

Gregory M. Mueller

Negaunee Institute for Plant Conservation Science and Action
Chicago Botanic Garden, 1000 Lake Cook Road, Glencoe, IL 60022
Phone: (847) 835-8226 E-mail: gmueller@chicagobotanic.org

Education

- 1976: Southern Illinois University, Carbondale, B.A. in Botany.
1979: Southern Illinois University, Carbondale, M.S. in Botany
Advisor: Dr. Walter J. Sundberg.
1982: The University of Tennessee, Knoxville, Ph.D. in Botany
Advisor: Dr. Ronald H. Petersen.

Appointments

- 1982-1983: Visiting Scientist, Institute of Physiological Botany, Uppsala University, Sweden (with Prof. Nils Fries)
1983: Postdoctoral Fellow, Mountain Lake Biological Station, Pembroke, VA.
1984-1985: Postdoctoral Research Associate, Department of Botany, University of Washington, Seattle. (with Dr. Joseph Ammirati)
1985-2008 Curator, Mycology, Department of Botany, The Field Museum, Chicago (Assistant 1985-1992, Associate 1993-2001, Full 2003-2008);
1996-2005. Chair, Department of Botany, The Field Museum, Chicago
2009-2013: Vice President, Science and Academic Programs, Chicago Botanic Garden
2013-2023 Chief Scientist & Negaunee Vice President for Science, Chicago Botanic Garden
2023-present Chief Scientist, Emeritus, Chicago Botanic Garden

Honorary Appointments

- 1994-present: Lecturer, Committee on Evolutionary Biology, The University of Chicago
1995-present: Adjunct Professor, Department of Biological Sciences, University of Illinois, Chicago (Associate Professor 1995-2003, Professor 2003-present)
1999-2005: International Coordinator of Fungal Programs, National Institute of Biodiversity (INBio), Costa Rica
2009-present: Adjunct Professor, Biological Sciences, Northwestern University, Evanston, IL
2009-present: Research Associate, The Field Museum, Chicago, IL
2023-present: Adjunct Professor, School of Biological Sciences, Southern Illinois University, Carbondale

Select Awards and Scholarships

- 1992: Alexopoulos Prize: Awarded by Mycological Society of America in recognition of outstanding research contributions within 10 years of receipt of Ph.D.
2008: Fulbright Senior Fellow, Fulbright Scholar Program
2011: Fellow, Mycological Society of America
2015: Harry Messel Award for Conservation Leadership, International Union for the Conservation of Nature (IUCN), co-awarded with Anders Dahlberg.
2016: Fellow, American Association for the Advancement of Science (AAAS)
2019: Founders Award, European Mycological Association
2020: Distinguished Mycologist Award, Mycological Society of America

Research Interests

Systematics, diversity, biogeography, ecology of macrofungi; mycorrhizas; fungal conservation

Administration and Noteworthy Committee Work

Chicago Botanic Garden

Chief Scientist and Negaunee Vice President, Science (2009–June 2023). Report directly to the Garden's President / CEO and serve on the Garden's Senior Management team. Duties include leading the Garden's science programs, Library, undergraduate and graduate student training initiatives, and working with other members of the Senior Management Team to achieve the Garden's mission.

Field Museum of Natural History (selected activities)

Facilities and Labs: IT Committee (1986-1990 & 2005-2007), Chair SEM Committee (2003-2008)

Exhibit Development: Co-Developer for the curatorial component of "La Selva Fria" exhibition (1993),

Chief Content Specialist for "Underground Adventure" exhibition (1995@-1999), Academic Affairs-Exhibition Liaison Committee (2005-2008)

Education Initiatives: Coordinator **Biodiversity Explorers High School Internship Program** (1995-1998),

Illinois "UrbanWatch" Protocol Development Team (1997-2003), Field Museum-Monsanto

Environmental Education Initiative Steering Committee (1999-2008)

Administration: Scientific Advisory Council (equivalent to Faculty Senate) (1990-1991, 1995-1996), **Chair**

