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Curriculum Vitae

Michael A. O'Donnell

Department of Biology, Trinity College
Hartford, CT 06106

michael.odonnell@trincoll.edu
860-297-2228

Education

- 1980-1984 State University of New York College of Environmental Science and Forestry,
Syracuse, New York: M.S., Environmental and Forest Biology (Concentration in
Wildlife Biology and Ecology)
Thesis: "Wildlife Problems, Human Attitudes and Response to Wildlife in the
Syracuse, New York Metropolitan Area"
- 1974-1978 University of Rhode Island: B.S., Zoology (Minor, Chemistry)

Academic Appointments

- 2003 – present Principal Lecturer and Laboratory Coordinator in Biology, Trinity College
- 1998 – 2003 Senior Lecturer and Laboratory Coordinator in Biology, Trinity College
- 1989 - 1998 Lecturer and Laboratory Coordinator in Biology, Trinity College
- 1986 - 1989 Biology Laboratory Coordinator, Trinity College
- 1985 - 1986 Adjunct Instructor, Dept. of Biology, Onondaga County Community College,
Syracuse, NY
- 1985 - 1986 Visiting Instructor, Dept. of Biology, LeMoyne College, Syracuse, NY
- 1983 - 1986 Lecturer in the Biological Sciences, State University of New York College at
Cortland
- 1984 Educational consultant for Cooperative Bass Fisheries Project, New York
Department of Environmental Conservation
- 1983 - 1984 Research Associate, Dept. of Biology, Syracuse University
- 1982-1984 Biology Program Coordinator, Directed Studies Center, SUNY College of
Environmental Science & Forestry

Courses taught at Trinity College

Lecture courses: The Evolution of Life (BIOL 182L), The Cellular Basis of Life (BIOL 203L and 183L); Organisms & Populations (BIOL 152L), Cells, Metabolism, & Heredity (BIOL 153L); Urban Wildlife Ecology (BIOL 131), Organisms and their Environment (BIOL 117)

Laboratory courses: The Evolution of Life (BIOL 182L), The Cellular Basis of Life (BIOL 203L and 183L); Organisms & Populations (BIOL 152L), Cells, Metabolism, & Heredity (BIOL 153L)

Seminar/independent

study courses: Research in Biology (Laboratory) (BIOL 425), Research in Biology (Library) (BIOL 419), Research Seminar (BIOL 403-404), Honors Thesis (BIOL 497), Honors Research in Environmental Sciences (ENVS 497 and 425), Science Research Apprenticeship (ISP 118), Internship Programs (INTR 111, 116, and 133) and Independent Study (BIOL 399) (e.g., CT Dept. of Environmental Conservation, National Wildlife Society, Roaring Brook Nature Center, Hartford Center for Clinical Research, Hartford Hospital), Biology Teaching Assistantship Program (BIOL 466-09)

Summer programs: Summer research mentor
Trinity College Summer Challenge Program: (teaching, administration, curriculum development)

Academic Administrative Experience

1986-2016 Coordinator, Introductory Biology Courses (BIOL 152L, 153L, 182L, 203L, 183L; includes coordination of 2-semester, team-taught introductory lecture courses; assisting in curriculum development and pedagogical innovation; development of laboratory curriculum, supervise lab instructors, teaching assistants, and preparatory workers)

1992-1994 Director, Trinity College Summer Challenge Program

Professional Membership

Association for Biology Laboratory Education (Offices held: Past President, 2009-2010; President, 2007-2009; Proceedings Editor, 2002-2007; Secretary, 1999-2001)

The Wildlife Society (including the Urban Wildlife Working Group Committee and the Urban Wildlife Education Committee)

National Science Teachers Association

Society for College Science Teachers (including Connecticut chapter)

