Dr. Carmen R. Cid is a forest and wetland ecologist with a PhD from Michigan State University, with nineteen years experience as professor of ecology and sixteen years as Dean of the School of Arts and Sciences at Eastern Connecticut State University. She has been honored with awards for her work in developing career development programs that promote diversity of ecologists by the Ecological Society of America, the Connecticut Science Center and in her K-12 science education outreach work with the National Science Foundation-Howard Hughes-funded multimedia/bilingual Project Wonderwise- Urban Ecologist Women in Science series. In 2017 she was elected an Ecological Society of America Fellow and is the incoming ESA Vice-President-elect for Education and Human Resources.

CARMEN R. CID - CURRICULUM VITAE

CONTACT INFORMATION

NAME: CARMEN R. CID

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ADVANCED EDUCATION

Ph.D. 1984 Michigan State University – Plant Ecology – Advisor: Patricia Werner 1984-85 Michigan State University – Post-Doctoral Fellowship in Plant Ecology 1993-94

HERS Administrative Leadership Program – Wellesley College, MA

M.S. 1979 Ohio State University – Botany – Advisor: Barbara A. Schaal

B.A. 1977 New York University – Biology

EMPLOYMENT HISTORY:

Science Education Project Evaluator/Consultant and NSF Co-P.I. on two projects - 2021- 2026

Eastern Connecticut State University- July 2021 - Professor/Dean Emerita

2005- 2021 – Dean – School of Arts and Sciences 1999 – 2005 - Chair – Department of Biology 1996-present - Full Professor – Biology/Ecology 1993-94- Acting Dean - School of Arts and Sciences 1987-1996- Assistant/Associate Professor – Biology

Quinebaug Valley Community College 2013-2014 – Interim President (on leave from ECSU)

Northeast Missouri State Univ. (now Truman State Univ.) 1985-1987 - Asst. Professor-Biology

ACADEMIC HONORS AND LEADERSHIP AWARDS:

- 2020 Connecticut Science Center STEM Achievement Award
- 2017 Appointed Fellow of the Ecological Society of America by the ESA Governing Board 2005-2021 Certified Senior Ecologist by the Ecological Society of America Board of Professional Certification
- 2013 Connecticut Women's Hall of Fame Education and Empowerment Honoree 2012 Latino and Puerto Rican Affairs Commission of Connecticut –"Latina Citizen of the Year" 2012 Girls Scouts of Connecticut Trailblazer Award
- 2012 American Council on Education Connecticut Women's Network Chapter Distinguished Woman in Higher Education Leadership Award
- 2012 Ecological Society of America Diversity Award Education & Human Res. Committee
- 2010 Connecticut Women of Innovation Academic Leadership Finalist 2009 ECSU Latin American Distinguished Service Award
- 2006 Elected to Omicron Delta Kappa National Leadership Honors Society 2006 -
- "Woman of Excellence" Maria Stewart Miller Award given by the Connecticut

Women's Education and Legal Fund

- 2002/2005- Chosen from national pool of applicants to be profiled as role model ecologist in *A Hand Up Women Mentoring Women in Science* Association for Women in Science prize-winning book -3rd edition
- 1998-2001 Chosen from national pool of applicants to have research profiled in Project Wonderwise "The Urban Ecologist" DVD/CD/English/Spanish environmental education curriculum targeting 4-6th grades, developed from my ecology research
- 1995 ECSU Distinguished Faculty Award highest university award for faculty excellence
- 1995 AAUW "Outstanding Woman" award Willimantic/Storrs, CT Branch 1993 Elected to Sigma Delta Pi Honorary Hispanic Society
- 1993 Profiled in prize-winning H.S. Biology text, Biology: Visualizing Life
- 1990 Elected to Sigma Xi Honor Biology Society Hartford Chapter
- 1984 Michigan State Univ. Woman Achiever Award
- 1977 Graduated cum laude New York University
- 1977 Elected to Beta Lambda Sigma Honor Biology Society N.Y.U.
- 1977 Founder's Day Award for Scholastic Excellence N.Y.U.

I. PROFESSIONAL ORGANIZATION LEADERSHIP EXPERIENCE

Ecological Society of America strategic planning and implementation

1990's to present.

In 1993, as founding chair of the Women and Minorities in Ecology Committee for the Ecological Society of America (largest professional organization for ecologists), I led the development of the first blueprint for establishing the committee infrastructure and strategic planning initiatives to improve recruitment, retention and career development for women and minorities in ecology (the WAMIE I report). Over the last two decades I have worked to set and accomplish many goals to enhance ESA diversity and ecological literacy initiatives. The biggest achievements being the establishment of the SEEDS award-winning mentoring programs for minority undergraduates (https://esa.org/seeds/) and the development of many society initiatives to improve career development of early career ecologists, along with establishment of society

endorsed undergraduate ecology education standards (www.esa.org/4dee). In 2017, for this work, I was honored and appointed Fellow of the Ecological Society of America. In 2021 I was elected ESA VP for Education and Human Resources.

2018-2020 – Elected to the Ecological Society of America Board of Professional Certification. Elected Chair of this Board for 2020.

2016-2022 – Elected to the Board of Trustees of Talcott Mountain Science Center/Academy, Avon, CT http://www.tmsc.org/about/people/board

2015-present. Appointed to the Ecological Society of America Ecology Education Task Force to develop and implement the society-endorsed undergraduate ecology education curricular framework (4DEE). https://www.esa.org/4DEE/people/

2014-2021 – Elected to the Hartford HealthCare East Region Board of Directors, Connecticut https://windhamhospital.org/about-us/leadership

2014-2022; — Elected to the Fund for Greater Hartford Board of Trustees. Elected Vice President in 2016 and President in 2017 — now past-president. https://fundforgreaterhartford.org/about-the-fund/leadership/

2013-2016 – Elected to the National Council for Science and the Environment EnvironMentors Board of Directors.

2013-2019; 2020-21 - Appointed Chair of Ecological Society of America Commitment to Human Diversity Award Committee.

