

CURRICULUM VITAE

2019

Personnel Data

Prof. Spencer A. Benson, Ph.D.
Founder and Director Eii-Consulting, LLC
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Education

University of Chicago, Chicago, IL	Ph.D.	1978	Genetics
University of Vermont, Burlington, VT	B.A.	1973	Zoology

Professional Experience

2018-present Consultant, The Graduate School and the Teaching and Learning Transformation Center, University of Maryland, College Park, MD

2018-Present Editorial Board Member, Journal of Excellence in College Teaching (JECT) and Learning Communities Journal (LCJ), USA

2017-present Consultant, Center for Teaching and Learning, Nanjing University, Nanjing, PRC

2017-present Founder and Director Education Innovations International Consulting (Eii-Consulting, LLC), Maryland, USA

2016-present Board of Directors, Hong Kong America Center, Hong Kong, SAR

2017-2020 Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) Specialist

2013-2017 Director Centre for Teaching and Learning Enhancement (CTLE) University of Macau, Macau, SAR, China (retired Aug. 2017)

2013-2016 Head of General Education University of Macau

2013-2017 Professor Faculty of Health Sciences, University of Macau, Macau, SAR, China (retired 2017)

2017 External Reviewer for Hong Kong Baptist University GE program

1993-2014 Associate Professor, Department of Microbiology, University of Maryland, College Park, MD, (retired 2014)

2003-2013 Director, Center for Teaching Excellence, University of Maryland, College Park, MD (retired 2014)

2005-2014 Affiliate Associate Professor, Dept. Curriculum and Instruction, College of Education, University of Maryland, College Park, MD (retired 2014)

2008-2009 US Fulbright Visiting Scholar, University of Hong Kong & Hong Kong American Center, Hong Kong, SAR

2003-2004 SENCER Visiting Fellow, American Association of College and Universities

2000-2001 Visiting Professor, Institute of Bio-Molecular Science, Academia Sinica, Taipei, Taiwan (sabbatical)

1988-1993 Assistant Professor, Department of Microbiology, University of Maryland, College Park, MD

1984-1988 Research Molecular Biologist, Department of Molecular Biology, Princeton University, Princeton, NJ

1983-1984 Scientist, Laboratory of Genetics and Recombinant DNA, NCI-Frederick Cancer Research Facility, Frederick, MD

1980-1983 NCI Postdoctoral Fellow, Laboratory of Genetics and Recombinant DNA, NCI-Frederick Cancer Research Facility, Frederick, MD

1980-1982 Assistant Professor, Cold Spring Harbor Advanced Bacterial Genetics Course Cold Spring Harbor, NY

1978-1979 Postdoctoral Fellow, Petroleum Research Fund, American Chemical Society,

