.</i> ” | 2002 |
| Wilbur G. Downs International Health Symposium , New Haven, CT.
Fellowship recipient and speaker. “ <i>A study of Campylobacter in children in Bangkok.</i> ” | 1997 |
| Merck Research Symposium , San Diego, CA.
Fellowship recipient and speaker. “ <i>Stereoselective metabolism of 2-arylpropionic acids (NSAIDs) in microbial systems developed as models of mammalian metabolism.</i> ” | 1994 |