2013-2015 – Elected Member-at-Large - Governing Board of the Ecological Society of America. 2014-2015 – Appointed Chair of the ESA Board of Professional Certification Review Committee 2013-2015 – Appointed co-chair of the Connecticut Board of Regents Early College Steering Committee, charged to develop BOR system policy, oversee new program implementation and expand partnerships between community colleges and high schools, in all types of early college program experiences. Assessed existing high school/community college partnerships and developed plan for meeting new NEASC guidelines for assessment of high school teaching of college coursework.

2009-2016. Appointed Chair of the Odum Ecology Education Award committee and appointed to the Ecological Society of America Education and Human Resources Committee.

2009-2015 – Elected to the Board of Directors of the Council of Colleges of Arts and Sciences, which represents 515 universities and 1600 Deans of Arts and Sciences across the United States. Served as co-P.I. of NSF-ADVANCE grant to enhance the CCAS professional development programs of deans and department chairs. Developed Dean's Knowledge Base online mentoring resources and collaborated on the CCAS Deans' Standards of Practice quidelines. Founding co-chair of the Cultural Diversity and Gender Issues committees

2007-2013 – Elected to the Board of Professional Certification for the Ecological Society of America, serving six years. In 2009-2010, *elected Chair of the ESA BPC.*

2006-2012 –Elected to the Board of Directors of the Connecticut Academy of Mathematics and Science Education

2006-2008 – Appointed to the *Board of the Eastern Area Health Education Center* in Eastern Connecticut

2004-2005 – Appointed by Ecological Society of America as *K-12 Education Subcommittee Chair – Integrating science with K-12 education* for NSF-funded National Ecological Observatory Network Project Design Team

1999-2008 - Board of Trustees - Connecticut Museum of Natural History

1995-1997- Chair of the Humanities/Social Science/Science American Fellowships Panel of the American Association of University Women, in charge of distributing over \$1 million in fellowships

1992-2000 - Council/Board of Directors - American Institute of Biological Sciences – 1998-2000 - Chair of the Human Resources Committee—developed guidelines for facilitating biology faculty recruitment and retention. AIBS represents 250,000 biologists from various biological disciplines.

1991-1994 Founding Chair - Women and Minorities in Ecology Committee of the Ecological Society of America. Was charged by ESA to start the committee, and to develop the first strategic plan for ESA for increasing the participation of women and minorities in ecological careers (WAMIE I Report - http://www.esa.org/esa/wp-content/uploads/2012/12/WAMIE-ReportI.pdf). ESA is the largest professional ecological organization, representing 8,900 ecologists. See ESA historical timeline for education and diversity - http://www.tiki-toki.com/timeline/entry/465415/ESA Education-Diversity

II. RESEARCH EXPERIENCE:

Research - Publications and Seminars:

Many invited seminars throughout 15 states, in addition to publications and conference presentations listed below. Topics of papers and presentations include: promoting recruitment, retention and career development of women and minorities in science, strategies for increasing recruitment and retention of first generation and minority undergraduates, making cross disciplinary connections in a liberal arts curriculum, forest and wetland ecology, strategies for achieving ecological literacy among non-science majors, communicating science to diverse and bilingual audiences, developing partnerships with community organizations to enhance experiential learning opportunities for undergraduates, and bilingual, interactive ecology teaching using my CD-ROM - Project *Wonderwise* "The Urban Ecologist" science resource for 4th-6th grades.

Publications/Abstracts – Ecology

- 2021 Bowser, G. and C. R. Cid. Developing the ecological scientist mindset among underrepresented students in ecology fields. *Ecological Applications* 31(6):e02348. 10.1002/eap.2348
- 2021 Bowser, G. and C. R. Cid. 1. Promoting action ecology research through integration of environmental justice in undergraduate ecology education. Bulletin of the Ecological Society of America 102(3):e01873. https://doi.org/10.1002/bes2.1873
- 2021 Miriti, M. N., G. Bowser, C. R. Cid and N. C. Harris. Overcoming blind spots to promote environmental justice research. *Trends in Ecology and Evolution* January 2021 issue DOI: https://doi.org/10.1016/j.tree.2021.12.011

- 2020 Bowser, G. and C. R. Cid. Integrating environmental justice into applied ecology research: Somebody else's problem? *Ecological Applications* 30(8)e02250. 10.1002/eap.2250
- 2020 Cid, C. R. and M. W. Brunson. Engaging faculty in preparing students for non-academic environmental careers. *Frontiers in Ecology and the Environment* February 2020 issue https://esajournals.onlinelibrary.wiley.com/doi/epdf/10.1002/fee.2158.
- 2020 Cid, C. R., A. Berkowitz, K. Bjorgo-Thorne, J. Doherty, K. Klemow, G. Middendorf, T. Mourad and A. Sorensen. Transforming ecology major courses to meet the goals of the ESA-endorsed 4DEE curricular framework. Ecological Society of America annual virtual conference https://eco.confex.com/eco/2020/meetingapp.cgi/Paper/84049
- 2020 Rodgers, V., A. Berkowitz, K. Bjorgo-Thorne, C. R. Cid, J. Doherty, K. Klemow, G. Middendorf, T. Mourad and A. Sorensen. Applying ESA's 4DEE framework to guide the development of ecological literacy for non-majors. https://eco.confex.com/eco/2020/meetingapp.cgi/Paper/84162
- 2019 Fetcher, N., M. E. Lam, C. R. Cid, and T. Mourad. 2019. Contingent faculty in ecology and STEM: an uneven landscape of challenges for higher education. *Ecosphere* 10:1-16 10(12): https://doi.org/10.1002/ecs2.2964
- 2019 Cid, C. R., K. Shea and J. S. Macfall. How environmental studies programs and the ESA 4DEE curriculum framework can help recruit diverse students into the environmental workforce. Ecological Society of America Conference, Louisville, KY https://eco.confex.com/eco/2019/meetingapp.cgi/Paper/76261
 - 2019 Berkowitz, A. T. Mourad, K. Klemow, C. Cid, G. Middendorf, B. Pohlad, J. Doherty, D. Ebert-May and A. Sorensen. Making fieldwork work as an essential element in ESA's 4-dimensional framework for ecology education (4DEE). Ecological Society of America conference, Louisville, KY https://eco.confex.com/eco/2019/meetingapp.cgi/Paper/76621
- 2019 Klemow, K., A. Berkowitz, C. Cid and G. Middendorf. Improving ecological education through a four-dimensional framework. Guest Editorial. *Frontiers in Ecology and the Environment*. https://doi.org/10.1002/fee.2013
- 2019 Prevost, L., A. E. Sorensen, K. Klemow, J. Doherty, G. Middendorf, D. Ebert-May, C. Cid, A. Berkowitz, T. Mourad and B. Pohlad. Implementing the Ecological Society of America's four-dimensional ecology education (4DEE) framework: case studies and future directions. https://eco.confex.com/eco/2019/meetingapp.cgi/Paper/80326
- 2018 Cid, C.R., Klemow, A. Berkowitz, D. Ebert-May, G. Middendorf, T. Mourad and B. Pohlad. Implementing an integrative framework for undergraduates: The ESA's Four Dimensional Ecology Education (4DEE) initiative Ecological Society of America Conference, New Orleans, LA.https://eco.confex.com/eco/2018/meetingapp.cgi/Paper/74254
 - 2017 Berkowitz, A. R., C. Brewer, C. R. Cid, J. Doherty, D. Ebert-May, K. Klemow, G. Middendorf, T. Mourad, N. Nadkarni and B. Pohlad. Wicked problems in ecology