Peer Reviewed Education Publications

- Benson, S. A. 2018, Connecting Assessment and Learning, The Scholarly Teacher Blog, <https://www.scholarlyteacher.com/blog/connecting-assessment-and-learning>
- Benson, S. A. 2018, How to Use Questions to Promote Student Learning, The Scholarly Teacher Blog <https://www.scholarlyteacher.com/blog/using-questions-for-student-learning>
- Fisher W.P, Pey-Tee Oon E. Benson S.A. 2017, Applying Design Thinking to systemic problems in educational assessment information management. Journal of Physics Conference Series Rio Brazil In Press
- Wu, H, Benson, S.A. 2017, Made in China 2025 New Trends of Entrepreneurship Education of China: A Socio-Economic-Educational Perspective. Asian Education Studies Vol 2(1)
- Pey-Tee Oon E, Benson S.A, Kam C.S (Chester). 2016 Psychometric Quality of a Student Rating Survey on Teaching and Learning Quality in Higher Education, Assessment and Evaluation in Higher Education 41:1-3
- A. A. Badawy, M. Ibrahim and S. Benson, 2016 "Let There Be Hope: Assessing the Implications of Exam Re-Taking on Student Learning Outcomes and Grades of Engineering Students Grounded on Metacognition Awareness Framework," 2016 International Conference on Computational Science and Computational Intelligence (CSCI), Las Vegas, NV, 2016, pp. 270-275.
- Benson, S. A. 2015, Meeting the Standards for STEM Educations: Individual and National Needs, Book Chapter Proc. Waterbury Educational Summit, 2013, Penn. State University, R. Duschel and A. Bismart Eds.
- Schmitt, KR.B., Larsen E.A., Miller M, Badawy A.H.A., Dougherty M., Taylor-Sharma A., Hrapczynski A., Andrew A, Robertson B., Williams A., Kramer S., Benson S.A. 2013 A Survey Tool for Assessing Student Expectations Early in a Semester, JMBE, 14: 255-257
- Schmitt, KR.B., Larsen E.A., Miller M, Badawy A.H.A., Dougherty M., Taylor-Sharma A., Hrapczynski A., Andrew A, Robertson B., Williams A., Kramer S., Benson S.A 2014, A Failing Grade for CS Faculty: Comparing Faculty Perception of Student Expectations and Reality, Consortium of Computing Sciences in Colleges (CCSC-Region Meeting) PA
- Kramer, S. and Benson, S. A., 2013. Changing Faculty use of Technology – One Cohort at a Time. J. Applied Research in Higher Education, 5: 202-221
- Badawy A.H.A., Schmitt, KR.B., Larsen E.A., Miller., Dougherty M., Taylor-Sharma A., Hrapczynski A., Andrew A, Robertson B., Williams A., Kramer S., Benson S.A, 2013, Expectations of Computing and other STEM Students: A Comparison for Different Class Levels, or (CSE ≠STEM-CSE)|Class Level, Journal of Computing Sciences in Colleges, Volume 28 Issue 6, p 101-108
- Benson, S A. Facilitating Educational Transformation at a Large Public Research University, 2013, in Conference Proceedings of General Education and University Curriculum Reform: An International Conference in Hong Kong, P. Corrigan, ed. http://www6.cityu.edu.hk/edge/conference2012/docs/GE_Conferences_Proceedings.pdf
- Benson, S.A., Smith, Ann, and Eubanks, E.B. 2013, Developing Scholarly Teaching at a Research University: Using Learning Communities to Build Capacity for Change, in Cases on Quality Teaching Practices in Higher Education, Diane J. Salter ed. pub IGI Global
- Sabrina Kramer, Spencer Benson, (2013) "[Changing faculty use of technology – one cohort at a time](#)", Journal of Applied Research in Higher Education, Vol. 5 Issue: 2, pp.202-221, <https://doi.org/10.1108/JARHE-11-2012-0036>
- Benson, S.A. AP-Biology 2012, Curriculum Framework 2012-13, co-chair of Curriculum Assessment and Design Committee (CDAC), which produced this document. http://media.collegeboard.com/digitalServices/pdf/ap/10b_2727_AP_Biology_CF_WEB_110128.pdf
- Reid. A(author) B. Basler, S. Benson, J. Handlesman, R. Kolter, K. Neelson, D. Newman (steering committee) Educating the Microbiologists of Future: The Role of Summer Courses, American Academy for Microbiology Report, 2011 American Society for Microbiology,

<http://academy.asm.org/index.php/colloquium-program/browse-all-reports/378-educating-the-microbiologist-of-the-future-the-role-of-summer-courses>