Department of Botany (1996-2005), Environment Team, Field Museum Strategic Planning Initiative

(1998-1999), Search Committee for Vice President, Academic Affairs (1999-2000), **Academic Affairs**

Management Group (1999-2001)

University of Chicago Committee on Evolutionary Biology (CEB)

Graduate Admissions Committee (1995-2004), CEB Associate Chair (2004-2008), GAANN Training Grant

Coordinating Group (2006-2009)

International Union for the Conservation of Nature (IUCN)

1999-2008: IUCN Species Survival Commission (SSC), Fungi Specialist Group, Member

2009-present: IUCN SSC Mushrooms, Brackets and Puffballs Specialist Group, Chair

2012-present: Global Fungal Red List Initiative, Coordinator

2013-present: IUCN SSC Steering Committee, Member

2017-2021: IUCN SSC Regional Vice Chair for North America and the Caribbean

2017-present: IUCN SSC and WCPA Key Biodiversity Areas Standards and Appeals Committee

2020-present: IUCN SSC Fungal Conservation Committee, Chair

Illinois and Chicago Regional Conservation Organizations, Committees, and Consortia (selected)

2000-present: Science Advisory Committee, Illinois Chapter of The Nature Conservancy

2009-2022: Executive Council, Chicago Wilderness

2009-present: Chicago Mayor's Nature and Wildlife Committee

2016-present: Advisory Committee, Prairie Research Institute

Mycological Societies (selected activities)

2001-2004: MSA Representative to the International Mycological Association

2001-2002: Advisory Board for 2002 Latin American Mycological Association Congress

2004-2008: MSA Vice President, President Elect, President, and Past President,

2008-present: MSA Conservation Committee

2010-2014: Program Committee for 2014 Latin American Mycological Association Congress

2010-present: International Society for Fungal Conservation (Coordinating Group)

2016-2000: MSA Research Awards Committee

Editorial Work

- 1990-1995: Editorial Committee, North American Mycological Association (Chair, 1991-1995)
1995-1998: Associate Editor, *Mycologia*
1998-2001: Editorial Board, *Mycotaxon* (Chair 2000-2001)
2001-2006: Member of Organization for Flora Neotropica Commission
2012-present. Editorial Board, Biodiversity Data Journal
2012-present: Editorial Board, Mycobiota
2018-present: Editorial Council, Acta Mycologica

Public Service

- Contact for mushroom cases, Illinois Poison Center and Chicago area hospitals (1985-present)
Scientific Advisor, Illinois Mycological Association (1985-present)

Teaching Experience (last 18 years)

- 2004 & 2005: Diversity of Fungi. Joint University of Illinois, Chicago and University of Chicago graduate student course. (Co-instructor).
2008: Diversity and Biology of Macrofungi. Federal University of Pernambuco, Recife Brazil (graduate course).
2012: Mycology (graduate level course), Northwestern University.
Fungi and Fungi-Like Organisms, Organization for Tropical Studies, Costa Rica (Co-instructor).
2016: Fungi and Fungi-Like Organisms, Organization for Tropical Studies, Costa Rica (Co-instructor).
2019 & 2020: Introduction to Fungi, Northwestern University
2021 Fungal Conservation, University of Antioquia, Medellin, Colombia (virtual)
2021 Fungal Conservation, Federal University of Pernambuco, Recife, Brazil (virtual)

