

## PROFESSIONAL VITA

**Maria (Mia) Elizabeth Bertagnolli**  
**Professor of Biology**

**Interim Associate Dean, College of Arts and Sciences**

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### EDUCATION

**Ph.D.**, Biology, University of Utah, Salt Lake City, Utah, 1993

Dr. Mary C. Beckerle, Thesis Advisor

**B.S.**, Biology, Minor Chemistry, Gonzaga University, Spokane, Washington, 1987

*summa cum laude*, Alpha Sigma Nu

### ACADEMIC AND ADMINISTRATIVE EXPERIENCE

**Interim Associate Dean, College of Arts and Sciences**, Gonzaga University, August 2017-

**Chair, Director of Honors Program Search Committee**, Gonzaga University, November, 2017

**CAS Curriculum Committee Liaison to the Dean**, Gonzaga University, 2017-2018

**Chair, Biology Department**, Gonzaga University, June 2011-May 2017

**Co-Chair, Supporting Women Faculty in the STEM Fields**, Faculty Enrichment Workshop,  
Murdock College Science Research Program, 2016

**Chair, E-Portfolio Committee for Academic Council**, Gonzaga University, 2010-2011

**Associate Dean, College of Arts and Sciences**, Gonzaga University, June 2009-June 2010

**Research Scientist, Providence Medical Research Center**, Sabbatical 2008-2009

**Professor of Biology**, Gonzaga University, 2008-present

**Associate Professor of Biology**, Gonzaga University, 2000-2008

**Chair, Committee on Health Science Careers**, Gonzaga University, 2000-2008

**Clare Boothe Luce Professor of Biochemistry**, Gonzaga University, 1995-2000

**Assistant Professor of Biology and Chemistry**, Gonzaga University, 1993-2000

### TEACHING EXPERIENCE

**Gonzaga University**, Department of Chemistry, 1993-2000; Department of Biology, 1993-present

**Spokane Community Colleges**, Institute for Extended Learning, Tae Kwon Do Instructor, 1994-2000

**East High Community School**, Salt Lake City, UT, Tae Kwon Do Instructor, 1990-1993

**University of Utah**, Graduate Assistant for Cell Biology, Cell Physiology and Genetics, 1988-1993

### SAMPLE of HONORS, AWARDS and GRANTS FUNDED

**Exemplary Faculty Award**, Gonzaga University, 2008

**Murdock College Research Program for Life Sciences**, (\$38,000) Effect of Truncated APC on  
Epithelial Cell Migration, RhoGTPase Signaling, and Cytoskeletal Function, 2006-2008

**Murdock College Research Program for Life Sciences**, (\$40,500) Effect of Truncated APC on  
RhoGTPase Signaling and Cytoskeletal Function, 2003-2006

**Alumna of the Year Award**, Gonzaga Preparatory School, 1996

### RESEARCH INTERESTS

My field of research is cellular biology. In general, my research focuses on understanding structural and regulatory molecules associated with cytoskeleton-mediated functions such as cell adhesion and migration. I am currently interested in studying changes in cytoskeletal structure and signaling

pathways that affect cell adhesion during the development of colon cancer. The effect of colon cancer chemopreventive drugs on these structures and pathways is also being examined to improve our understanding of how these drugs work.

#### **SCIENCE PUBLICATIONS AND PRESENTATIONS** (undergraduate co-authors are underlined)

Bertagnolli, M.E., Meek, R.L., Anderberg, R.J., Cooney, S.K., Tuttle, K.R. RAGE expression modulates mediators of fibrotic injury in mesangial cells. *J Am Soc Nephrol* 20, 2009; SA-PO2914.

Meek, R.L., Bertagnolli, M.E., Leboeuf, R.C., Alpers, C.E., Hudkins, K.L., Tuttle, K.R. Albuminuria, podocyte loss, and kidney RAGE expression in a mouse model of type 1 diabetes and high protein diet. *J Am Soc Nephrol* 20, 2009: SA-PO2912.

Weyant, M.J., A.M. Carothers, M.E. Bertagnolli, and M.M. Bertagnolli (2000) Colon cancer chemopreventive drugs modulate integrin-mediated signaling pathways. *Clinical Cancer Research* 6: 949-956.

Bertagnolli, M.E., L.A. Hudson and G.Y. Stetsenko (1999) Selective association of the tyrosine kinases Src, Fyn and Lyn with integrin-rich actin cytoskeletons of activated, nonaggregated platelets. *Biochemical and Biophysical Research Communications* 260: 790-798.

Weyant, M.J., A.M. Carothers, R.T. Bilinski, M.E. Bertagnolli and M.M. Bertagnolli (1999) Increased tyrosine phosphorylation of focal adhesion kinase (FAK) correlates with altered intestinal cell growth in an animal model of early carcinogenesis. *Abstracts*, Association for Academic Surgery, Philadelphia, PA. (Abstract chosen to receive a resident research award)

Roy, M.L. and M.E. Bertagnolli (1999) Identification of a platelet membrane glycoprotein causing an alloimmune response. *Book of Abstracts*, 217<sup>th</sup> ACS National Meeting, Anaheim, CA, March 21-25; CHED-422.

Hudson, L.A., G.Y. Stetsenko and M.E. Bertagnolli (1998) Kinase activity in integrin-rich cytoskeletons isolated from activated, nonaggregated platelets. *Molecular Biology of the Cell* 9:163a.

#### **RECENT UNDERGRADUATE POSTER PRESENTATIONS**

Gamboa, N.T.; Hoeg, L.N.; Anton, T.M.; Bertagnolli, M.E. “Do COX-2 Inhibitors Restore Cell Adhesion and Migration in Cultured Epithelial Cells Expressing Truncated APC?” 2013 Spokane Intercollegiate Research Conference. Spokane, WA. (Poster)

Wilson, J.; Gamboa, N.T.; Bertagnolli, M.E. “The Effects of Adenomatous Polyposis Coli Mutations on Cell Adhesion: A Window into Colorectal Cancer Development.” 2012 Spokane Intercollegiate Research Conference. Spokane, WA. April 21, 2012.

Jarrett, T.R., Miller, J.M., Gamboa, J. and Bertagnolli, M.E. “Truncated APC Reduces Cell Adhesion and Motility in MDCK cells.” 36<sup>th</sup> Annual West Coast Biological Science Undergraduate Research Conference, Tacoma, WA, April 16, 2011.

Bertram, R., Gamboa, C. and M.E. Bertagnolli (2007) Cell-Cell Adhesion and the Subcellular Localization of Involved Proteins. Sixteenth Regional Conference on Undergraduate Research of the Murdock College Science Research Program (MCSRP), Salem, OR, November 2-3.