National Association of Biology Teachers

New England Consortium for Undergraduate Science Education

National Center for Case Study Teaching in the Sciences

Honors, Awards, Grants

- 2008 Research Assistant grant from the Faculty Research Committee, Trinity College: "Avian nest predation in urbanized areas"
- 2008 Faculty Development Grant from Trinity HHMI Steering Committee, "Designing an inquiry-based laboratory curriculum for a new course: Bio III, The Cellular Basis of Life"
- 2007 Faculty Development Grant from Trinity HHMI Steering Committee, "Designing an inquiry-based laboratory curriculum for a new course: Bio II, The Evolution of Life"
- 2005 Research Assistant grant from the Faculty Research Committee, Trinity College: "Monitoring of mammal populations at the Trinity College Field Station"
- 2004 Hughes Summer Scholars grant from Trinity's HHMI Steering Committee, "Monitoring of mammal populations at the Trinity College Field Station"
- 2001-2003 Co-PI (along with Joan Morrison and Craig Schneider; PI = Scott Smedley): "Planning Activities: Development of a Strategic Plan for the Trinity College Field Station at Church Farm." \$25,000, National Science Foundation Program, Division of Biological Infrastructure, Biological Field Station and Marine Laboratory Program.
- 1999 Research Assistant grant from the Faculty Research Committee, Trinity College: "Movements of female raccoons after eviction from houses"
- 1996 Arthur H. Hughes Award for Achievement in Teaching, Trinity College
- 1996 Urban Curricular Initiative course development grant for Urban Wildlife Ecology and Management
- 1993 Trinity College Academic Computing Advisory Committee Summer Grant
- 1993 NSF (National Science Foundation) Symposium grant: Invited speaker, "Group Learning in the Science Laboratory," Biology in Action: New Approaches to Teaching and Learning Science, Radford University, Radford, Virginia
- 1991-1993 NECUSE (New England Consortium for Undergraduate Science Education) grant for laboratory curriculum development: "Acid Precipitation: A Project Laboratory for General Chemistry and Biology." (co-recipient along with David Henderson)

Areas of scholarship

- Teaching strategies for biology; specifically laboratory curriculum development, and introductory biology education
- Wildlife ecology and behavior in urban and suburban habitats
- Habitat use and monitoring of mammal populations
- Human dimensions in wildlife management

Publications

Papers in peer-reviewed journals:

O'Donnell, M.A. and A.J. DeNicola. 2006. Den site selection of lactating female raccoons following removal and exclusion from suburban residences. *Wildlife Society Bulletin* 34(2):366-370.

Book Chapters:

O'Donnell, M.A. 2015. "Science Writing, Wikis, and Collaborative Learning." *In* Dougherty, J. and O'Donnell, T., editors, " *Web Writing: Why and How for Liberal Arts Teaching and Learning* (University of Michigan Press, 2015). ISBN 978-0-472-05282-0

O'Donnell, M. A. 1999. "The role of the laboratory experience in science education." pp. 71-82 *In* McLaughlin, M.W., D.A. Hyland, and J.R. Spencer, eds., "Teaching Matters: Essays on Liberal Education at the Millennium," Trinity College, Hartford, CT

O'Donnell, M.A. 1993. "Plants and Water," "Transpiration and Tissues," "Separation of Chloroplast Proteins by Polyacrylamide Gel Electrophoresis," and "Phylogeny and Classification of Vertebrates." *In* Thomas, M., and P. Bryer, eds., "A Collection of Advanced Biology Laboratory Exercises," The New England Consortium for Undergraduate Science Education.

O'Donnell, M.A. 1991. "Study of Succession in a Laboratory Microecosystem," "Enzyme Induction in a Prokaryote: the lac operon," "Enzymology: Preparation and Assay of a Krebs Cycle Enzyme," "Analysis of Cockroach Digestive Enzymes," and "Preparation and Fusion of Plant Protoplasts." *In* Thomas, M., Bryer, P., and M. Dermody, eds., "A Collection of Introductory Biology Laboratory Exercises," The New England Consortium for Undergraduate Science Education.

Books Edited:

O'Donnell, M.A. (editor). 2007. Tested Studies for Laboratory Teaching: Proceedings of the 28th workshop/conference of the Association for Biology Laboratory Education (ABLE), 403 pages. ISBN 1-890444-10-3

O'Donnell, M.A. (editor). 2006. Tested Studies for Laboratory Teaching: Proceedings of the 27th workshop/conference of the Association for Biology Laboratory Education (ABLE), 382 pages. ISBN 1-890444-09-X

O'Donnell, M.A. (editor). 2005. Tested Studies for Laboratory Teaching: Proceedings of the 26th workshop/conference of the Association for Biology Laboratory Education (ABLE), 452 pages. ISBN 1-890444-08-1

O'Donnell, M.A. (editor). 2004. Tested Studies for Laboratory Teaching: Proceedings of the 25th workshop/conference of the Association for Biology Laboratory Education (ABLE), 414 pages. ISBN 1-890444-07-3

O'Donnell, M.A. (editor). 2003. Tested Studies for Laboratory Teaching: Proceedings of the 24th workshop/conference of the Association for Biology Laboratory Education (ABLE), 334 pages. ISBN 1-890444-06-5

O'Donnell, M.A. (editor). 2002. Tested Studies for Laboratory Teaching: Proceedings of the 23rd workshop/conference of the Association for Biology Laboratory Education (ABLE), 392 pages. ISBN 1-890444-05-7

Desktop Publishing:

- O'Donnell, M.A. and Fournier, C.T. (multiple years, 2015-2020) "Exploring Biology: Cellular Basis of Life." Laboratory manual, Trinity College
- O'Donnell, M.A. and Fournier, C.T. (multiple years, 2016-2019) "Exploring Biology: Evolution of Life" Laboratory manual, Trinity College
- O'Donnell, Michael A. (multiple years, up to 2014) "Exploring Biology: Cells, Metabolism and Heredity." Laboratory manual, Trinity College
- O'Donnell, Michael A. (multiple years, up to 2015) "Exploring Biology: Organisms and Populations." Laboratory manual, Trinity College

Chapters in Proceedings:

- Henderson, D.E. and M.A. O'Donnell. 1994. The Acid Rain Project - A Laboratory Project for introductory chemistry and Biology. Project Kaleidoscope – Projects That Work, Phase II
- O'Donnell, M.A. and L.W. VanDruff. 1983. Wildlife conflicts in an urban area: Occurrence of problems and attitudes toward wildlife. pp. 315-323 *In* Decker, D. J. Proc., The First Eastern Wildlife Damage Control Conference, Cornell University, Ithaca, N.Y.

Abstracts:

- O'Donnell, Michael A., *Science Writing, Wikis, and Collaborative Learning*. 2011. Teaching Millennials in the New Millennium, April 2011. Paper 5: <http://digitalrepository.trincoll.edu/millennials/5>
- Henderson, D.E., A.W. Busse, J.A. Oliver, M.A. O'Donnell, and S.K. Henderson. 1992. Analysis of Acid Precipitation - A Project for the General Chemistry Laboratory. Chemical Education Division, American Chemistry Society National Meeting, Washington, D.C.
- O'Donnell, M.A. and L.W. VanDruff. 1987. Wildlife problems, human attitudes, and response to wildlife in the Syracuse, New York metropolitan area. *In* Decker, D.J. and G.R. Goff, eds. "Valuing Wildlife: Economic and Social Perspectives", Westview Press, Boulder and London.
- O'Donnell, M.A. and L.W. VanDruff. 1987. Public attitudes and response to wildlife and wildlife problems in an urban-suburban area. In Adams, L.W. & D.L. Leedy, eds., Integrating Man and Nature in the Metropolitan Environment. Proceedings of a National Symposium on Urban Wildlife, 4-7 November 1986, Chevy Chase, Maryland.
- Fernandez, P.C. and M.A. O'Donnell. 1979. Ionic permselectivity of the rat proximal convoluted tubule: Effects of luminal calcium and peritubular oncotic pressure. Clin. Res. 27: 414A.
- Fernandez, P.C. and M.A. O'Donnell. 1979. Volume expansion induced changes in ionic permselectivity of the rat proximal convoluted tubule. In Abstracts of the 12th Annual Meeting of the Amer. Soc. of Nephrology.

Presentations

Oral Presentations at Conferences:

- 2011 Science Writing, Wikis, and Collaborative Learning. Teaching Millennials in the New Millennium, April 2011. Trinity College, Hartford, Connecticut
- 2001 "Den Site Selection and Movement Patterns of Female Raccoons Following Removal and Exclusion from Residences," 57th Annual Northeast Fish and Wildlife Conference, Saratoga Springs, New York
- 2001 "Lyme Disease: Nutty Interactions," presented at the National Center for Case Study Teaching in Science Workshop. May 2001. State Univ. New York at Buffalo. Buffalo, New York
- 2000 "Den Site Selection and Movement Patterns of Female Raccoons Following Removal and Exclusion from Residences," Eastern Wildlife Damage Conference, Penn State Univ., State Park, Pennsylvania
- 1996 "Active learning in the Biology Laboratory," 18th Workshop/Conference of the Association for Biology Laboratory Education, Boston University, Boston, Massachusetts
- 1993 "Group Learning in the Science Laboratory," Invited Presentation at the Conference "Biology in Action: New Approaches to Teaching and Learning Science," Radford University, Radford, Virginia
- 1992 "Analysis of Acid Precipitation - A Project for the General Chemistry Laboratory," D. E. Henderson, A.W. Busse, J.A. Oliver, M.A. O'Donnell, and S.K. Henderson, Invited Presentation at Sci-Mix, ACS National Meeting, Washington, D.C.
- 1989 "The elucidation of a biochemical pathway using *Serratia marcescens* mutants," M. A. O'Donnell, presented at the New England Consortium for Undergraduate Science Education, Introductory Biology Laboratory Section, Wellesley College
- 1986 "Wildlife problems, human attitudes and response to wildlife in an urban/suburban area," M. A. O'Donnell and L.W. VanDruff, presented at the National Symposium on Urban Wildlife, National Institute for Urban Wildlife, Chevy Chase, Maryland.
- 1986 "Human attitudes and responses to problems with urban/suburban wildlife," M. A. O'Donnell and L. W. VanDruff, presented at the International Symposium on Economic and Social Values of the Wildlife Resource, sponsored by the New York Chapter of The Wildlife Society, Syracuse, New York
- 1983 "Wildlife problems in an urban/suburban environment: Human attitudes and management implications," M. A. O'Donnell and L. W. VanDruff, presented at the First Eastern Wildlife Damage Control Conference, Cornell University, Ithaca, New York

