<u>Curriculum Vitae</u> Donna M. Bozzone

Address: Department of Biology

Saint Michael's College Colchester, VT 05439

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Education:

1978 Manhattan College

B.S. summa cum laude in Biology

1980 Princeton University

M.A. in Biology

1983 Princeton University

Ph.D. in Biology (Specialization in Developmental and Cellular Biology)

Professional Positions and Appointments:

2002 - present	Professor of Biology, Saint Michael's College
2006- present	Chair of the Major Workshop committee for ABLE
2005 - 2006	Co-chair of the Major Workshop Committee for ABLE
2003- present	Member of Publication Review Panel for the <i>Journal of College Science Teaching</i>
2001 - 2002	Professor and Chair of Biology, Saint Michael's College
1999 - present	Chief Advisor for the Health Professions, NEAAHP
1996 - 2001	Associate Professor and Chair of Biology, Saint Michael's College
1998 - 2002	Member-At-Large, Association for Biology Laboratory Education
1994 - 1996	Associate Professor of Biology, Saint Michael's College
1994 - 1997	Member of Manuscript Review Panel of the Journal College Science Teaching
1996 - present	Reviewer for the American Biology Teacher
1987 - 1993	Assistant Professor of Biology, Saint Michael's College
1987	Visiting Lecturer in Biology, College of the Holy Cross, Worcester, MA
1983 - 1987	Research Associate, Cell Biology Group, Worcester Foundation for

Experimental Biology, Shrewsbury, MA

Awards and Honors:

Manhattan College: Elected to the following honor societies: *Phi Beta Kappa*, *Sigma Xi*, *Beta*

Beta Beta (Biology Honor Society), Epsilon Sigma Pi (Manhattan College Honor Society); 1974-78 Manhattan College Full Academic Scholarship; Dean's List 1974-78; received Biology Department and

Research Medals, 1978.

Princeton University: 1978-80, 1981-82 National Science Foundation Pre-doctoral fellowship;

1980-81 Princeton University Graduate Fellowship; 1978-80 John Dunlop Prize; 1981-82 Merit Prize; 1982-83 American Association of

University Women Dissertation Fellowship.

Worcester Foundation: 1983 Awarded NIH postdoctoral fellowship (declined)

1985 Awarded NIH postdoctoral fellowship

Saint Michael's College: 1987 Awarded SMC Research Grant

1988 Awarded SMC Research Grant

1989 Awarded Vermont EPSCoR Research Grant1990 Awarded Vermont EPSCoR Research Grant

1990 Faculty Appreciation Award from the Class of 1990

1991 Awarded SMC Summer Grant

1992 Awarded SMC Faculty Development Grant (with Robert Niemi)

1992 Awarded National Science Foundation Grant for Laboratory

Instrumentation Improvement

1993 Awarded SMC Faculty Development Grant

1995 Awarded SMC Faculty Development Grant

1996 Who's Who Among America's Teachers

1996 Awarded National Science Foundation Grant for Laboratory

Instrumentation Improvement (co-principal investigator with

Glenn Bauer)

1997 Awarded SMC Faculty Development Grant (with Glenn Bauer)

1999 Gerald E. Dupont Award from the Student Association

2000 Who's Who of American Women

2001 Joanne Rathgeb Teaching Award

2003 Inducted into Delta Epsilon Sigma

2005 Who's Who of American Education

Professional Society Memberships:

American Association of University Women American Institute of Biological Science Association for Biology Laboratory Education National Association of Biology Teachers National Science Teachers Association Sigma Xi

Society for College Science Teaching

Dissertation:

<u>Bozzone</u>, <u>D</u>. <u>M</u>. (1983). Cellular Interactions During Early Stages of Macrocyst Development in *Dictyostelium discoideum*. Ph.D. dissertation, Princeton University, Princeton, NJ, 175 pp.

Publications: Books

Bozzone, D. M. 2007. Cancer Genetics. Chelsea House Publishers. New York, NY.

Bozzone, D. M. 2007. Causes of Cancer. Chelsea House Publishers. New York, NY.

<u>Bozzone, D. M.</u> (Consulting Editor). *Biology of Cancer* Series. Chelsea House Publishers. New York, NY.

Bozzone, D. M. (under contract) Leukemia. Chelsea House Publishers. New York, NY.

<u>Bozzone</u>, <u>D.M.</u> and D. S. Green. (under contract) *Biology for the Informed Citizen*. Oxford University Press. New York, NY.