Graduate Student Thesis Committees, Postdoc Supervision, Internship Mentoring

Graduate Students: Milagro Mata Hidalgo, U. Costa Rica, Licenciatura, 1995 [External Member] (Curator of Macrofungi, INBio, Costa Rica); Loengrin Umaña Tenorio, U. Costa Rica, Licenciatura, 1995 [External Member] (Curator of Microfungi, INBio, Costa Rica); Juan Luis Mata, U. Costa Rica, M.S. 1998 [External Member] (Assistant Professor, U. Southern Mississippi); Sara Foster, U. Illinois, Chicago, M.S. 1998 [Member] (employed in industry); John Paul Schmit, U. Chicago, Ph.D. 1999 [Chair] (Quantitative Ecologist, National Park Service); Andrew Miller, Ph.D. 2003, U. of Illinois at Chicago [Co-Chair] (Mycologist, Illinois Natural History Survey); Jutta Buschbom, U. of Chicago, Ph.D. 2003 [Chair], (Bioinformatition in Germany); Laura Gúzman Dávalos, UNAM, Mexico, Ph.D. 2003 [Co-Chair] (Professor, U. Guadalajara, Mexico); Matthew Kierle, U. of Chicago, Ph.D. 2008 [Chair] (Professor, State College of Florida Manatee-Sarasota); Kelly Gravier, Ph.D. 2009, U. of Chicago [Co-Chair]; Sara Branco, Ph.D. 2010, U. Chicago [Co-Chair] (Assistant Prof. U. Colorado, Denver); Ning Chen, M.S. 2015, Ph.D. 2018, Northwestern University, [Chair] (Associate Prof. Central South University of Forestry and Technology, Changsha Hunan, China); Rui Zhang, Northwestern U., Ph.D. 2018 [Chair] (PostDoc, Shenzhen University, China); Lynnaun Johnson, Northwestern U., Ph.D. 2019 [Chair]; Emma Leavens, MS 2020, Northwestern U. (Chair) (Research Assistant, Morton Arboretum); Logan Novak, MS student, Northwestern U. [Co-Chair] (PhD student, University of Georgia); Willow AbshireSims, MS student, Northwestern U. [Chair]; Tiago Kossmann, MS student Federal University of Santa Catarina, Brazil [Co-Chair] (PhD student, University of Colorado, Boulder).

PostDocs: John (Jack) F. Murphy, 1995-1997; John Paul Schmit, 1999-2000 (currently Quantitative Ecologist, National Park Service); Patrick Leacock, 1997-2006 (currently, Adjunct Curator, Field Museum); Peter Avis, 2004-2007 (currently Professor, Indiana University Northwest); Kentaro Hosaka, 2005-2008 (currently Curator, Mycology, National Museum for Nature and Science, Tsukuba, Japan); Andrew Wilson, 2009-2016 (currently Curator of Fungi, Denver Botanic Gardens); Mariana Herrera, 2021-present.

High School and Undergraduate Research Interns: 55 high school and undergraduate interns

Memberships in Professional Organizations

Mycological Society of America (MSA); Asociacion Latinoamericana de Micología (ALM); North American Mycological Association (NAMA); European Mycological Association; International Mycological Association, International Society for Fungal Conservation; Illinois Mycological Association; Botanical Society of America; American Society of Plant Taxonomists; The Association for Tropical Biology; Society of Systematic Biologists; American Association for the Advancement of Science (AAAS).

Select Professional Meetings Attended (last 10+ years)

2009: Joint Mycological Society of America, Botanical Society of America, and American Society for Plant Taxonomy meeting, Snow Bird Utah
Fungal Evolution and Charles Darwin: From Morphology to Molecules, Thailand
Plant Conservation for the Next Decade, Royal Botanic Gardens Kew, UK
Fungal Conservation: Science, Infrastructure, Politics, Whitby, UK
Biological Interactions and Biodiversity, Tokyo, Japan

2010: VI Southern Connection Congress, San Carlos de Bariloche, Argentina
4th Global Botanic Garden Congress, Dublin, Ireland
Mycological Society of America, Lexington, KY
9th International Mycological Congress, Edinburgh, UK

2011: Center for Plant Conservation National Meeting, Denver
VII Latin American Mycological Congress, San José, Costa Rica
North American Mycological Congress, Fairbanks, AK
Global Partnership for Plant Conservation, St. Louis, MO
XVI Congress of European Mycologists and European Mycological Association Meeting, Halkidiki, Greece

