
Melissa A. Rowland-Goldsmith Biographical Sketch

Melissa A. Rowland-Goldsmith, Ph.D.	Assistant Professor, Biological Sciences		
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR	FIELD OF STUDY
Chapman University, Orange, CA	B.S.	1989	Biology/ Chemistry
University of CA, Riverside, Riverside, CA	Ph.D.	1997	Biochemistry

A. Positions and Honors.

Positions

- 1997-2001 Postdoctoral fellow. University of California, Irvine, CA Murray Korc, M.D., Lead Investigator.
- 2001-2003 Postgraduate researcher. University of California, Irvine, CA Protein Expression Facility Frances Journak, Ph.D., Faculty Director.
- 2002-2003 Part-time Visiting Professor of Biological Sciences, Chapman University, Orange, CA
- 2003-present Assistant Professor of Biological Sciences, Chapman University, Orange, CA
- 1/2011-5/2011 Part-time Visiting Instructor of Biological Sciences, Santiago Canyon College, Orange, CA

Honors and Awards:

Who's Who Among America's Teachers 2005; Chapman University Achievement Award of Excellence in Teaching 2007; Gamma Beta Phi Honor Society Award for Being an Inspiration to Chapman University Students 2007 & 2008; Chapman University Residence Hall Faculty Award for Making a Difference in a Student's Life 2004, 2008, 2010, 2012; National Academies Education Fellow in the Life Sciences 2011-12; Chapman Iota Epsilon Chapter of Delta Tau Delta award for dedication to the scholastic excellence of the members 2011; National Academies Education Mentor in the Life Sciences 2012-2013.

B. Selected peer-reviewed publications

Muralidharan K.R., **Rowland-Goldsmith M.**, Lee A.S., Park G., Norman A.W., Henry H.L., Okamura W.H. (1997) "Inhibitors of 25-hydroxy vitamin D₃-1 α -hydroxylase: thia vitamin D analogs and biological evaluation." Journal Steroid Biochem. Mol. Biol. 62 p 73-8.

Rowland-Goldsmith M.A., Holmquist B., and Henry H.L. (1999) "Genomic cloning, structure, and regulatory elements of the 1 α ,25(OH)₂D₃ down-regulated gene for cyclic AMP-dependent protein kinase inhibitor." Biochimica et Biophysica Acta. 1446 p 414-418.

Rowland-Goldsmith M.A., Maruyama H., Kusama T., Ralli S., and Korc M. (2001) "Soluble type II Transforming Growth Factor-beta (TGF- β) receptor inhibits TGF- β signaling in COLO-357 pancreatic cancer cells *in vitro* and attenuates tumor formation." Clinical Cancer Research. 7 p 2931-40.

Rowland-Goldsmith M.A., Maruyama H., Matsuda K., Idezawa T., Ralli M., Ralli S., and Korc M. (2002) "Soluble type II Transforming Growth Factor- β receptor attenuates expression of metastasis-associated genes and suppresses pancreatic cancer cell metastasis." Molecular Cancer Therapeutics. 1 p 161-167.

Rowland-Goldsmith M.A. (2009). "Laboratory exercises: A new way to introduce microarray technology in a lecture/ laboratory setting by studying the evolution of this modern technology." Biochemistry and Molecular Biology Education. 37 p 37-43.

Rowland-Goldsmith M.A., McNulty N., Krause J. (2009). "Microarray Data Analysis: Can Significance Save Your Life?" Computational Science Education Reference Desk (CSERD), a Pathways project of the National Science Digital Library.

Moss M., **Rowland-Goldsmith M.A.**, Sawant L., Fahy M. (2009). "Mutant X - a bioinformatics exercise for undergraduate biology students." Computational Science Education Reference Desk (CSERD), a Pathways project of the National Science Digital Library.

Service and Teaching

Justice,M.S., Kjelland,J.D., Minardi,C.S., Nguyen,A.A., Orellana,D., Perkins,C.M., **Rowland-Goldsmith,M.A.** (2009). Linum usitatissimum glyceraldehyde-3-phosphate dehydrogenase (GAPC2) gene, partial cds. GenBank accession #:GQ148916.1 <http://www.ncbi.nlm.nih.gov/nuccore/GQ148916.1>

Gomez V., Shackelford T., Tocchi A., **Rowland-Goldsmith M.A.** (2010). "The effect of pomegranate juice extract on the Hedgehog signaling pathway in pancreatic cancer." Chapman University e-Research: A Journal of Undergraduate Work. 1 (2).

Akahoshi,L., Berrigan,E., Boone,M., Chesne,R., James,C., Lawless,N., Punton,S., Singh,H., Swinford,N., Zylstra,A. and **Rowland-Goldsmith,M.** (2011) Jacaranda mimosifolia glyceraldehyde-3-phosphate dehydrogenase (GAPC-1) gene, partial cds. GenBank accession #JF440302.1 <http://www.ncbi.nlm.nih.gov/nuccore/JF440302.1>

Participation at Teaching Development Workshops:

2007 Shodor Computational Biology Workshop Sweet Briar, Virginia

2008 Pearson Strategies Workshop for Biology Educators

2008 Shodor Computational Biology Workshop Houston, Texas

2009 DNA Dolan Learning Center RNA interference Workshop Dominguez Hills, CA

2009 GCAT Microarray Workshop Atlanta, Georgia

2010 DNA Dolan Learning Center Follow-up RNA Interference Workshop Pasadena, CA

2011 DNA Dolan Learning Center Workshop using DNA Subway Tucson, AZ

2011 University of Maryland MathBench Workshop College Park, MD

2011 Regional HHMI/National Academies Summer Institute on Undergraduate Education in Biology Olympia, WA.

2012 Regional HHMI/National Academies Summer Institute on Undergraduate Education in Biology Olympia, WA (invited facilitator).

C. Research

The lab investigates how pomegranate juice extract (PE) slows down human pancreatic cancer cell growth and spread.