Conference, Portland, OR. - https://eco.confex.com/eco/2017/webprogram/Paper62943.html

- 2016 Cid, C. R. Networking environmental professionals to promote ecology competency skills needed for today's emergent environmental careers –Ecological Society of America Conference, Fort Lauderdale, FL https://eco.confex.com/eco/2016/webprogram/Paper58395.html
- 2016 Solomon, L. K. M. Dlemow, C. R. Cid, J. A. Reynolds and T. Mourad. An historical timeline of ESA's efforts to promote ecological literacy and enhance human diversity among ecologists. Ecological Society of America Conference, Fort Lauderdale, FL https://eco.confex.com/eco/2016/webprogram/Paper60883.html
- 2015 Cid, C.R, L. Heath and J. Macfall. Upgrading and expanding the ESA Certification Program to meet ecology workforce needs in the 21st century https://eco.confex.com/eco/2015/webprogram/Session10824.htm
- 2014 Cid, C. R. Role of community college administrators in enhancing diversity of ecologists, environmental literacy and conservation at their local communities. Proceedings of the Ecological Society of America Conference, Sacramento, CA.https://eco.confex.com/eco/2014/webprogram/Paper45434.html
- 2014 Cid, C.R. and C. Thomas. Partnering with community colleges in encouraging future ecologists. Organized oral talk session at the annual meeting of the Ecological Society of America Sacramento, CA https://eco.confex.com/eco/2014/webprogram/Session9696.html
- 2013 Cid, C. R. and R. V. Pouyat. Making ecology relevant to decision making: a case for the human-centered approach, place-based research and education. Invited article for Ecoliteracy Series *Frontiers in Ecology and the Environment* **11**: 447–448. http://onlinelibrary.wiley.com/doi/10.1890/1540-9295-11.8.447/epdf
- 2013 Cid, C. R. Maximizing exposure of minority youth and communities to the wonders of ecological research. Ecological Society of America Conference, Minneapolis, MN. https://eco.confex.com/eco/2013/webprogram/Paper40065.html
- 2013 Jablonski, L., C.R. Cid and M.M. Gregory. Following your passion and creating a just society as an ecologist organized oral talk session at the annual meeting of the Ecological Society of America Minneapolis, MN https://eco.confex.com/eco/2013/webprogram/Session8691.html
- 2012 Cid, C. R. Using the *Wonderwise* model to engage minority students in ecology careers.

 Proceedings of the Ecological Society of America Conference, Portland, OR https://eco.confex.com/eco/2012/webprogram/Paper36604.html
- 2010 Cid, C. R. How ecological professional certification, interdisciplinary curriculum collaborations

- and educational outreach programs can influence the development of environmental public
 - policy Proceedings of the Ecological Society of America Conference Pittsburgh, PA https://eco.confex.com/eco/2010/techprogram/P22845.HTM
- 2010 Cid, C. R. and N. S. Nicholas. The evolving role of ecologists in the development of environmental public policy – organized oral session for the annual meeting of the Ecological Society of America – Pittsburgh, PA https://eco.confex.com/eco/2010/techprogram/S5664.HTM
- 2010 Pyle, C. and C. R. Cid. English/Spanish invasive species sheets for the Natural Resources Conservation Service USDA in CT. See http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ct/technical/ecoscience/invasive/?cid=nrcs142p2_011101
- 2010 Cid. C. R. How ecologists can impact sustainability education. *Ecology* 91:931-932.
- 2009 Cid, C. R. Ecologists and the development of sustainability curricula for majors vs. non majors Proceedings of the Ecological Society of America Conference Albuquerque, NM https://eco.confex.com/eco/2009/techprogram/P15398.HTM
- 2008 Cid, C. R. and J. Hyatt. Using virtual tour and interactive imagery to teach understanding and assessment of environmental gradients and seasonal change in nature trails. Proceedings of the Ecological Society of America conference Milwaukee, WI. https://eco.confex.com/eco/2008/techprogram/P11218.HTM
- 2005 Cid, C. R. Using wetland seed bank studies to integrate spatial, temporal and biological scales in ecology education. Proceedings of the 2005 Annual Conference of the Ecological Society of America, Montreal, Canada
- 2001 Cid, C. R. *The Urban Ecologist*. English/Spanish, interactive DVD/CD/ROM, science activity guide, video package and science kit for 4th-6th graders and their teachers part of award winning Women in Science series *Project Wonderwise* <a href="http://wonderwise.unl.edu/nderwise.unl
- 1999/2001/2002 Cid, C. R. Plant community regeneration response to seasonal variation in flooding and vegetation structure in Connecticut non-tidal wetlands Parts I, II and III Published in Proceedings of 3 different annual conferences 1999-Society of Wetland Scientists Norfolk, VA, 2001-Ecological Society of America Madison, WI and 2002 Botanical Society of America Madison, WI
- 1998 Cid, C. R. and J. Yncera. Effect of flooding and disturbance on regeneration and succession in an inland wetland plant community. Proceedings of the Ecological Society of American Annual Conference – Baltimore, MD.
- 1995 Cid, C. R. and A. Corn. Effect of seasonal water depth variation and vegetation structure on regeneration and diversity in a non-tidal wetland. *Bulletin of the Ecological Society of America* 76: 312.
- 1992 Cid-Benevento, C. R. Relative effects of tree and fern litter on regeneration of herbaceous and woody forest species. *American Journal of Botany* 79: 50.