Poster Presentations at Conferences:

- 2013 "Science Writing, Wikis, and Collaborative Learning in the Laboratory," Association of Biology Laboratory Education Annual Conference, University of Calgary, AB, Canada (June)
- 2008 "ABLE: A Resource for Inquiry-based Laboratory Activities for Undergraduate Biology Courses," Lily-East Conference on College and University Teaching. University of Delaware. Newark, Delaware (April 2008)
- 2007 "ABLE: A Resource for Inquiry-based Laboratory Activities for Undergraduate Biology Courses," National Science Digital Library (NSDL) Annual Meeting, Washington, D.C.

Trinity College and Community Presentations:

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| 2016 | Invited Presenter/Panelist, Center for Teaching & Learning workshop: "Faculty-to-Student Collaborations" |
| 2015 | Invited Panelist, Spring Institute for Technology: Presented work on using personal response systems to generate peer discussion in the classroom as part of a panel discussion – "How can we Enhance our Teaching with Technology?" |
| 2012 | Invited Panelist, Winter Institute for Technology: Presented work on using wikis in collaborative student writing assignments as part of a panel discussion – "How can we Enhance our Teaching with Technology?" |
| 2011 | Invited Presenter, Winter Institute for Technology: "Using Wikis to Write Collaborative Lab Reports" |
| 2010 | Invited Presenter/Panelist, Center for Teaching & Learning workshop: "Changing Students, Changing Assignments, and Millennial Students" |
| 1990-1991 | Invited speaker: "Using Common Wildflowers to Teach Plant Reproduction," Mother Earth Workshop in Outdoor Education, Knox Parks Foundation, Hartford, Connecticut |
| 1990-1991 | Workshop presenter, "Using Brassica fast plants in the classroom," State of CT Teacher Training Courses, Knox Parks Foundation, Hartford, Connecticut |

Other Recent Professional Activities:

- Reviewer for American Biology Teacher (2000-present)
- Reviewer for the Ecological Society of America's "Teaching Issues and Experiments in Ecology" (2007-2016)
- Reviewer for Oxford University Press, "Writing in the Life Sciences." (2010-2012)
- Reviewer for the National Center for Case Study Teaching in Science (2006-2008)
- Reviewer for "Urban Ecosystems," Springer Netherlands, Publisher (2006-2007)
- Reviewer for Elsevier Publications, "Foundations for the Biology Laboratory: A Guide to Inquiry-Based Learning in 16 Units" (2006)
- Reviewer for John Wiley & Sons, Inc. The Hidden Wilderness: Understanding Urban Wildlife Issues (2004)
- Preliminary review of Urban Wildlife chapter (L. VanDruff, ed.) in 6th edition of "Research and Wildlife Management Techniques," The Wildlife Society, Bethesda, Maryland (2002)

Service Activity

Trinity College Service

Health Professions Advisory Committee (2004-present)
Information Technology in Education Committee (2007-2010; 2017-2019)
Athletic Department Faculty Liaison (Women's basketball team, 2010-2017)
Jury panel (2011-2015)
Environmental Science Steering Committee (2001-2011)
Search Committee for Director, Instructional Technology (2011)
Search Committee for Instructional Technologist (2008)
Athletic Advisory Council (2007-2008)
Luce Foundation proposal planning (2006)
Neurobiology Lab Coordinator Search Committee (2005)
Environmental Sciences Lab Coordinator Search Committee (2005)
Trinity College Field Station Coordinating Committee (2001-2007)
Trinity College Field Station User's Group (2001-2007)
Trinity College Field Station Research Workshop (2002; participant and planning)
Trinity College Field Station Education Workshop (2002; participant and planning)
Co-facilitator at conference on Academic Success and Satisfaction, Trinity College, Hartford, CT (2001)
College Affairs Committee (1999)
Ad-hoc contract faculty committee (participated in creation of standardized policies for contract faculty positions)
Urban Curricular Initiatives Award Committee (1997)

Recent Community Service:

Board of Directors (Vice-President, Secretary), Trinity College Community Child Center, Hartford, CT (2002-2012)
Trinity College Judge for Connecticut Science Fair (2001 and 2002)
A.V. Davis Advisory Committee, Greater Hartford Academy of Math and Sciences (2002)