2012: IUCN SSC Specialist Group Chairs Meeting, Abu Dhabi
1st Workshop of North American Orchid Conservation Center, SERC, Maryland
Mycological Society of America Meeting, New Haven, CT
Natural Areas Association Conference, Norfolk, VA
IUCN World Conservation Congress, Jeju, Korea
Workshop on Measuring Successful Forest Landscape Restoration, Bristol, UK

2013: Measuring Successful Forest Landscape Restoration Workshop 2, Ghana
American Public Garden Association Conference, Phoenix, AZ
Natural Areas Association Conference, Chicago, IL
Global Botanic Garden Conference, Dunedin, New Zealand
IUCN SSC Steering Committee, Mexico
International Society for Fungal Conservation, Gokova, Turkey

2014: Fungal Red List Workshop, Sweden
Macroecology of microbes-What are the large-scale diversity, distribution, and fate of Europe's forest fungi? London, England.
Mycological Society of America Meeting. East Lansing, Michigan
10th International Botanical Congress, Bangkok, Thailand

- IUCN SSC Steering Committee Meeting, Tallinn, Estonia
1st Meeting of Polish Mycological Society, Lodz and Spala, Poland
VII Latin American Mycological Congress, Medellin, Colombia
- 2015: IUCN Key Biodiversity Area Thresholds workshop, Cambridge, UK
Global Fungal Red Listing Workshop, Ekenäs, Sweden (Co-Organizer)
IUCN US Regional Forum, Smithsonian Institution, Washington, DC
V Congreso Biodiversidad y Manejo de Ecosistemas, Havana, Cuba
MSA / BSA / ASPT Joint Meeting, Edmonton, Canada
8th International Congress on Mycorrhiza, Flagstaff, AZ
IUCN Steering Committee and Chairs Meeting, Abu Dhabi, UAE
- 2016: North American Mycological Association Annual Meeting, Asheville, NC
US NSF / China NSFC Workshop on Fostering Collaboration, Guangzhou
North American Fungal Red List Workshop, Corvallis, OR (Co-Organizer)
Global Partnership for Plant Conservation Meeting, St. Louis, MO
MSA Meeting, Berkeley, CA
IUCN World Conservation Congress, Honolulu, HI
Brazilian Mycological Congress, Florianopolis, Brazil
Ecological Restoration Alliance Meeting, Xalapa, Mexico
- 2017: US Native Seed Conference, Washington, DC
AAAS Annual Conference, Boston
IUCN US Committee, Warrenton, VA
6th Global Botanic Garden Congress, Geneva, Switzerland
MSA Annual Meeting, Athens, GA
IUCN SSC Steering Committee Meeting, Cartagena, Colombia
Latin American Mycological Congress, Lima, Peru
NAMA, Wisconsin
University of Pinar del Rio 40th Anniversary Symposium, Pinar del Rio, Cuba
IUCN SSC –WCPA Key Biodiversity Areas TWG-SAC Workshop, Warrenton, VA
- 2018: IUCN National Committee and 70th Anniversary, Washington, DC
International Mycological Congress 11, Puerto Rico
Global Partnership for Plant Conservation Meeting, Cape Town, South Africa
CBD Liaison Group Meeting, Post 2020 Strategy for Plant Conservation, South Africa
Kew State of the Worlds Fungi, Kew, UK
IUCN SSC Steering Committee Meeting, Bangkok, Thailand
- 2019: European Red List Fungal Workshop, Cambridge, UK
Latin American and Caribbean Fungal Conservation Workshop, Panama City, Panama
SE Asian Fungal Red List Workshop, Borneo, Malaysia
Australasian Fungal Red List Workshop, Melbourne, Australia
IUCN SSC Leadership Meeting, Abu Dhabi
- 2020: MSA Annual Meeting (virtual)
NAMA (virtual)
Latin American Mycological Congress, Santiago Chile (virtual)
- 2021: Cloud Forest Fungi Symposium, Brazil (virtual)
NatureServe Biodiversity Without Borders (virtual)
MSA Annual Meeting (virtual)
IUCN World Conservation Congress, Marseille, France
- 2022: NatureServe Biodiversity Without Borders, Pittsburg, PA
MSA Annual Meeting, Gainesville, FL
Italian Botanical Congress, Bologna, Italy