- Benson, S., 2011, Proceedings Research in Biology Education: Where do we go from here? Changing the national science education landscape: The new AP-Biology, p 7-14 Institute for Research on Mathematics and Science Education, Apr. 2011 *rmse.msu.edu/wp-content/uploads/Participant-list-Biology-Ed-.pdf*
- Benson, S. A. 2011, Making Global Health Matter: Tools for the Science Educator, *Biology International*, Vol. 49, 5-6
- Marbach-Ad, G., McGinnis J. R., Pease, R., Dai, A., Benson S., and Dantley, S. J., 2010, Transformative Undergraduate Science Courses for Non-majors at a Historically Black Institution and at a Primarily White Institution. *Science Education International*, Vol.21, 252-271
- Marbach-Ad, G., McAdams, K., Benson S., Brikenc, V., Cathcart, L., Chased, M., El-Sayed, N. Frauwirth, K., Fredericksen B., Joseph, S. Lee, V. , McIver, K., Mosser, D., Quimby, B., Shields, P., Song, W., Stein, D., Stewart, R., Thompson, K., Smith, A. 2010. A Model for Using a Concept Inventory as a Tool for Students' Assessment and Faculty Professional Development, *CBE-Life Sciences Education (CBE-LSE)* Vol. 9, 408-416
- Marbach-Ad, Gili; McGinnis, J. Randy; Pease, Rebecca; Dai, Amy H.; Schalk, Kelly A.; Benson, Spencer, 2010. Clarity in Teaching and Active Learning in Undergraduate Microbiology Course for Non-Majors Bioscene: *Journal of College Biology Teaching*, 36: 3-9.
- Marbach-Ad G., McGinnis J. R., Dai A. H., Pease, R., Schalk, K. A., and Benson, S., 2009 Promoting Science for All by Way of Student Interest in a Transformative Undergraduate Microbiology Laboratory for Non-majors, *JMBE* Vol. 10
- Yuan, R., Benson, S., Chang, S., & Gulick, D., 2007. The Global University: The Restructuring of Undergraduate Science and Engineering Courses and the Development of International Partnerships. *Sci. Ed. & Civic Engagement* 2:42-50, www.secej.net/PDFs/Publications/SECEJFall20070102.pdf
- Benson, S. A., Schalk, K. McGinnis, J.R. and Marbach-Ad, G. 2007, Using Student Interest to Foster Reconstructive Learning in a Non-Majors Microbiology Course: A Preliminary Report. (American Society for Microbiology) ASM General Meeting and ASMCUE Meeting Poster
- Benson, S. A., Schalk, K. McGinnis, J.R. and Marbach-Ad, G. 2007, Using Student Interest to Foster Reconstructive Learning in a Non-Majors Microbiology Course: A Preliminary Report. (American Society for Microbiology) ISSoTL International Meeting Poster
- Stuart, M. J., N. D. Ahuja, D. Eubanks, C. Shaw, and S. Benson, 2005. A Brief Description of the Graduate Teaching Assistant Programs Offered by the Center for Teaching Excellence at the University of Maryland, *MAHE Journal*, Vol. 25. pp 40-48
- Russo, T., & Benson, S. 2005. Learning with Invisible Others: Perceptions of Online Presence and their Relationship to Cognitive and Affective Learning, *Educational Technology & Society*, 8: 54-62.
- Benson S. A. and T. C. Russo 2002, Distance Education: Challenges, Paradigms, and Pathways for Success in Microbiology. *Focus on Microbiology Education*. 9:3-7 <http://www.microbelibrary.org>
- Benson, S. A. 2001. Defining the Scholarship of Teaching and Learning (SOTL) in Microbiology. *Focus on Microbiology Education*. 7:1-8 <http://www.microbelibrary.org/>
- Yuan, R. T. and S. A. Benson. 2000. Research and Team Work at the Frontiers of Learning in Involving Commuters Students in Learning, B. Jacoby ed. Jossey-Bass, San Francisco, CA. pp. 51-5

Non Peer Reviewer Educational Publications

- Benson, S. A. Centre for Teaching and Learning Enhancement University of Macau 2016 Teaching Tips of the Week <https://ctle.umac.mo/2016/12/06/ctle-teaching-tips-of-the-week-directory/>
- Benson, S. A. Center for Teaching Excellence Newsletter on Teaching and Learning 2003-2013, >30 articles on teaching and learning <http://www.cte.umd.edu/staff/spencer/spencer-publications.html>

- Benson, S.A., Zedalis J. (co-chairs) AP-Biology Curriculum Framework 2012-2013, the new AP Biology Course [2012-13 AP-Biology Curriculum Framework](#)
- Benson, S. A. 2009. General Education in Hong Kong for the 21st Century: A Case Study of the University of Hong Kong, submitted book chapter for the Hong Kong American Center, Hong Kong General Education Initiative, S. Benson and E. Eoyang eds.
- Benson, S. A., A. Bedford, et al. 2008. The Next Challenge and Frontier: Digital Learners and Digital Teachers. Asia-Pacific Sub-regional Preparatory, Conference for the 2009 World Conference on Higher Education, “Facing Global and Local Challenges: the New Dynamics for Higher Education”. Macao, SAR, China.
- Shapiro, N., Benson, S.A., Maloney, P.A., Frank, J., Abdi Dezfooli, N., Susskind, D., Munoz, M., 2006, Report on Course and Curriculum Changes in Math and Science Partnership (MSP) Programs Change and Sustainability in Higher Education (CASHE), 2006, <http://hub.mspnet.org/index.cfm/13463>
- Benson S. A. 2004. Using Assessment to Foster Student Learning Focus on Microbiology Education. 10: <http://www.microbelibrary.org/>
- Benson S. A. 2003. The Role of Connections in Teaching and Learning Focus on Microbiology Education. 10: <http://www.microbelibrary.org/>
- Benson, S. A. Coleman W. H., Fisher, L. E., Kullman, D., Nakaoka K., 2002 Unseen Life on Earth” Using the Video Series to Enhance Student Learning, ASM-News, 68:182-184
- Benson S. A. 2000. Looking Forward-Reflecting Back in Microbiology Education, Focus on Microbiology Education. 7: 12-13
- Yuan, R. T. and S. A. Benson. 2000, The Endless Frontier. AAHE Web Center Resource, <http://aahe.ital.utexas.edu/rsrc>
- Benson, S. A. and A. C. Chang, 2000. Microbiology Education: A New Venue for Scholarship in Microbiology Education, Focus on Microbiology Education 6: 13-14