- 1989 Cunningham, K. A. and C. R. Cid-Benevento. Relative importance of human disturbance and canopy gap size on distribution, growth and herbivore damage of two epiphytic species of *Columnea* (Gesneriaceae) in tropical rainforests. -Association for Tropical Biology Abstracts Proceedings, Toronto, Canada annual conference (K. Cunningham was Eastern's first Henry Barnard Award winner in 1989, my Biology student advisee)
- 1988 Cid-Benevento, C. R. The relative effects of seed size, seedling morphology and leaf litter distribution on competitive interactions between forest annual and perennial herbs. Bulletin of the Ecological Society of America 69: 99.
- 1987 Cid-Benevento, C. R. Distributional limits of old-field and woodland annual herbs. The relative importance of seed availability and interference from herbaceous vegetation. *American Midland Naturalist* 117: 293-306.
- 1987 Cid-Benevento, C. R. Relative effects of light, soil moisture availability and plant size on floral sex ratio of two monoecious woodland annual herbs: *Acalypha rhomboidea* (Euphorbiaceae) and *Pilea pumila* (Urticaceae). *Bulletin of the Torrey Botanical Club* 114: 293-306.
- 1987 Cid-Benevento, C. R. Competitive response of woodland annuals to early- or mid successional old-field herbs: effect of soil moisture availability. *Bulletin of the Ecological Society of America* 68: 279.
- 1986 Cid-Benevento, C.R. and P. A. Werner. Local distributions of old-field and woodland annual plant species: Demography, physiological tolerances and allocation of biomass of five species grown in experimental light and soil moisture gradients. *Journal of Ecology* 74: 857-880.
- 1986 Cid-Benevento, C. R. and B. A. Schaal. Variation in population growth rate in the woodland annual *Impatiens pallida* (Balsaminaceae). *American Journal of Botany* 73: 1031-1042.

Publications/Abstracts – Higher Education Issues

- 2018 Cid, C. R., C. Mills and W. Davi. Embracing diversity while maintaining civility at today's liberal arts colleges. Sponsored by the CCAS Liberal Arts Committee, chaired by C. Cid. Proceedings of annual meeting of the Council of Colleges of Arts and Sciences, Chicago, IL.
 - https://www.ccas.net/files/2018%20All%20Meetings/Embracing%20Diversity%20While%
 - 20Maintaining%20Civility%20at%20Today's%20Liberal%20Arts%20Colleges%20(sponsored%20by%20the%20Committee%20on%20Liberal%20Arts).pdf
- 2018 Cid, C. R. Proactive use of technology to retain, motivate and graduate Hispanic students in four years. Proceedings of the Hispanic Education Technology Services annual conference, February 2018, San Juan, PR.
- 2017 Kelley, C., B. Oles and C. Cid. Strategic cohorting of first-year students to improve student retention. Proceedings of AAC&U annual conference, January 2017, San Francisco, CA
- 2016 Cid, C. R., R. Finkelstein, T. Pfannestiel and M. Cowart. Maximizing student access to global learning high impact practices across the curriculum Proceedings AAC&U

- annual meeting, Washington, D.C.
- 2015 Cid, C.R., S. Mulkey and K. Klemow panel organizers. The impact of ecologists in higher education administration in promoting ecoliteracy, ecological research and sustainability in the 21st Century – Proceedings-Ecological Society of America annual meeting, Baltimore, MD https://eco.confex.com/eco/2015/webprogram/Session10575.html
- 2015 Cid, C.R. Community colleges' central role in the high school to college environmental pipeline for a diverse ecology workforce Proceedings ESA annual meeting Baltimore, MD https://eco.confex.com/eco/2015/webprogram/Paper51079.html
- 2015 Cid, C.R. How a liberal education, practically applied, is meeting emerging career needs panel entitled "A Toolbox for Promoting the Liberal Arts" Proceedings of annual meeting of the Council of Colleges of Arts and Sciences, Washington, D.C.
 - http://www.ccas.net/files/2015%20Annual%20Meeting%20Washington%20DC/Presentations/A%20Toolbox%20for%20Promoting%20the%20Liberal%20Arts.pdf
- 2013 Cid, C.R., H. Bouchey and R. Rice. Data-driven transformative strategies for campus wide faculty/staff collaborations to enhance student success AAC&U annual Student Success and Diversity conference April 2013, Miami, FL.
- 2013 Cid, C. R. Data-driven transformative collaborations to improve student retention and progress to graduation. Proceedings of the annual conference of the Council of Colleges of Arts and Sciences, Jacksonville, FL.
- 2013 Invited symposium speaker and report contributor for "Accelerating Change for Women of Color Faculty in STEM: Policy, Action, and Collaboration" Institute for Women and Policy Research Symposium Washington, D.C. May 10, 2013 http://www.iwpr.org/publications/pubs/accelerating-change-for-women-faculty-of-color-instem-policy-action-and-collaboration/
- 2013 Cid, C. R. Professional organizations taking ADVANCE to a national scale: The Council of Colleges of Arts and Sciences ADVANCE initiative. Proceedings of the NSF ADVANCE annual meeting, Alexandria, VA.
- 2013 Fetcher, N., M. Lam, C. Cid and T. Mourad. Contingent faculty in ecology results of a survey. Proceedings of the Ecological Society of America annual meeting Minneapolis, MN https://eco.confex.com/eco/2013/webprogram/Paper41703.html
- 2012 Cid, C. R. and E. Yasuhara. Minority faculty leadership development towards the deanship. Proceedings of the annual conference of the Council of Colleges of Arts and Sciences, Seattle, WA.
- 2012 Cid, C.R. Challenges and opportunities for data-driven transformative change for ensuring Latino/a student success The Eastern Connecticut State University model Proceedings of the annual meeting of the American Association of Hispanics in Higher Education, Costa Mesa, CA
- 2009 Cid, C. R. Operationalizing inclusion as a university core value: Dean's role.