Publications: Articles and Papers

<u>Bozzone, D. M.</u> 2005. Using microbial eukaryotes for laboratory instruction and student inquiry. In: O'Donnell, M. (ed.) Vol. 26, *Tested Studies for Laboratory Teaching. Proceedings of the 26th Workshop/Conference of the Association for Biology Laboratory Education.*

<u>Bozzone</u>, <u>D</u>. <u>M</u>. 2004. Revisiting "A practical guide to the use of cellular slime molds for laboratory exercise and experiments". In: O'Donnell, M. (ed.) Vol. 25, *Tested Studies for Laboratory Teaching*. *Proceedings of the 25th Workshop/Conference of the Association for Biology Laboratory Education*.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. 2002. Using *Tetrahymena* to teach cell behavior. *Carolina Tips*, Vol. 65, Number 3. Available online at: http://www.carolina.com/tips

<u>Bozzone, D. M.</u> 2001. Cells with Personality! The use of microbial eukaryotes for laboratory instruction. II. *Physarum. Carolina Tips*, Vol. 64, Number 3. Available online at: http://www.carolina.com/tips

<u>Bozzone, D. M.</u> 2001. Cells with Personality! The use of microbial eukaryotes for laboratory instruction. I. Social amoebae. *Carolina Tips*, Vol. 64, Number 2. Available online at: http://www.carolina.com/tips

Green, D. S. and <u>D. M. Bozzone</u>. 2001. A test of hypotheses about random mutation: Using classic experiments to teach experimental design. *American Biology Teacher*, <u>63(1)</u>:54-58.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and D. A. Martin. 2000. An experimental system to study phagocytosis. Chapter 20 in: Karcher, S. (ed.) Vol. 21, *Tested Studies for Laboratory Teaching*. *Proceedings of the 21st Workshop/Conference of the Association for Biology Laboratory Education*.

- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 2000. Investigating phagocytosis in *Tetrahymena*: An experimental system suitable for introductory and advanced instruction. *American Biology Teacher*, <u>62 (2)</u>:136-139.
- 2000. Above also in: Biology Labs that work: The Best of How-To-Do-Its, Vol. II. Black, S., R. Moore, and H. Morgan, (Eds.) NABT Press. Reston, Virginia.
- Green, D.S. and <u>D. M. Bozzone</u>, 1998. The Island Biogeography Game. In: Kuntz, S., A. Hessler, and G. Bauer. *Making Meaning: Integrating Science through the Case Study Approach to Teaching and Learning*. Primus Publishing. McGraw-Hill.
- 1999. Above also in: *Ecology Case Studies* (to accompany Manuel Molles' text: *Ecology Concepts and Applications*). Life Sciences division, McGraw-Hill.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 1998. An investigative approach to the study of phagocytosis in *Tetrahymena*. p. 347-350. In Karcher, S. (ed.) Vol. 19, *Tested Studies for Laboratory Teaching*. *Proceedings of the 19th Workshop/Conference of the Association for Biology Laboratory Education*.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. and D. A. Martin. 1998. Chemotaxis in the plasmodial slime mold, *Physarum polycephalum*: An experimental system for student exploration and investigation. *American Biology Teacher*, <u>60(1)</u>: 59-62.
- 2000. Above also in: *Biology Labs that work: The Best of How-To-Do-Its, Vol. II.* Black, S., R. Moore, and H. Morgan, (Eds.) NABT Press. Reston, Virginia.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 1997. Feeding behaviors in cellular slime mold amoebae: A microbial system to study competition. *American Biology Teacher*, <u>59(9)</u>: 565-572.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 1997. Using tissue culture to investigate plant cell differentiation and dedifferentiation. *J. Biological Education*, <u>31(4)</u>: 293-299.
- <u>Bozzone</u>, <u>D. M.</u> 1997. How to get students to stop asking "Is this lab going to take the whole three hours?" A description of a cell biology lab curriculum which emphasizes scientific inquiry, p. 303-305. In: Glase, J. (ed.) Vol. 18, *Tested Studies for Laboratory Teaching. Proceedings of the 18th Workshop/Conference of the Association for Biology Laboratory Education.*
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 1996. Chemotaxis in *Physarum*, a plasmodial slime mold (a simple experiment to teach chi² analysis). p. 247-250 in: Glase, J. (ed.) Vol. 17, *Tested Studies for Laboratory Teaching*. *Proceedings of the 17th Workshop/Conference of the Association for Biology Laboratory Education*.
- <u>Bozzone</u>, <u>D. M.</u> 1995. Using tissue culture to investigate plant cell differentiation and dedifferentiation. p. 248 in: Goldman, C. (ed); Vol. 16, *Tested Studies for Laboratory Teaching*. *Proceedings of the 16th Workshop/Conference of the Association of Biology Laboratory Education*.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. 1994. An experimental system to study developmental choice. *J. College Science Teaching*, <u>23</u>:363-366.
- <u>Bozzone</u>, <u>D. M.</u> 1993. A practical guide to the use of cellular slime molds for laboratory exercises and experiments. Chapter 1 in: Goldman, C. (ed.), Vol. 14, *Tested Studies for Laboratory Teaching*.