Conference and Invited Presentations (Education) 2016-2019

- University of Maryland, College Park MD, Mar. 2019, TLTC workshop, [Can We Foster Student Motivation for Learning?](#)
- University of Maryland, College Park MD, Feb. 2019, Promise Conference, Learning Through Diversity: Being Inclusive, Being Human.
- Workshop, Teaching and Learning Transformation Center, University of Maryland, College Park, Feb. 2019 [“Neurodiversity: From Accommodations to Inclusion”](#)
- John Hopkins University Teaching Academy, JHU-CIRTL Pizza & Pedagogy presentation, Feb. 2019, Neuro “PS: It Matters (Pedagogy Space).
- Co-Constructing Excellence: Recognizing, Scaffolding, and Building Excellence in University Learning and Teaching Conference, Dec 2018 CETL-HKU, Two presentations, “Strengthening the pipeline: The Use of E-Portfolios to Develop Teaching Excellence in Future teachers” with Prof. Emily Oon and “Building Future Excellence: Inspiring, Training and Developing the Next Generation of STEM Faculty:
- Lilly Conference on Teaching and Learning, Miami OH, Nov. 2018, [“Fostering Student Development for Success in a Changing World”](#) with Prof. Emily Oon
- Nanjing University, Center for Teaching and Learning, Nanjing China, Oct. 2018, Three workshops; “Preparing Students for Tomorrow’s Complex Changing World”, “Assessment of/for/as Learning: Strategies for Students and Courses”, “Teaching as Research: Integrating SoTL into Your Teaching” and consulting and course observations”.
- Da-Yeh University, Oct. 2018, Taiwan “Title Fostering Effective 21st University Education: Characteristics and Challenges”
- Tatung University, Oct. 2018, Taiwan, “Assessments of/for/as Learning; Strategies for Students and Courses”
- National Taichung University for Education, Oct. 2018, Taiwan, “Assessments of/for/as Learning; Strategies for Students and Courses”