 Proceedings of the annual conference of the Council of Colleges of Arts and Sciences,
 Baltimore, MD.

- 2007 Cid, C. R. Designing a research program at a small liberal arts college. Proceedings of *Women Evolving in the Biological Sciences Symposium* in Seattle, WA for women in science mentoring program funded by NSF.
- 2007 Cid, C. R. Best practices in interdisciplinary teaching and research Proceedings-Council of Colleges of Arts and Sciences annual conference Chicago, IL
- 2006 Cid, C. R. Deans as mentors: Promoting multiple pathways to the deanship. Proceedings of the Council of Colleges of Arts and Sciences annual conference, Boston, MA.
- 2006 Cid, C. R. Contributing to regional economic development through the arts How deans can help. Proceedings of the Council of Colleges of Arts and Sciences annual conference, Boston, MA.
- 2002 Cid, C. R. Focus on Latinas in Science. Association of Women in Science journal 31:6-7
- 1994 Cid, C. R. Challenges and career strategies for women and minorities in the life sciences. *American Journal of Botany* 81: 205.
- 1993 Cid, C. R. Diversidad de Ecólogos: Situación y Retos en E.E.U.U.. Ecosistemas 7 (10/93):62.
- 1993 Cid, C. R. Career opportunities in ecology: The importance of diversity, pp. 21-26. In *Environmental Career Directory*, Gale Research Press, MI
- 1991 Cid-Benevento, C.R. Strategies for achieving ecological literacy among non-science majors. Bulletin of the Ecological Society of America 72:89.

III. HIGHER EDUCATION ADMINISTRATIVE EXPERIENCE

As Dean of the School of Arts and Sciences at Eastern Connecticut State University I am responsible for effective functioning of 14 out of the 20 academic departments in the university, overseeing 156 full time, up to 280 part-time faculty, 19 staff and support services for 24 academic major programs (majority of B.A. and B.S. options) and 45 minors. These departments house the natural and physical sciences, social sciences, humanities, visual and performing arts. The School of Arts and Sciences faculty teach 80% of the coursework for the university's general education program, which we call the Liberal Arts Curriculum, and provide courses for 75% of all university majors. Eastern has on average an enrollment of 5200 students, with 4200 being undergraduates, who are primarily residing on campus.

1. STRATEGIC PLANNING AND IMPLEMENTATION

Eastern Connecticut State University

As faculty and during my fifteen years as Dean of the School of Arts and Sciences I have played a central role in the development and implementation of several strategic plans for the university. At present I chair the strategic planning committee responsible for implementing Goal #1 – Maximizing Student Success – working with Eastern's Employability Council on initiatives

to maximize career readiness skills, experiential learning opportunities and continue high rate of graduation in four years, especially for our 50% first-generation and 31% minority undergraduates.

For the 2013-2018 Strategic Plan, my focus was to expand experiential learning opportunities for all students, engaging faculty in developing service learning courses in collaboration with the Center for Community Engagement (the hub for all community organizations to come to for services in our immediate region). I was part of the team that established the Center for Community Engagement (Eastern's main outreach hub to support our local community organizations) and promotes our student and faculty engagement in our community at large. I also led Eastern's LEAP Signature Work experiential learning program as part of the American Association of Colleges and Universities (AAC&U) LEAP New England project. https://www.aacu.org/press/press-releases/aacu-launches-new-project-advance-leap-challenge-new-england-institutions

During 2007-2013, I co-chaired the Horizontal Distinctiveness and Distinction Subcommittee of the Committee on the Future of Eastern (COFE I) strategic planning group. I led faculty and staff in assessing institutional strengths for comparative distinction, and developed eight strategies for improving institutional support, curriculum, advising, and student life components so as to enhance academic success, student retention and timely progress to graduation. Developed implementation proposals for three student success initiatives focusing on a comprehensive dual-advising program, establishment of an Academic Services Center (with a new Writing Center, new Mathematics Achievement Center, General Tutoring Services Center and the Advising Center in renovated facilities in the first floor of the Library), a Student Success Center Network and a Task Force on Student Retention and Graduation. After obtaining funding from the Nellie Mae Foundation, I led a large group of faculty along with staff from Student Affairs and Academic Affairs departments to develop an ongoing Community of Practice for instituting reform in advising, career services and data-driven enrollment management practices. I also obtained federal (Title III – U.S. Dept. of Education) for implementing the proposed student success initiatives through 2014. In 2010 I facilitated development of a university-wide CREATE student research and creative activity conference based on the School of Arts and Sciences model, which is now in its ninth year of showcasing faculty-student research and creative collaborations.

Quinebaug Valley Community College

2013-2014 – Led development of assessment metrics for the college's strategic plan in order to meet requirements of the NEASC (now NECHE) five-year review of 2014.

Enhanced coordination of college and attached magnet high school academic programs to improve seamless transition of students into QVCC. In May 2014, I oversaw the move of the high school and opening of a 38,000 square foot wing, which houses the Quinebaug Middle College high school. The wing contains six new classrooms, two science labs, half gym, art room, special education room, fitness room, music room and two practice rooms, health suite, offices and collaborative rooms.

Oversaw search and hire of new QVCC Manufacturing Program Director to meet the requirements of the new QVCC Manufacturing Building facility in process of being built.

Council of Colleges of Arts and Sciences strategic planning initiatives

2007-present - As a CCAS Board member for six years, I co-founded the CCAS Cultural Diversity standing committee and as Co-PI of a four-year National Science Foundation ADVANCE grant (2009-2013) I founded the Gender Issues standing committee for CCAS. Many mentoring programs, panels, publications have resulted from this work to improve career development for faculty and deans throughout CCAS' 525 institutions.

Fund for Greater Hartford strategic planning

2014-present - As a trustee, and later as Vice-President and President, I have been charged with leading the private, independent foundation, Fund for Greater Hartford, through the implementation of its 2016 Strategic Plan, focusing on improving early childhood literacy, family and trauma support services for the greater Hartford, CT communities.

2. INSTITUTIONAL ACCREDITATION REVIEW EXPERIENCE

Eastern Connecticut State University

1995 to present – At Eastern, I have written, collected data, developed assessment metrics and led the writing of standard components of every NEASC (now NECHE) 5-year accreditation review since 1995, resulting in successful evaluations.

