

NANCY ANN GUILD

Department of Molecular, Cellular and Developmental Biology
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Education:

Colorado College, 1966-1970, B. A., Biology

Colorado College 1971-1972, M. A. T., Elementary Education

University of Colorado, 1976-1986, Ph. D., Molecular, Cellular
and Developmental Biology

Research Experience:

August, 1970 - June 1971. Clinical Research Assistant, Children's Asthma Research
Institute and Hospital, Denver, Colorado.

August 1976 - October 1986. Graduate Student, Department of Molecular, Cellular and
Developmental Biology, University of Colorado, Boulder, Colorado.

September, 1986-June 1987 Postdoctoral Research Associate, Department of Molecular,
Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

Teaching Experience:

September 1968 - May 1969, September 1969 - May 1970. Teaching assistant, Zoology,
Colorado College, Colorado Springs, Colorado.

June 1971 - December 1971. Student teacher, Bates Elementary School, Colorado Springs
Public Schools (District 11), Colorado.

January 1972 - June 1972. Intern teacher, Howbert Elementary School, Colorado Springs
Public Schools (District 11) Colorado.

August 1972 - June 1976. Fourth and Fifth Grade Teacher, Bergen Park Elementary,
Jefferson County Public Schools, Colorado.

September - December 1977, September - December 1980. Graduate teaching assistant,
Introductory Molecular, Cellular and Developmental Biology, University of Colorado, Boulder,
Colorado.

July 1987 - October 1989. Lab Coordinator III, Department of Molecular, Cellular and
Developmental Biology, University of Colorado, Boulder, Colorado.

October 1989 - January 1997. Assistant Professor, Attendant Rank, Department of
Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

March - April 1991. Visiting Professor, Colorado College, Colorado Springs, Colorado.

January 1997 - September 2005. Associate Professor, Attendant Rank, Department of
Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

September 2005- present. Professor, Attendant Rank, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

Service

1987-present Undergraduate Committee, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

1997-2005 Diversity Committee, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, Colorado.

2019-present, Peer Teaching Observation Committee, University of Colorado, Boulder, Colorado.

Honors and Awards

Spring 1991, Nominated for the Outstanding Professor Award, sponsored by the Student Organization for Alumni Relations, University of Colorado, Boulder, Colorado.

Spring 1993, 2002, Professor Recognition Award, Mortar Board Senior Honor Society, University of Colorado, Boulder, Colorado.

Fall 2001, 2002, 2003, 2004, 2006 Academic Teaching Award, National Residence Hall Honor Program, University of Colorado, Boulder, Colorado.

Fall 2002-present Who's Who in American Teachers

Fall 2007-present Who's Who in America

Fall 2008-present Who's Who in American Women

Spring 2008, Women's Resource Center, Women Who Make a Difference Award, University of Colorado, Boulder, Colorado.

Spring 2013, 2015, Marinus Smith Award for faculty who have made a positive impact on undergraduates, CU Parents Association, University of Colorado, Boulder, Colorado.

Spring 2018, Nancy Guild, PhD, Endowed Scholarship Fund for undergraduate Molecular, Cellular and Developmental Biology students, established by Alex Meininger.

Abstracts and Presentations:

Guild, N. (1983) Gene 32 Transcription. The Evergreen International T4 Meeting.

Gayle, M., Guild, N. and Gold, L. (1985) What's mot and what's not. The Evergreen International T4 Meeting.

Saunders, R., McPheeters, D., Guild, N., Gayle, M. and Gold, L. (1985) Bacteriophage T4 Gene 32: Studies of the Translational Operator Region. The Evergreen International T4 Meeting.

Guild, N. (1986) The *motA* protein, a transcriptional activator in bacteriophage T4. University of South Carolina Medical School.

Guild, N. (1987) What's hot about mot: Transcriptional activation of bacteriophage T4 middle promoters by the *motA* protein. Colorado College.

Guild, N. (1988) Autogenous translational regulation of the gene 43 protein of bacteriophage T4. University of Northern Colorado.

Fillman, C. and N. Guild, (2010) Teaching Investigative Phage Biology at the University of Colorado, SEA Phages Symposium

Fillman, C. and N. Guild, (2011) Moving Phage into the Traditional Biology Lab, SEA Phages Symposium

Guild, N., J. Shi and C. Fillman, (2012) A Comparison of Learning Gains, Class Performance and Science Attitudes in Introductory Biology Students, SEA Phages Symposium

Guild, N. and C. Fillman, (2013) Do Biology Lab Courses Matter? A Comparison of Learning Gains, Class Performance and Science Attitudes, SEA Phages Symposium

Guild, N. and C. Fillman, (2013) From Frogs to Phage, the Evolution of the Introductory Biology Lab Curriculum, MMB Presentation, MCD Biology, University of Colorado.

Bartholomay, K., Hyde, H., Fillman C. and Guild N. (2015) From Bench to Bedside, Using Phages to Treat Disease, Science on the Screen, Dairy Center for the Arts, Boulder, Colorado.