Research Grants and Contracts

- 1982-1983: *National Science Foundation*, U.S.-Sweden Cooperative Research Program. "Sexual Incompatibility Studies in the Mushroom Genus *Laccaria*." \$2,883 INT-8211779.
- 1982-1983: *Swedish Natural Science Research Council*, U.S.-Sweden Cooperative Research Program. "Incompatibility Studies in the *Laccaria laccata* Species Complex." 13,000 Skr (awarded to Prof. Nils Fries to support my visit).
- 1984-1987: *National Science Foundation*. "A Taxonomic and Biological Study of the Ectomycorrhizal Agaric Genus *Laccaria* in North America, North of Mexico." \$135,000 BSR-8315238 (Postdoc on award to Dr. J. Ammirati, U. Washington).
- 1986-1990: *National Science Foundation*. "The Agaric Genus *Laccaria* in South America: A Taxonomic and Biological Study." \$144,955 BSR-8607106.
- 1987-1990: *Bradley Study Center, Leopold Memorial Reserve*, WI. "Mycota of the Leopold Reserve." \$18,000 (Co-PI with H. Burdsall, D. Glawe, A. Parker).
- 1989-1992: *John D. and Catherine T. MacArthur Foundation*. "Mushrooms and Other Fungi of Costa Rican Oak Forests." \$22,000.
- 1993-1997: *National Science Foundation*. "Agaricales of Costa Rican *Quercus* forests." \$401,017 DEB-9300798 (PI with Co-PI, R. Halling, New York Botanical Garden).
- 1995-1997: *National Institutes of Health*. "Screening Costa Rican Macrofungi for Bioactive Compounds: Fungi from the Guanacaste Conservation Area." \$100,000 1-R03-TW00732.
- 1995-2000: *National Science Foundation*. "Studies in the Lasiosphaeriaceae: Monographs of Two Key Genera and Family-Level Phylogeny (Fungi, Ascomycetes, Sordariales)." \$702,364 DEB-9521926 (Senior Associate; awarded to Sabine Huhndorf, The Field Museum).
- 1995: *U.S. Department of the Interior, National Biological Service*. "Measuring and Monitoring Biological Diversity: Standard Methods for Fungi" \$6,000.
- 1995-1996: *USDA Forest Service Pacific Northwest Research Station*. "Measuring and Monitoring Biological Diversity: Standard Methods for Fungi" \$10,000.
- 1995-1996: *USDA Forest Service Forest Products Laboratory*. "Measuring and Monitoring Biological Diversity: Standard Methods for Fungi" \$10,000.
- 1996-1998: *National Science Foundation*, Dissertation Improvement Program. "Population Dynamics and Species Diversity of Decomposers of Patchy Substrates." \$10,000 DEB-9623523 (for support of John Paul Schmit, Ph.D. candidate, Univ. of Chicago).
- 1996-1999: *National Science Foundation*, U.S.-China Cooperative Science Program. "Comparative Studies on the Macrofungi of China and Eastern North America." \$133,439 INT-9513874 (Co-PI with PI, Qiuxin Wu, The Field Museum).
- 1996-1998: *Conservation Foundation/Chicago Wilderness*. "Monitoring Restoration in an Oak-Woodland Community at Swallow Cliff Woods" \$45,000 (awarded to D. K. Moskovits).
- 1997-1999: *Illinois Department of Natural Resources*. "Illinois Rapid Assessment Program (IRAP) and EcoWatch/UrbanWatch" \$369,967 (participant; awarded to D. K. Moskovits and C. Fialkowski).
- 1999-2001: *Restoration Research Fund, Forest Preserve District of Cook County*. "Restoration Effects on Macrofungi in an Oak Woodland Community at Swallow Cliff Woods" \$19,244 (with Patrick Leacock and John Paul Schmit)
- 1999-2003: *National Science Foundation*. "Collaborative: Survey of Costa Rican Macrofungi" \$150,000 DEB-9972027.
- 2000: *Conservation Foundation/Chicago Wilderness*. "Impact of Nitrogen Deposition on Macrofungi in Chicago Wilderness." \$12,096. (with Patrick Leacock and)
- 2001-2003: *National Science Foundation*, Dissertation Improvement Program. "Dissertation Research: Phylogenetic studies in the Lasiosphaeriaceae (Fungi, Ascomycetes,