Quinebaug Valley Community College

2013-2014 – I led the President's Council team in developing the strategic plan's metrics needed and the writing of their 2014 NEASC accreditation review report. I also oversaw the NEASC external site visit review to provide a temporary external facility for the newly established Advanced Manufacturing program (as the new building to house the program on campus was in development).

3. BUDGET MANAGEMENT AND FUND-RAISING EXPERIENCE

Eastern Connecticut State University

1999-present -At Eastern, I have been in charge of budget management, and doing fundraising for Eastern's Biology Department (1999-2005), and the fourteen departments in the School of Arts and Sciences (2005-present). I have obtained three large multi-year grants affecting recruitment and retention of students (1994-1998, 2006-2011, 2009-2014 – see Grants section), and coordinating with Alumni Affairs to develop scholarship fundraising affinity groups (associated with retiring esteemed faculty in the School of Arts and Sciences). At ECSU, I am responsible for approximately a \$20 million budget primarily salaries/benefits for the 156 full time and up to 236 part-time faculty, along with department secretaries and lab technical staff, management of budgets for ongoing faculty searches, and up to \$150,000 additional equipment funds. I have also overseen budget management and resource allocation as Chair of the American Association of University Women combined Dissertation/Faculty Fellowship panel (1995-1997), as member of the Board of Directors of the following national professional organizations -- American Institute of Biological Sciences (1992-2000 – a federation of 250,000 biologists), the Council of Colleges of Arts and Sciences (2008-2013 - national organization of 525 institutions and 1600 Deans of Arts and Sciences), the Ecological Society of America (2013-2015 – largest ecological organization representing 8900 ecologists), the Connecticut Academy for Mathematics and Science Education (2006-12), the Connecticut Museum of

Natural History (1999-2008), the Talcott Mountain Science Center/Academy (2014-2020) and the Fund for Greater Hartford private foundation (2014-2023).

Quinebaug Valley Community College 2013-2014 – As Interim President of QVCC, I developed a balanced collegewide budget for FY15 while increasing QVCC new faculty/staff hires, forging financial agreement with co-located magnet high school, upgrading IT capabilities, and undergoing two successful NEASC accreditation reviews (off-site program evaluation for new Manufacturing program; interim report for collegewide accreditation). At QVCC I oversaw and continued a balanced budget of \$16 million, with some additional grant funds management and an equipment budget of \$750,000 above the total budget. The college increased its reserves to \$1.1 million and its Foundation funds to \$3.1 million.

GRANTS EXPERIENCE

The ecology discipline, university and community college strategic planning initiatives that I have led and implemented have required considerable funding for successful start-up and I obtained the grants to fund those programs. At both Eastern and QVCC, I have been successful in obtaining large grants to support student success initiatives and improve curriculum and experiential learning opportunities.

2020 Co-P.I. of RCN-UBE: The Undergraduate network for increasing diversity of ecologists (UNIDE) – National Science Foundation DBI #2018939 – 5 year grant to develop and implement strategies and teaching resources to improve recruitment and retention of underrepresented students in environmental fields. \$499,432

2020 Co-P.I. of National Science Foundation S-STEM grant – "Scholarships and a learning community approach to support success of undergraduates in mathematics and biology" – five year grant – DUE #2030582 - \$649,957

Facilitated science education and math/biology/environmental earth science faculty collaboration grants for ECSU summer teacher preparation programs – from Connecticut Department of Higher Education – total for 4 years - \$560,000

2017- present - Facilitated obtaining ECSU grants for NSF projects in Biology and Davis Foundation grants for First Year Experience enhancement – over \$700,000.

Total ECSU funding obtained in student retention/support services grants: \$3,421,633

2017-2019 – Worked on obtaining the Davis Foundation Grant to improve critical reading and writing skills in the First Year Experience - \$200,000

2009-14 – Title III – U.S. Dept. of Education Support Services Grant - \$1.5 million – 5 years Publicity - http://www.facultyfocus.com/articles/academic-leadership/a-data-driven-approach-to student-retention-and-success/

2008-12 – Nellie Mae Foundation Project Compass 4-year Implementation Grant – \$760,000 2007 – Nellie Mae Foundation Project Compass Planning Grant - \$100,000 1994-98 - National Science Foundation Grant - Women and Science Project - \$861,633

Co-P.I. on NSF Grant for improving faculty and administrator professional development

2009-13 – NSF-PAID - ADVANCE grant HRD0930138– in collaboration with CCAS (Council of Colleges of Arts and Sciences – College of William and Mary) and the Univ. of Northern Colorado – 4 year grant - \$1,170,02 – Goal – to infuse best practices for incorporating gender equity issues in the recruitment, retention and mentoring of women and minorities in science, by enhancing professional development programs of CCAS department chairs and deans with mentoring and diverse case studies--

http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0930138

Quinebaug Valley Community College

2013-2014 - Obtained \$50,000 from the CT Board of Regents for Quinebaug Valley Community College during 2014-2015 to develop the first stage of the Early College Program math skills enhancement for a community college, high school, business collaborative partnership to grow the manufacturing career student pipeline. The partnership will involve Windham High School, the Willimantic Center of Quinebaug Valley Community College and the Eastern Connecticut Manufacturing Association companies (the latter providing internships for high school students). Windham H.S. students will be able to finish their high school education and manufacturing associate degrees at the same time, with funding from the manufacturing companies and State of Connecticut Early College Program of the Connecticut Board of Regents.

2014- Obtained \$144,151 grant from the Office of Higher Education to operate the Connecticut College Access and Success (ConnCAS) program to help support strategic initiatives that improve the retention and graduation rate of underrepresented college students at QVCC.

Additionally, I have also facilitated and coordinated obtaining grants from the National Science Foundation and CT NASA Space Consortium to fund student research, faculty research and outreach to science magnet high schools in our region over the last 3 years, for a total of \$600,000.