- International Conference Chinese Association for General Education, Taiwan Oct. 2018, Invited Key Note “Preparing Students for Tomorrow’s Complex Changing World”
- Taiwan Association for General Education, Taipei National Taiwan University, Round Table Forum Panelist, International Perspective on General Education
- ASMCUE 25th Conference Plenary “30 years of ASMCUE and STEM Education: Past, Present and Future” July 2018, Austin TX
- Fifth Higher Education Leadership Program (HELP-V) Conference, June 2018, Yangon, Myanmar, Keynote, “Moving from teacher Centered to Learner Centered Education: First Steps”
- Chinese Association for Suzhi Education (CASE), Mar. 2018, Conference, Chengdu PRC, Workshop Assessments for Learning in GE Courses and keynote on 21st Century Higher Education
- Workshop of Echoing Whole Person Education Academy, Sam Ratulangi University, Mar. 2018, Manado, Indonesia, “21st Century Teaching and Learning,”
- University of Maryland College Park, Teaching and Learning Transformation Center, Dec. 2017
- National University of Singapore, Singapore, Nov. 2017, Two Workshops, “21st Century Education” and “Assessment: Theory-Practice-Reality”
- Jiangsu Assoc. for Teaching and Learning in Higher Education, Zhangzhou, PRC, Oct. 2017, “Developing 21st Century Education; The Role of Teaching and Learning Centers”
- Nanjing University, Center for Teaching and Learning, Nanjing China, Oct. 2017, Three Workshops/Talks “Outcome Based Teaching and Learning (OBTL)”, “Centers for Teaching and Learning”, “Effective Teaching; Thoughts and Strategies”
- Ocean University of China, Qingdao, PRC, July 2017, “Assessment: Theory-Practice-Reality”
- General Education Institute Chinese University of Hong Kong, June 2017, Two Interactive Workshops, “Designing and Implementing 21st Century General Education”, “GE 2.9 General Education in 2020”.
- E-learning Forum Asia, Conference Poly, Hong Kong June 2017, “Getting Faculty to Embrace e-Learning”
- Lilly International Teaching Conference, June 2017 Bethesda MD, “Design Thinking in Education: New Paradigm or New Fad”
- International Mobile Learning Festival, University of Hong Kong June 2017, workshop plus presentation “Design Thinking” workshop, “Moving Beyond LMS; Getting Recalcitrant Faculty to Engage M-Learning”
- Central Philippines University, Mar. 2017 Two Workshops i.) “Why OBE Makes Sense: Meeting the Needs of Today and Tomorrow's Students”, ii.) “Teach Less –Learn More”
- Chinese Association for Suzhi Education, Mar. 2017 “Making GE-Suzhi Courses Relevant for Students - for Life”, Nanjing PRC
- Hong Kong International School, Hong Kong American Center mini-symposium Feb. 2017 “Design Thinking Context and Thoughts”
- Hong Kong University Conference Nov. 2016, “Documenting Student Competencies Using an E-Portfolio”
- Chinese Higher Education Development Network (CHED) Nov. 2016 “Faculty Learning Communities; Changing the Teaching Culture One Groups at a Time”, Heifei PRC
- Fulbright Retreat, Hong Kong American Centre-US Consulate Hong Kong Oct. 2016, “Reducing Academic Dishonesty”, Hong Kong
- International Mobile Learning Festival, Bangkok Thailand, June 2016, “Do Mobile Devices Have a Central Role in E-Learning”
- University of Santo Tomas, Manila, Philippines, and Assoc. Systematic Biologist of the Philippines, May 2016 Faculty-Student Workshop “Sticky Teaching Sticky Learning”
- Beijing Institute Technology-Zhuhai Mar. 2016 “How General Education Contributes to Success in the 21st Century”, Zhuhai, PRC

Peer Reviewed Science Discipline Research Articles (Since 1990)

- Klebba, P. E., S. A. Benson, S. Bala, T. Abdullah, J. Reid, S. P. Singh and H. Nikaido. 1990. Determinants of OmpF porin antigenicity and structure. *J. Biol. Chem.* 265:6800-6810.
- Benson, S. A., A. M. DeCloux and J. Munro. 1991. Mutant Bias in non-lethal selections results from selective recovery of mutants. *Genetics.* 129: 647-658.
- Li, Tsai-Hsia, S. A. Benson and S. W. Hutcheson. 1992. Phenotypic expression of the *Pseudomonas syringae* pv. *syringae* 61 hrp/hrm gene cluster in *Escherichia coli* requires a functional porin. *J. Bacteriol.* 174:1742-1749
- Gauthier, M. J., S. A. Benson, G. N. Flatau, R. L. Clement, V. A. Breittmayer, and P. M. Munro. OmpC and OmpF porins influence viability and culturability of *Escherichia coli* cells incubated in seawater. 1992. *Microb. Releases.* 1:47-50
- Swidersky, U. E., A. Reinhofer-Schweer, P. K. Werner, F. Ernst, S. A. Benson, H. K. Hoffschulte, and M. Muller. 1992. Biochemical analysis of the biogenesis and function on the *Escherichia coli* export factor SecY. *Eur. J. Biochem.* 207:803-811.
- Weiss, B. D., M. A. Capage, M. Kessel, and S. A. Benson. 1994 Isolation and characterization of generalized transducing phage for *Xanthomonas campestris* pv *campestris* *J. Bacteriol.* 176:3354-3359
- Peters, J. E. and S. A. Benson. 1995 Redundant transfer of F \square plasmids occurs between *Escherichia coli* cells during nonlethal selections. *J. Bacteriol.* 177:847-850
- Peters, J. E. and S. A. Benson. 1995 Characterization of a new rho mutation that relieves polarity of Mu insertions *Mol. Microbiol.* 17:231-240
- Peters, J. E., I. M. Bartoszyk, S. Dheer and S. A. Benson. 1996. Redundant homosexual F transfer facilitates selection induced reversion of plasmid mutations. *J. Bacteriol.* 177:847-850
- Lou, K. L., N. Sainte, A. Prilipov, G. Rummel, S.A. Benson, J. P. Rosenbush and T. Schirmer. 1996. Structural and functional characterization of OmpF porin mutants selected for larger pore size: I Crystallographic analysis. *J. Mol. Biol. J. Biol. Chem.* 271:20669-20675
- Benson, S. A. 1997. Adaptive mutation: a general phenomena or special case. *Bioassay.* 19:9-11
- Benson, S. A., B. P. Higgins, C. S. Chae, and Y. Lin. 2001. Antibacterial synergy in rubricine: an extract from the roots of *Arnebia euchroma* a Chinese medicinal herb. In *Drug Discovery and Traditional Chinese Medicine: Science, Regulation, and Globalization.* Yuan Lin, ed. Kluwer Acad. Pub. 111-125
- Yang, N. S., K. F. Lin, and S. A. Benson. 2001. Chinese and western herbal medicine, past, present and future R&D: The joining of history culture and technology. *Journal Chinese Society of Traditional Veterinary Science*, March, 2001