Proceedings of the 14th Workshop/Conference of the Association for Biology Laboratory Education.

<u>Bozzone</u>, <u>D</u>. <u>M</u>., R. E. Kohnken, and E. A. Berger. 1987. Relationships between cell-cell interactions, cAMP and gene expression in a developmental mutant of *Dictyostelium discoideum*. *Neurochemical Res.* 12:1005-1012.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and E. A. Berger. 1986. Distinct developmental regulation and properties of the responsiveness of different genes to cyclic AMP in *Dictyostelium discoideum*. *Differentiation* <u>33</u>:197-206.

Berger, E. A., <u>D. M. Bozzone</u>, M. B. Berman, J. A. Morgenthaler, and J. M. Clark. 1985. Regulation of discoidin I gene expression in *Dictyostelium discoideum* by cell-cell contact and cAMP. Same article as below <u>in</u>: *Membrane Receptors and Cellular Recognition*. (M. P. Czech and C. R. Kahn, eds.), Alan R. Liss, New York, pp. 233-242.

Berger, E. A., <u>D. M. Bozzone</u>, M. B. Berman, J. A. Morgenthaler, and J. M. Clark. 1985. Regulation of discoidin I gene expression in *Dictyostelium discoideum* by cell-cell contact and cAMP. *J. Cell Biochem.* 27:391-400.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. 1983. A comparison of the macrocyst and fruiting body developmental pathways in *Dictyostelium discoideum*. *J. Gen. Microbiol*. <u>129</u>:1371-1380.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and J. T. Bonner. 1982. Macrocyst formation in *Dictyostelium discoideum*: Mating or Selfing? *J. Exp. Zool*. 220:391-394.

1991. Above reprinted in: *Researches on Cellular Slime Moulds*. Selected Papers of J. T. Bonner. Indian Academy of Sciences. Bangalore, India.

Evans, L. S. and <u>D</u>. <u>M</u>. <u>Bozzone</u>. 1978. Effects of buffered solutions and various anions on vegetative and sexual development in gametophytes of *Pteridium aquilinum*. *Can. J. Bot.* 56:779-785.

Evans, L. S. and <u>D</u>. <u>M</u>. <u>Bozzone</u>. 1977. Effects of solutions to simulate acidic precipitation on fertilization of the bracken fern (*Pteridium aquilinum*). pp. 164-182 <u>in</u>: Kitchings, J. T. and N.E. Tarr (eds.), *National Environmental Research Park Symposium: National Resource Inventory*, *Characterization, and Analysis*. ORNL-5304. Oak ridge National Laboratory, Oak Ridge, Tennessee.

Evans, L. S. and <u>D. M. Bozzone</u>. 1977. Effects of buffered solutions and sulfate on vegetative and sexual development in gametophytes of *Pteridium aquilinum*. *Am. J. Bot*. <u>64</u>:897-902.

Publications: Laboratory Teaching Kits:

The following kits are now available from Carolina Biological Supply Company. They are advertised in their current catalogue.

Bozzone, D. M. Introduction to *Physarum*.

Bozzone, D. M. Chemotaxis in *Physarum polycephalum*.

- Bozzone, D. M. Introduction to Tetrahymena.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. Phagocytosis and Vacuole Formation in *Tetrahymena*.
- <u>Bozzone</u>, <u>D</u>. <u>M</u>. Introduction to *Dictyostelium* and Other Social Amoebae.
- Bozzone, D. M. Food Preference, Competition, and Cooperation in Social Amoebae.