Total ECSU funding personally obtained in science research grants: \$275,009

1986-87 - Northeast Missouri State Univ. Faculty Research Grant \$5,000 1988, 2003 Eastern Connecticut State Univ. Library Improvement Grants - \$1000 1990 - Eastern Connecticut State Univ. Summer Fellowship Award - \$5000 1994-95 - Mashantucket Pequot Tribe Research Grants – Lake of Isles Biological Surveys 1994 - \$69,926; 1995 - \$52,583; total = \$122,509

1995-96 - State of Connecticut - Howe - Yankee Ingenuity Grant - \$80,000 1997, 1999, 2001, 2002, 2005 - ECSU Summer Curriculum Development- total = \$12,000 1990, 1991, 1995 - ECSU Faculty Development Awards - total = \$4500 1987-89, 1991, 1995-96, 1998-2001, 2005 - CSU Faculty Research Grants - total = \$45,000

4. PHYSICAL FACILITIES PLANNING EXPERIENCE

Fine Arts Building – Coordinated program review and design planning integrating Music, Theatre and Visual Arts into an upcoming 130,000 sq ft new building, which opened in January 2017.

Science Building

2001-2008 – Led planning, Integration, five-building moves transition and IT coordination into a 170,000 sq ft, 6-story, \$64 million building designed to meet Silver LEED Certification. Conducted the integration of mathematics, computer science, environmental earth science, biology and physical sciences into one building, with acquisition of state-of-the-art confocal microscope, protein sequencer, ground scanning radar and sustainable energy studies' latest equipment.

2009-present – Development of Science Building brochure, student recruitment tours, display case poster series of all discipline programs in the building, part of tour.

Church Farm Center for Arts and Sciences, Ashford, CT

2007-present - Coordinated acquisition of 110 acre property with Historical Register home and barn. Currently coordinating development of property into nature preserve facilities to expand biology and environmental earth science fieldwork opportunities, along with landscape painting coursework, development of sculpture garden and theatrical/musical performances now being held in the large, historic barn.

Multimedia Language Resource Room

2010-2011 – Obtained funding from the ECSU Foundation's Parent Fund to renovate the Multimedia Language Resource room to facilitate language instruction in Webb Hall

Environmental Science Field Lab – In 1998 I obtained \$80,000 to develop the campus Arboretum facility (forest, wetland, pond) into a teaching and research facility shared by Biology and Environmental Earth Science departments. Used for educational outreach to Connecticut public schools and professional development for New England science teachers. Profiled in the nationally used ecology curriculum *Project Wonderwise* (used in 28 states and Canada to educate after-school program students in the 4-H national curriculum.

Quinebaug Valley Community College – Quinebaug Middle College building

2013-2014 – Oversaw move to and opening of new academic building for the **new Quinebaug Middle College high school facilities** -- the partner magnet high school attached to Quinebaug Valley Community College - including ribbon-cutting ceremony in May 2014 - https://www.eastconn.org/gmc-home

5. CURRICULUM DEVELOPMENT AND IMPLEMENTATION

Liberal Arts Curriculum Development and Implementation

2005-present - Worked with the University Senate's Liberal Arts Program Committee on developing a three-tiered Liberal Arts Curriculum, with core abilities and up-front outcomes assessment built in. Developed implementation infrastructure to support course proposal vetting and implementation of the three-tiered structure, especially the integrative curricular elements. In 2006, the liberal arts curriculum reform process and product won a Silver award from the Connecticut Quality Improvement Association. This three-tiered curriculum presents methods and concepts in Tier I courses, promotes synthesis and application of concepts in Tier II courses and fosters independent inquiry in Tier III capstone courses. The four curricular themes

integrated within and across tiers include: critical thinking, oral/written/visual communication, ethics and information literacy.

Academic Program Development – Majors and Minors

1995 – Developed the self-designed Individualized Major program (during my Interim year as Dean of Arts and Sciences – 1993-1994). This program has been used successfully to expand interdisciplinary major opportunities for our incoming students and has provided a way to pilot many interdisciplinary majors. The program is particularly successful in enhancing articulation of curriculum for our community college and other transfer students, to facilitate timely progress to graduation.

2005 – present -- Majors/minors development which I have spearheaded, in collaboration with existing faculty advisory committees:

- Data Science
- Anthropology
- Health Sciences
- Sustainable Energy Studies major concentration in Environmental Earth Science
 New Media Studies
- Data Science (in final process for Board of Regents approval)
- Anthropology (in final process for Board of Regents approval)
- Biochemistry
- Criminology
- Music
- Theatre
- Philosophy
- Women's and Gender Studies
- Environmental Management and Policy and Sustainable Energy concentrations for the Bachelor of General Studies

Interdisciplinary Minors which I have launched:

- Public Health Studies
- Bioinformatics
- Genetics Counseling
- Environmental Health
- Sustainable Energy Studies
- Game Design
- Peace and Human Rights
- Asian Studies
- Astronomy and Public Presentation
- Film Studies
- Costume and Fashion Design

International Study Programs Developed

- Ghana Sociology/Mathematics global awareness program Univ. of Cape Coast
 Ghana Public Health internship experience
- Jamaica Individualized Major Program in Sociology and Education. In collaboration
 with the School of Continuing Education and the School of Education and Professional
 Studies I developed a two-year articulation program to provide an interdisciplinary
 Individualized Major to Jamaican public school teachers (to complete their 4-year
 degree).
- Coordinated development of current Biology department's Costa Rica's and San Salvador, Bahamas' Tropical Biology program components – expansion from original program initiated in 1967 in Bermuda and later taken to Belize
- Facilitated development of Visual Arts study abroad tours and faculty research collaboration with Cuban artists
- Facilitated development of creative writing global field courses to Dublin, Ireland and Florence, Italy
- Coordinated development of Swedish folk music summer experience course Facilitated development of the comparative health psychology summer course experience in Nepal, India and Hawaii
- Global field study in history/political science to Munich/Prague, and in environmental science to Costa Rica at QVCC during 2013-2014
- Global field study tours to London and Los Angeles, CA for Theatre program
- Field study tours to Iceland and Spain for Environmental Earth Science program
 Global field study courses to Israel and Turkey for history majors

6. FACULTY EVALUATION AND CONTRACT NEGOTIATION EXPERIENCE

During the 15 years as Dean of the School of Arts and Sciences I have been part of the evaluation process for promotion and tenure, faculty renewal and sixth year professional assessment for up to 156 full time faculty. I have helped develop interdisciplinary faculty networks to promote curriculum development and research and provided workshops for new faculty to enhance their career development pathways in the School of Arts and Sciences.