Science Discipline Publications: Symposium Articles and Chapters in Books (Since 1990)

- Benson, S. A. 1997. Ultrastructure of bacteria. In *Principles of Medical Biology*, E. E. Bittar and N. Bittar eds. JAI Press Greenwich CN, Vol. 9A, p1-14
- Benson, S. A. 1997. Bacteria outer membranes and permeability. In *Principles of Medical Biology*, E. E. Bittar and N. Bittar eds. JAI Press Greenwich CN, Vol. 9A, p15-28
- Peters, J. E. and S. A. Benson. 1995. F plasmid transfer as a mechanism of adaptive mutation. In *Meeting Abstracts: Proceeding of the Eighteen Annual Mid-Atlantic Extrachromosomal Elements and Molecular Genetics Meeting.* Plasmid 34: 72
- Peters, J. E. and S. A. Benson. 1996. F plasmid copy number changes with host growth phase by redundant plasmid transfer. In *Meeting Abstracts: Proceeding of the Nineteenth Annual Mid-Atlantic Chromosomal Elements Meeting.* Plasmid 35;211.
- Rindal, M. and S. A. Benson. 1996. The isolation and characterization of novel rho mutants in *Escherichia coli* K-12. In *Meeting Abstracts: Proceeding of the Nineteenth Annual Mid-Atlantic Chromosomal Elements Meeting.* Plasmid 35;215.
- Dheer, S. and S. A. Benson. 1996. A comparison of the reversion of the same mutation when present on an F' and the chromosome during extended nonlethal selections. In *Meeting Abstracts:*

Proceeding of the Nineteenth Annual Mid-Atlantic Chromosomal Elements Meeting. Plasmid 35;216.

- Benson, S. A., B. P. Higgins, C. S. Chae, and Y. Lin. 2001. Antibacterial synergy in Rubricine: an extract from the roots of *Arnebia euchroma* a Chinese medicinal herb. In *Drug Discovery and Traditional Chinese Medicine: Science, Regulation, and Globalization*. Yuan Lin, ed. Kluwer Acad. Pub. 111-125
- Yang, N. S., K. F. Lin, and S. A. Benson. 2001. Chinese and western herbal medicine, past, present and future R&D: The joining of history culture and technology. *Journal Chinese Society of Traditional Veterinary Science*, March, 2001

Other Professional Teaching Related Activities US,

- Calibrated Peer Review Advisory Committee 2006-2011
- American Society of Microbiology, Chair International Education Committee 2011-2013
- American Society of Microbiology, International Education Committee 2008-2011
- American Society of Microbiology, review committee for International Leadership Fellowships 2009, 2010, 201, 2012, 2013
- American Society of Microbiology, Carski Award selection committee, 2007-2009
- Co-Chair College Board, AP-Biology Curriculum and Assessment Development Committee 2008-2011
- Co-Chair College Board, AP-Biology Redesign Commission 2007-2006
- Executive Working Committee American Society of Microbiology, Biological Scholars Program 2008
- Advisory Committee for Center for STEM Education, a national initiative, 2008-2006
- Co-director founder of the SENCER (Science Education for New Civic Engagement and Responsibility) institute on Scholarship in Teaching and Learning (SoTL) 2007
- Steering committee and faculty for the American Society for Microbiology Scholars in Residence Program , 2007, 2006, 2005, Summer institute on Scholarship on Teaching and Learning
- Steering committee member for the NSF Funded UCLA Calibrated Peer Review (CPR) educational tool, 2007-2006
- University of Maryland lead member for the TEAGLE Multi-University Technology Fluency Commission 2007-2006
- Councilor Division-W (Education) American Society for Microbiology, 2009-2007
- College Board ETS AP-Biology test review committee 2007, 2005
- College Board AP-Biology Test translation committee, 2007
- College Board AP-Biology Test question leader and reader, 2006-1998
- Chair Division-W (Education) American Society for Microbiology, 2003
- Quality Undergraduate Education (QUE) Committee, National Association of System Heads (NASH) faculty consultant, 2004; 2003, 2002
- Chair ASM Undergraduate Education Committee of the Board of Education (ASM) 2003-2000,
- Chair ASM International Education, International Board 2011-2014
- Chair ASM International Education, Chair Education Board 2014-2016