Abstracts and Presentations:

Bozzone, D. M. 2004. Using microbial eukaryotes for laboratory instruction and student inquiry. (Association for Biology Laboratory Education, 2004 Workshop/Conference, Bowling Green State University, Bowling Green, Ohio).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. 2003. Revisiting "A Practical Guide to the Use of Cellular Slime Molds for Laboratory Exercises and Experiments." (Association for Biology Laboratory Education, 2003 Workshop/Conference, University of Nevada, Las Vegas). This was an invited presentation.

<u>Bozzone</u>, <u>D. M.</u> and D. A. Martin. 1999. An experimental system to study phagocytosis. (Association for Biology Laboratory Education, 1999 Workshop/Conference, University of Nebraska, Lincoln).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. 1997. *Dictyostelium* and Developmental biology. Dibner Institute for the History and Philosophy of Science. "Making Choices: Organisms in the History of Biology." July 27-August 2, 1997. Marine Biological Laboratory. Woods Hole, MA. This was an invited presentation.

<u>Bozzone</u>, <u>D. M.</u> 1997. Phagocytosis in *Tetrahymena*: An experimental system to explore cell function. (Association for Biology Laboratory Education, 1997 Workshop/Conference, University of Calgary, Calgary, Alberta, Canada).

<u>Bozzone</u>, <u>D. M.</u> 1996. How to get students to stop asking "Is this lab going to take the whole three hours." A description of a cell biology lab curriculum which emphasizes scientific inquiry. (Association for Biology Laboratory Education, 1996 Workshop/Conference, Boston University, Boston, MA).

<u>Bozzone, D. M.</u> 1995. Chemotaxis in *Physarum*, a plasmodial slime mold (a simple experiment to teach chi² analysis). (Association for Biology Laboratory Education, 1995 Workshop/Conference, Purdue University, West Lafayette, Indiana.)

<u>Bozzone</u>, <u>D. M.</u> 1994. Using tissue culture to investigate plant cell differentiation and dedifferentiation. (Association for Biology Laboratory Education, 1994 Workshop/Conference, Emory University, Atlanta, Georgia.)

<u>Bozzone, D. M.</u> 1992. A Practical Guide to the Use of Cellular Slime Molds in Laboratory Exercises. (Association for Biology Laboratory Education, 1992 Workshop/Conference, University of Nevada, Las Vegas.)

Bozzone, D. M. and E. A. Berger. 1986. Developmental analysis of the differential responsiveness of

genes to cAMP in *Dictyostelium discoideum*. (American Society for Cell Biology, 26th Annual Meeting, Washington, D.C.).

<u>Bozzone, D. M.</u> and E. A. Berger. 1986. Developmental regulation of the response of genes to cAMP in *Dictyostelium discoideum*. (Society for Developmental Biology, 45th Annual Symposium, San Diego, California).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and E. A. Berger. 1985. cAMP control of gene expression in *Dictyostelium discoideum* depends on developmental history. (American Society for Cell Biology, 25th Annual Meeting, Atlanta, Georgia). J. Cell Biol. 101: No. 5 Pt. 2, Abstr. 18. Selected for minisymposium presentation.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and E. A. Berger, J. M. Clark, M. B. Berman, and J. A. Morgenthaler. 1984. Cell contact regulation of gene expression in *Dictyostelium*. (Society for Developmental Biology, 43rd Annual Symposium, New York, New York).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and J. T. Bonner. 1982. Cell interactions during early stages of macrocyst development in *Dictyostelium discoideum*. (International Cellular Slime Mold Conference, Hartford, Connecticut).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and L. S. Evans. 1978. Effects of buffered solutions and various anions on vegetative and sexual development in gametophytes of *Pteridium aquilinum*. (Botanical Society of America, Annual Meeting, Blacksburg, Virginia).

<u>Bozzone</u>, <u>D</u>. <u>M</u>. and L. S. Evans. 1977. Effects of buffered solutions and sulfate on vegetative and sexual development in gametophytes of *Pteridium aquilinum*. (Botanical Society of America, Annual Meeting, East Lansing, Michigan).

Manuscripts and Work in Preparation

<u>Bozzone</u>, <u>D</u>. <u>M</u>. Studying Cell Communications in Social Amoebae. To be submitted to *American Biology Teacher*.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. Using Microbial Eukaryotes for Laboratory Instruction. To be submitted to *Journal of College Science Teaching* or the *American Biology Teacher*.

<u>Bozzone</u>, <u>D</u>. <u>M</u>. No title (yet). A lab manual for cell and developmental biology. The focus is on the use of microbial eukaryotes for student experiments and research projects.