During 2014-2017 I was chosen to represent management in the contract negotiation of the AAUP 2016-2021 collective bargaining agreement.

IV. GRANT PANEL AND MANUSCRIPT REVIEWER EXPERIENCE:

1992-present- Reviewer of grant and fellowship proposals in ecology and in many programs of the National Science Foundation Division of Undergraduate Education (e.g. CCLI Types 1,2,3, REU, IUSE), the NSF Division of Graduate Education (e.g. GK-12, IGERT, GRFP, NATO post-doctoral fellowships, Presidential Fellows) and all of the program initiatives to improve recruitment and retention of women in science -- ADVANCE in the Directorate for Education and Human Resources of the National Science Foundation, as well as for the U.S. Dept. of Agriculture and the American Association of University Women.

2020 – NSF REU panel – Division of Biological Infrastructure/Undergraduate Education 2019 – NSF IUSE panel – Division of Undergraduate Education

2019 - NSF REU panel – Division of Biological Infrastructure/Undergraduate Education

2018 – NSF GRFP panel – Division of Graduate education

2018 – NSF REU panel – Division of Undergraduate Education

2015 – NSF IUSE panel – Division of Undergraduate Education

2009 – NSF GK-12 Teaching Fellows panel

2008 - NSF CCLI panel

2008 - NSF GK-12 Teaching Fellows panel

2007 - NSF GK-12 Teaching Fellows panel

2007 - NSF CCLI panel

2006 - NSF Division of Environmental Biology Committee of Visitors review

panel 2003 – NSF ADVANCE panel

2003 - NSF CCLI panel

2003 - NSF NATO Post-Doctoral Fellowships panel

2002 – NSF Graduate Teaching Fellows in K-12 Education panel

2001 – NSF Course Curriculum and Laboratory Improvement (CCLI) panel

1997 - NSF CPMSA panel (Comprehensive Partnerships for Math and Science

Achievement) 1997 – NSF Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring panel

1996 – NSF Experimental Projects for Women and Girls panel

1993 – NSF-NATO Postdoctoral Fellowships panel

1992 – NSF Postdoctoral Research and Mid-Career Fellowships panel

1982-present - Reviewer of manuscripts for the following refereed journals: *Ecology*, *Journal of Ecology*, *American Midland Naturalist, Biotropica*, *American Journal of Botany. Plant Ecology* (formerly *Vegetatio*), *Michigan Botanist, Journal of Geosciences Education and Journal of Diversity in Higher Education*.

V. TEACHING EXPERIENCE

1987-2005 Eastern Connecticut BIO 100 Intro. Biology: Organisms & Env. State University BIO 115 Principles of Biology Lec/Lab

Asst./Assoc./Full Professor BIO 234 Population Biology Lec/Lab BIO 307

Human Ecology

BIO 308 General Ecology

BIO 442 Plant Ecology Lec/Lab

BIO 446 Terrestrial Ecology Lec/Lab

BIO 466 Senior Seminar

1985-87 Truman State University

(formerly Northeast Missouri State Univ.)

Assistant Professor BIO 103 General Botany

BIO 301 Intro. to Ecology

BIO 518 Plant Ecology

BIO 501 Evolutionary Biology

1979-84 Michigan State University BOT 302 Intro. to Plant Morphology Teaching

Assistant BOT 318 Intro. to Plant Systematics

BOT 401 Intro. to Aquatic Plants BOT 852 Plant Population Biology

1977-79 Ohio State University BOT/ZOO 110 General Biology Teaching Assistant BOT/ZOO 313 Intro. to Ecology

BOT 620 Community Ecology

VI. SERVICE ON UNIVERSITY COMMITTEES:

I have been a significant part of the Eastern Connecticut State University shared governance model for the last 32 years. For ten years, Eastern has been recognized by the Chronicle of Higher Education as a Best Place To Work For, with special distinction in Shared Governance.

1987 – 2021 - Eastern Connecticut State University Committee Work

Chair – Maximizing Value of Eastern degree subcommittee – Strategic Plan 2018-2023 – Committee on the Future of Eastern III

Chair - Academic Program Review Committee - University Senate

Chair – Promotion and Tenure Committee – University Senate

Co-Chair – Horizontal Committee – Strategic Plan 2008-2013 – Committee on the Future of Eastern I

University Senate Curriculum Committee

University Senate Task Force on Standards and Procedures for Faculty Tenure &

Promotion Student Outcomes Assessment Committee

Committee on Assessment of Institutional Strengths

ECSU Planning and Priorities Council

Founding Co-Chair - First Year Program Committee – University Senate Developer of the Individualized Major Program at ECSU – chair of committee for Univ. Senate 1999, 2004, 2009, 2014 NEASC Writing Teams – Chair- Scholarship and Research, Faculty and Student sections, respectively – most recently wrote the Administrative standard chapter CT Programming Committee - 2004 International Children and the Environment Conference Applied Research Committee

Planning Task Force - Strategic Choices for the 90's

Role and Scope Committees 1993, 1999

Reader of graduate names - Commencement Ceremonies - ECSU - 1993, 1995-

2004 Started Eastern's chapter of BBB Biology Honors Society 1997/sole advisor until

2005 Founding Co-Chairperson, Organization of Minority Employees at ECSU

Chairperson - Search Committee - Asst. to Director of Admissions

Search Committees - Microbiologist , Biochemist, Conservation Biologist – Biol.

Dept. Search Committees - Env. Earth Science Dept. - 2 positions

Search Committee - Assoc. V.P. Academic Affairs

Search Committee – V.P. Institutional Advancement

Search Committee – Executive Director of Sustainable Energy

Institute Campus Beautification Committee

University Senate – Senator at large

1985-1987 Truman State University (formerly Northeast Missouri State Univ.)

Developer of Honors in Biology program guidelines Writer of "Value of a Liberal Arts Education" brochure for recruitment Head of Greenhouse Design Committee Coordinator of the Northeast Missouri Regional Science Fair Judges Judge at Missouri Academy of Science meetings Member of the Biology Curriculum Revision Committee

VII. MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

Council of Colleges of Arts and Sciences Ecological Society of America Association for Women in Science American Association of University Women