BIOGRAPHICAL SKETCH
MARIA A. BURNATOWSKA-HLEDIN

A. Professional Preparation

Physiology, McGill University,	Ph.D., 1980
Physiology, McGill University,	M.S., 1977
Biochemistry, McGill University,	B.S., 1975

B. Appointments

Professor, Departments of Biology and Chemistry, Hope College, 1998-Present
Associate Professor, Departments of Biology and Chemistry, Hope College, 1992-1998
Assistant Professor, Department of Physiology, Michigan State Univ., 1987-1992
Instructor, Department of Physiology, Michigan State University, 1985-1987
Instructor, Departments of Med. and Phys., Michigan State Univ., 1983-1985

C. Publications (* indicates undergraduate co-authors; undergraduate REU co-authors in bold-faced)

1. Van Dort, C.*; P. Zhao*, Parmelee, K.*, Capps, B.*, Poel, A.*, Listenberger, L.*, Card, B.*, Murrey D.*, Kossoris J.*, and M. Burnatowska-Hledin. VACM-1, a cullin gene family member, attenuates cellular growth *in vitro*. AJP-Cell: 285: p. C1-C11, 2003.
2. Burnatowska-Hledin, M. and M. DeJongh. Development and Implementation of an Introductory Bioinformatics Course at Hope College. In: Transformations @ Liberal Arts in Digital Age. Vol 2: (http://dev.colleges.org/drupal/) 2004.
3. Burnatowska-Hledin, M. Kossoris J.*, C. Van Dort*, D. Murrey*, J. Abbott*, C. Kan* and C. Barney. VACM-1 expression in T47D human breast cancer cell line. Biochem. Biophys. Res. Com. 319: 817-825, 2004.
4. Maria A. Burnatowska-Hledin: Truncated form of VACM-1/cul 5 with an extended 3' untranslated region stimulates cell growth via a MAPK-dependent pathway.(BBRC 343:1086-1093, 2006).
5. Johnson, Alyssa* E. I. P. Le*, Maria A. Burnatowska-Hledin: VACM-1, a cul-5 Gene, Regulates Estrogen Dependent Growth of T47D Cancer Cell Line. (Molec Cell Biochemistry, Dec 2006).
6. **Buchwalter, A**, C. Van Dort*, R. Smith*, S. Schultz*, I. P. Le*, J. Abbott*, E, Oosterhouse, A. Johnson*, F. Hansen-Smith, and M. Burnatowska-Hledin: Nedd-8 Modification of VACM-1/cul 5 induces MAPK phosphorylation and maspin degradation, and converts endothelial cells to the angiogenic phenotype. (Microvascular Research-in print)

(ii) Presentations

1. Abby Buchwalter, Isabellele P. Le and M. Burnatowska-Hledin. VACM-1, a cul 5 gene, regulates angiogenesis by modulating MAPK phosphorylation and maspin protein expression. ISBMB.
2. Abby L. Buchwalter, Isabelle P. Le, and Maria Burnatowska-Hledin†, "VACM-1, a Cul 5 Gene, Regulates Angiogenesis by Modulating MAPK Phosphorylation and Maspin Protein Expression," ASBMB April 2005 San Diego.
3. Ashleigh Sartor : ASBMB April 2005 San Diego.
4. Alyssa Johnson: Effects of VACM-1 on ER̨ expression in T47D cells. ASBMB April 2005 San Diego.
5. Isabelle Le: VACM-1 Regulates AQP2 expression. ASBMB April 2005 San Diego.
6. Alyssa E. Johnson, I. P. Le, Maria A. Burnatowska-Hledin: VACM-1 mutants Regulate Estrogen Dependent Growth of T47D Cancer Cell Line. ASBMB, San Francisco, 2006.
7. Johnson Alyssa E., Maria Burnatowska-Hledin, Phosphorylation and/or Neddylation of VACM-1/cul5 Reverses its Inhibitory Effect on Cell Growth in T47D Breast Cancer Cells. VAI Cancer Symposium, Sept 2006.
8. Johnson Alyssa E., Maria Burnatowska-Hledin, Phosphorylation and/or Neddylation of VACM-1/cul5 Reverses its Inhibitory Effect on Cell Growth in T47D Breast Cancer Cells. Univ. of Notre Dame, Aug. 2006.

9. Gabe Marquez, Michael Hledin and Maria Burnatowska-Hledin: Regulation of VACM-1 expression. Presented at Univ. of Notre Dame, Aug. 2006
10. A. Johnson and M. Burnatowska-Hledin, Neddylation and/or Phosphorylation of VACM-1/cul-5 is Required for its Regulation of Estrogen-dependent Growth in T47D breast cancer cell line. ASBMB. Wash. DC. Apri 2007.
11. Oosterhouse, E. and M. Burnatowska- Hledin. The Antiangiogenic Effect of VACM-1 Protein in Rat Endothelial Cells is Regulated by its Neddylation and/or Phosphorylation Status.

D. Synergestic Activities

Invited speaker at West Michigan Regional Undergraduate Science Research Conference. Oct. 20, 2007.
Invited speaker at a *Bioinformatics Workshop* at Bates College (June 2006).
Organized and chaired a meeting on *Bioinformatics* for GLCA/AMC colleges in May 2004.
Sigma Xi Award for Scientific Outreach, Hope College, 2001
Chair and Presenter, ACS-Midwest Meeting on Teaching Biochemistry through Research, 2001
Dreyfus Teacher/Scholar Award, 2000
NIH Grant Review Panelist, 1995-1996
American Heart Association Grant Review Panelist, 1995-1999
American Physiological Society
American Association for the Advancement of Science
American Society of Biochemistry and Molecular Biology
American Society of Cell Biology

(ii). Recent External Grant Support
2004-2008 NIH-AREA grant: "VACM-1, a cul 5 gene regulates cell growth and angiogenesis." $209,232.
2003: MITC: Planning proposal entitled "Hands-on Teaching Bioinformatics" $ 3400
2004: "MITC: Hands-on Teaching Bioinformatics" Workshop at Hope College

E. Collaborators and other Affiliations
(i) undergraduate research students:
Approximately37-undergraduate students mentored since 2000. Nine undergraduates active in the lab in 2007-2008: Brian Clow'08, J.P. Joe Stodola '09, Shirley Bradley'10, , Lida Dabney'10 (Harper Community College-Chicago), John Pelton,'09, Emmy Shuietman'10, Jeanne Oxendine'11, Paoula Munoz'12 and Drake Harper (High School).
Nine undergraduate students active in 2006-2007 research group: Alyssa Johnson'07, Liz Oosterhouse'07, Emily Harper'07, Stephanie Harrier'07, Justin Lubbers'08, Brian Clow'08, J.P. Pustelak'08, Nick Zendler'08, Shirley Bradley'10, Joe Stodola'09, Lida Darby'08 (Harper Community College-Chicago), Mike Hledin (High School) Gabe Marquez (High School-REACH student)

(ii) Collaborations:
Dr. James Resau, Van Andel Research Institute (Grand Rapids, MI). Microarray analysis.