Teaching Awards

- American Society for Microbiology, Carski Teaching Award 2011
- University of Maryland System Regents Faculty Teaching Award, 2003
- CASE-Carnegie Foundation for the Advancement of Teaching, Maryland Professor of the Year, 2002
- Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) Carnegie Scholar 2001-2002
- University nominee for the Carnegie U.S. Professor of the Year Award, 1998
- Finalist in University Advisor Award from the UMCP Parents Association 1996

- Finalist in University Teacher Award from the UMCP Parents Association 1996
- College of Life Sciences Teaching Award, 1996
- CTE-Lilly Teaching Fellow 1993-1994

Previous Funded Educational Projects

- 2002-2007 NSF-MSP-VIP K-16, Vertically Integrated Partnerships #0227325, PI is Dr. Nancy Shapiro, UMS, Sub-contract \$399,323.00 to UMCP, S. Benson UMCP, PI, Center for Teaching Excellence
- 2005-2007, NSF Change and Sustainability in Higher Education (CASHE) grant. PI is Dr. Nancy Shapiro, S. Benson Co-PI, Center for Teaching Excellence, Grant 500,000 to USM
- 2008-2012 NSF DRK-12 Disciplinary Experts in Science Education Research: A University of Maryland Program for Producing STEM Education Researchers, PI is Dr. David Hammer University of Maryland, S. Benson Co-PI, Disciplinary Experts in Science Education \$1,057,728
- 2007-2010 NSF Enhancing Learning Through Evidence (ELITE) Scholars Program, PI is Amy Chang, American Society for Microbiology, S. Benson Co-PI, \$199,985
- 2010–2013 MADE-CLEAR: Maryland and Delaware Climate Change Education, Assessment and Research: Climate Change Education Program (CCEP), PI- Nancy Shapiro National Science Foundation S. Benson Co-PI Benson
- 2012–2017 MADE-CLEAR: Maryland and Delaware Climate Change Education, Assessment and Research: Climate Change Education Program (CCEP), National Science Foundation \$999,949 PI- Nancy Shapiro National Science Foundation S. Benson Co-PI Benson
- 2012-2017 The CIRT Network: 25 Research Universities Preparing a National Faculty
- to Advance STEM Undergraduate Learning, National Science Foundation 5.2 million dollars, UM (S. Benson) UM lead 25,000 sub-contract

Courses Taught (since 2000)

Laos: The Value of Water: Culture and Sustainable Development in Laos, Winter-term Study Abroad
2008

Microbes and Society, (BSCI122) a science general education course for non-majors Spring 2000, 2002, 2003, 2004, 2005, 2006, 2007

University Teaching and Learning (UNIV798), a graduate seminar course on pedagogy and university teaching, 2005, 2006, 2007

Principles of Transmission Genetics (LFSC630) a graduate on-line Internet-course for high school teachers 2002, 2003, 2004, 2005, 2006, 2007

Technology and the Environment; The Hydrology, Biology and Politics of the Mekong River Basin (a.k.a. The Mekong Course (WRLD235A) 2005, 2007; A team-taught general education interdisciplinary course.

Traditional Chinese Medicine (CPSL218 colloquium), 2005

The Value of Water: Culture and Sustainable Development in South East Asia, (GVPT388, WRLD 338a) Winter-term Study Abroad Course; 2006

Technology and the Environment: To Stem the Flow: The Nile, Technology, Politics, and the Environment [a.k.a. The Nile course] (UNIV138A); A team-taught general education interdisciplinary course on the Nile river basin, 2001, 2003

Pedagogy and Learning, (MICB688), a graduate seminar course on STEM university teaching, 2003

Principles of Genetics (BSCI222), a sophomore level genetics course for majors 2001, 2002,