

MICHELLE W. WIEN

Senior Lecturer, Department of Biology, Bryn Mawr College
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EDUCATION

- 1996 Harvard University, Cambridge MA
Ph. D in Biophysics, Advisor: James M. Hogle
Dissertation: Recognition of Poliovirus: Structural studies of neutralization and receptor specificity
- 1991 Wesleyan University, Middletown, CT
B.A. Molecular Biology and Biochemistry with Honors

RESEARCH EXPERIENCE

- 1996-1998 Postdoctoral Fellow, CNRS, Gif-sur-Yvette, France
Crystallographic studies of Flavivirus envelope glycoproteins
- 1996 Postdoctoral Fellow, Harvard Medical School, Boston, MA
Crystallographic studies of Human Echovirus 1

TEACHING EXPERIENCE

- 2018-present Senior Lecturer, Bryn Mawr College
- 2011-2018 Lecturer, Bryn Mawr College
- 2006-2011 Lecturer, Adjunct, Bryn Mawr College
- 2005-2006 Visiting Assistant Professor, Saint Joseph's University

COURSES TAUGHT AT BRYN MAWR COLLEGE

- 2006-present Biology 181 with laboratory, Genetics and the Central Dogma
Biology 182 with laboratory, Biochemistry and Human Physiology
- 2023 STML B122 The Biology of Epidemics (co-instructor)

2011-2019 Biology 354, Special Topics in Biochemistry (Summer School)
2015, 2016 Praxis 3 Faculty Supervisor

ADMINISTRATIVE EXPERIENCE

2019-present Chair, Institutional Biosafety Committee, Bryn Mawr College
2015-present Interviewer and Admissions Committee Member, Bryn Mawr Post-Baccalaureate Premedical Program
2011-2014,
2015-2016 Director, Summer Science Research, Bryn Mawr College

AWARDS

2022 Mary Patterson McPherson Award, Bryn Mawr College
2013 Rosalyn R. Schwartz Teaching Award, Bryn Mawr College
1998 National Science Foundation Postdoctoral Fellowship (declined)
1991-1994 National Science Foundation Predoctoral Fellowship
1991 Hawk Prize in Biochemistry, Wesleyan University

PUBLICATIONS

Morrison, M.E., He, Y.J., Wien, M.W., Hogle, J.M., and Racaniello, V.R. (1994) "Homolog-scanning mutagenesis reveals poliovirus receptor residues important for virus binding and replication." *Journal of Virology*, 66, 2807-2813.

Wien, M.W., Filman, D.J., Stura, E.A., Guillot, S., Delpeyroux, F., Crainic, R., and Hogle, J.M. (1995) "Structure of the complex between the Fab fragment of a neutralizing antibody for type 1 poliovirus and its viral epitope." *Nature Structural Biology*, 2, 232-243.

Wien, M.W., Chow, M., and Hogle, J.M. (1996) "Poliovirus: new insights from an old paradigm." *Structure*, 4, 763-767.

Wien, M.W., Curry, S., Filman, D.J., and Hogle, J.M. (1997) "Structural studies of poliovirus mutants that overcome receptor defects." *Nature Structural Biology*; 4(8):666-74.

Filman DJ, Wien MW, Cunningham JA, Bergelson JM, Hogle JM. (1998) Structure determination of echovirus 1. *Acta Crystallogr D Biol Crystallogr*. 54 (Pt 6 Pt 2):1261-72.

Wien, M.W., (1998) "La cristallographie et l'étude du poliovirus." (*In French*) *Virologie*, 2:369-376.

Duarte dos Santos CN, Frenkiel MP, Courageot MP, Rocha CF, Vazeille-Falcoz MC, Wien MW, Rey FA, Deubel V, Despres P. (2000) Determinants in the envelope E protein and viral RNA helicase NS3 that influence the induction of apoptosis in response to infection with dengue type 1 virus. *Virology*. 274(2):292-308.

Lescar J, Roussel A, Wien MW, Navaza J, Fuller SD, Wengler G, Wengler G, Rey FA. (2001) The Fusion glycoprotein shell of Semliki Forest virus: an icosahedral assembly primed for fusogenic activation at endosomal pH. *Cell* 105 (1) 137-148.

Hyson P*, Sharpiro JA, Wien MW (2015) Draft Genome Sequence of *Exiguobacterium* sp. Strain BMC-KP, an Environmental Isolate in Bryn Mawr, PA. *Genome Announcements* vol. 3 no. 5 e01164-15. *Postbaccalaureate student author

PROFESSIONAL ACTIVITES

2016-2017	Professional Development Leave: Attended medical school classes and started writing a biology review booklet for premedical and medical students.
2017	Reviewer, <i>Essential Genetics: A Genomics Approach</i> , 7 th edition
2011, 2014, 2016	Reviewer, <i>Genetics Essentials</i> by Pierce, 2nd-4th editions
2015, 2007	Honors Examiner, Swarthmore College, Biochemistry
2015	Reviewer, <i>Essentials of Genetics</i> , 1e, by Sanders and Bowman
2015	Reviewer, <i>Principles of Life</i> , by Hillis, Sadava, Heller and Price

SERVICE

2022-present	Student Mentor, STMLA program
2022	BMC Search committee member, TT position in Physiology
2022	BMC Search committee member, TT position in Neuroscience
2021-present	Member, Haverford College IBC

2020	BMC Search committee member, TT position in Genomics
2018-present	Faculty Mentor, Bryn Mawr College mentoring program
2015-present	BMC Biology department representative to the IRB
2019	BMC Search committee member, TT position in Physiology
2015-2018	BMC Council on Undergraduate Academic Standing
2018	BMC Search committee member, TT position in Immunology
2018	Haverford Search committee member, Laboratory Instructor, HC
2015-present	BMC Search committee member, Adjunct faculty in biology
2016	BMC Search committee member, CNTT position for Geology Laboratory Instructor
2016	BMC Search committee member, Assistant Director of the Postbaccalaureate Premedical Program
2016	BMC External review committee member, Health Professions Advising
2015	BMC Search committee member, Assistant Dean, HPAO
2015	BMC Search committee member, Associate Dean and Director of HPAO
2013	BMC Search committee member, CNTT position
2013	BMC Search committee member, TT position in ecology
2012	BMC Search committee member, TT position in genomics
2011	BMC Search committee member, TT position in ecology
2011	BMC Search committee member, Adjunct position in genomics

PANELS, MEETINGS, AND ABSTRACTS

2018	Exploring Faculty Careers at Teaching-Focused Institutions Panel, University of Pennsylvania, Panelist 2018 Provided mentoring and advice to graduate students and post docs
2014	Skirkanich, J and Wien, M (Poster presentation by J. Skirkanich) Society of Developmental Biology MidAtlantic Meeting Making heads of tails: Using a project-based learning approach to investigate planarian regeneration in an introductory biology laboratory Invited attendee
2014	“The future of pre-medical preparation admissions summit” At the Icahn School of Medicine at Mount Sinai and co-author on resulting “White paper” (2015) entitled “The coming revolution in pre-medical preparation: A multi-disciplinary perspective”