Publications:

Guild, N., M. Gayle, R. Sweeney, L. T. Walker, T. Modeer, and L. Gold. (1987) Transcriptional activation of bacteriophage T4 middle promoters by the *motA* protein. J. Mol. Biol. 199, 241-258.

Tuerk, C., P. Gauss, C. Thermes, D.R. Groebe, M. Gayle, N. Guild, G. Stormo, Y. d'Aubenton-Carafa, O.C. Uhlenbeck, I. Tinoco, Jr., E. N. Brody, and L. Gold. (1988) CUUCGG hairpins: Extraordinarily stable RNA secondary structures associated with various biochemical processes. Proc. Natl. Acad. Sci. USA 85, 1364-1368.

Andrake, M., N. Guild, T. Hsu, L. Gold, C. Tuerk and J. Karam (1988) The DNA polymerase of bacteriophage T4 is an autogenous translational repressor. Proc. Natl. Acad. Sci. USA 85, 7942-7946.

Nivinskas, R. G., A. A. Randonikenya, and N. Guild (1989) New early gene upstream from the middle gene 31 of bacteriophage T4: Cloning and expression. Molekulyarnaya Biologiya 23, 739-750.

Guild, N. and K. Bever (1995, revised 1997, 1999, 2001, 2004, 2006, 2010, 2013, 2015) *From Molecules to Cells, a Laboratory Manual*, MCDB 1151

Guild, N. (1993, revised 1996, 2000, 2002, 2004, 2005, 2007, 2010, 2012) *Genetics, An Introduction*, MCDB 2151 Laboratory Manual.

Minor, Christine, E. Dzialowski, W. Burggren, L. Goodloe, and N. Guild (2001) *Study Guide to Accompany Life, Science of Biology, 5th Edition*, W. H. Freeman and Co., MA.

Minor, Christine, E. Dzialowski, W. Burggren, L. Goodloe, and N. Guild (2004) *Study Guide to Accompany Life, Science of Biology, 6th Edition*, W. H. Freeman and Co., MA.

Dzialowski, Edward, B. Mcguire, L. Goodloe, N. Guild and P. Mabee (2005) *Study Guide to Accompany Life, Science of Biology 7th Edition*, W. H. Freeman and Co., MA.

Dzialowski, Edward, B. Mcguire, L. Goodloe, N. Guild and J. C. Glase (2008) *Study Guide to Accompany Life, Science of Biology 8th Edition*, W. H. Freeman and Co., MA.

- Smith MK, Wood WB, Adams WK, Wieman C, Knight JK, Guild N, Su TT. (2009) *Why Peer Discussion improves student performance on in-class concept questions*. *Science* 2: 323 (5910): 122-124. doi: 10.1126/science.1165919.
- Newman, Dzialowski, L. Goodloe, Edward, B. McGuire, N. Guild and P. Mabee (2010) *Study Guide to Accompany Life, Science of Biology 9th Edition*, W. H. Freeman and Co., MA.
- Shi J, Wood WB, Martin JM, Guild NA, Vicens Q, Knight JK., (2010) *A diagnostic assessment for introductory molecular and cell biology*. *CBE Life Sci Educ*. Winter; 9(4): 453-61
- Jordan TC, Burnett SH, Carson S, Caruso SM, Clase K, DeJong RJ, Dennehy JJ, Denver DR, Dunbar D, Elgin SCR, Findley AM, Gissendanner CR, Golebiewska UP, Guild N, Hartzog GA, Grillo WH, Hollowell GP, Hughes LE, Johnson A, King RA, Lewis LO, Li W, Vazquez E, Ware VC, Barker LP, Bradley KW, Jacobs-Sera D, Pope WH, Russel DA, Cresawn SG, Lopatto D, Bailey CP, Hatfull GF. (2014) *A Broadly Implementable Research Course in Phage Discovery and Genomics for First-Year Undergraduate Students*. *mBio* 5(1). Doi:10.1128/mBio.01051-13.
- Pope WH, Bowman CA, Russell DA, Jacobs-Sera D, Asai DJ, Cresawn SG, Jacobs WR, Hendrix RW, Lawrence JG, Hatfull GF; Science Education Alliance Phage Hunters Advancing Genomics and Evolutionary Science; Phage Hunters Integrating Research and Education; Mycobacterial Genetics Course. [Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity](#). *Elife*. 2015 Apr 28;4:e06416. doi: 10.7554/eLife.06416.
- Karen N. Pelletreau, Tessa Andrews, Norris Armstrong, Mary A. Bedell, Farahad Dastoor, Neta Dean, Susan Erster, Cori Fata-Hartle4, Nancy Guild, Hamish Greig, David Hall, Jennifer K. Knight, Donna Koslowsky, Paula P. Lemons, Jennifer Martin, Jill McCourt, John Merrill, Rosa Moscarella, Ross Nehm, Robert Northington, Brian Olsen, Luanna Prevost, Jon Stoltzfus1, Mark Urban-Lurain, Michelle K. Smith. *A clicker-based case study that untangles student thinking about the processes in the central dogma*. *CourseSource*. 2016 Dec. doi: 10.24918/cs.2016.15