- Sordariales)." \$9,985 DEB-0105077 (for support of Andrew Miller, Ph.D. candidate, University of Illinois, Chicago).
- 2001-2003: *National Science Foundation*, Dissertation Improvement Program. "Dissertation Research: Evolutionary history of reproductive systems in closely related taxa of the lichen-forming genus *Porpidia* (Ascomycota)." \$10,000 DEB-0105024 (for support of Jutta Buschbom, Ph.D. candidate, University of Chicago).
- 2001-2006: *National Science Foundation*, PEET Program "Studies in the Lasiosphaeriaceae II: Monograph of *Podospora* and Phylogeny of the Lasiosphaeria/Sordariaceae Group (Fungi, Ascomycetes, Sordariales)." \$744,579 DEB-0118695 (Senior Associate; PI, Sabine Huhndorf).
- 2002-2007: *National Science Foundation*, Ecology and Ecosystems "Mycorrhizal regulation of ecosystem response to chronic nitrogen deposition." Field Museum subcontract \$229,818 DEB-0134748 (with J. Lussenhop and H. BassiriRad, University of Illinois, Chicago, and R. M. Miller, Argonne National Labs).
- 2005-2009: *National Science Foundation*, Systematics "REVSYS: Monographing a Model Clade of Ectomycorrhizal Fungi: *Laccaria* – *Hydnangium* ". \$328,727 (DEB-0445216).
- 2005-2009: *John D. and Catherine T. MacArthur Foundation* "Building Capacity for Biodiversity Research, Conservation, and Education in Eastern Himalaya" \$480,000 Grant 02-73933 (Co-PI with Richard Ree and Jun Wen).
- 2008-2010: *National Science Foundation*, Dissertation Improvement Program. "Dissertation Research: Local Adaptation of Symbiotic Fungi to Serpentine Soils ." \$12,000 DEB-0808269 (support of Sara Branco, Ph.D. candidate, University of Chicago).
- 2013: *Mohamed bin Zayed Species Conservation Fund*. Support of Fungal Red Listing Workshop at the 2013 International Fungal Conservation Society Congress. \$23,000.
- 2014: *Mohamed bin Zayed Species Conservation Fund*. Support of global red listing workshop focused on Basidiomycetes. \$20,000.
- 2015: *Mohamed bin Zayed Species Conservation Fund*. Support of red listing workshop focused on North American macrofungi. \$21,000.
- 2017: *Mohamed bin Zayed Species Conservation Fund*. Assessing the conservation status of economically and ecologically important macrofungi. \$15,000.
- 2021: IUCN SSC-EDGE Internal Grant. Assessing EDGE Fungi: Boletales, Russulales, and Cantharellales plus 6 Monotypic Families. \$10,000.
- 2022: Indianapolis Zoo. Developing a tool for Rapid fungal assessments: case-study on macrofungi from North America. \$20,000.

Facility, Digitization, and Teaching Grants

- 1988-1991: *National Science Foundation*. "Acquisition of New Scanning Electron Microscopy Facility at Field Museum of Natural History" \$65,000 (Co-PI with P. R. Crane, J. S. Ashe, and C. Niezgoda.)
- 1992: *National Science Foundation*. "Support for the Involvement of Minority Undergraduates in Management of Systematic Collections at Field Museum" (Co-PI with B. D. Patterson, B. Chernoff, J. Engel, J. Flynn, L. Grande, S. Lanyon, S. Lidgard, and A. Newton).
- 1996-1999: *National Science Foundation*, Informal Science Education. "Life Underground: Foundations of the Biosphere" \$1,583,771 ESI-9627007 (Co-PI with M. F. Muraski-Stotz and D. K. Moskovits).
- 1996-1999: *National Science Foundation*. "Support for the Mycological Collections, The Field Museum" \$199,300 DEB-9631632 (PI with Co-PI, Q.-X. Wu)
- 1997: *National Science Foundation*. "Support for the Mycological Collections, The Field Museum: Research Assistantships for Minority High School Students" \$5,582 Supplement to DEB-9631632 (PI with Co-PI, Q.-X. Wu)

- 1999-2000: *National Science Foundation*. "Support for the Mycological Collections, The Field Museum: Lichen Supplement" \$25,100 Supplement to DEB-9631632 (PI with Co-PI, Q.-X. Wu)
Institute for Museum and Library Services National Leadership Grant. "vPlants: The Chicago Regional Virtual Herbarium as a Model Multi-Institutional Plant Data Resource" \$418,428 (Co-PI with C. Dunn, Morton Arboretum; J. Ault, Chicago Botanic Garden; W. Alverson, Field Museum)
- 2004-2006 *Institute for Museum and Library Services National Leadership Grant*. "vPlants Plus: Enhancing the Chicago Region Virtual Herbarium" \$473,072 (PI, with C. Dunn, Morton Arboretum; K. Havens, Chicago Botanic Garden; W. Alverson, Field Museum)
- 2006-2009 *Department of Education GAANN Grant*. "GAANN: Graduate Training in Evolutionary Environmental Biology." \$633,000. (PI, with CoPIs M. LaBarbera, UofC; D. Jablonski, UofC; S. Kidwell, UofC; M Kearney, Field Museum; J. McElwain, Field Museum)
- 2019-2021 Anonymous Foundation, Expansion of Plants of Concern. \$2,055,282 (with Gretel Kiefer).

Extended Field Work

NORTH AMERICA: Canada: British Columbia, 1981, 1984; Nova Scotia, 1978; Ontario, 1984, USA: AK, CA, CO, FL, GA, ID, IN, IL, HI, KY, LA, MA, MI, MN, MO, MS, MT, NY, NC, OH, OR, SC, TN, TX, VA, WA, WV, WI, WY, 1978-present; Puerto Rico, 1998; Mexico: Nuevo Leon, Tamaulipas, 1988, Verracruz, 2002.

CENTRAL AMERICA and CARRIBEAN: Costa Rica, 1986, 1989, 1991-2005, 2011, 2012, 2016, 2022; Cuba 2015, 2017; Guatemala, 2002, 2004, 2007; Honduras, 1991; Panama, 2005.

SOUTH AMERICA: Argentina 1987, 1988, 2010; Brazil, 1987, 2008; Chile, 1987-1988; Ecuador, 1987; Colombia, 1987; Venezuela, 1987.

EUROPE: Germany, 1990; the Netherlands, 1982; Sweden, 1982; Russia, 2003, 2007; Ukraine, 2003; France, 2007; Portugal, 2007; Poland, 2014.

ASIA: China, 1996-1998, 2002, 2006; Japan, 2008, 2009

AUSTRALASIA: Australia 2005, 2006; New Zealand, 1999, 2006; Papua New Guinea 2006

Thesis and Dissertation

- Mueller, G. M. 1978. The genus *Laccaria* in southern Illinois. M.S. Thesis. Southern Illinois University, Carbondale. 64 pp.
- Mueller, G. M. 1982. The genus *Laccaria* in North America excluding Mexico. Ph.D. dissertation. University of Tennessee, Knoxville. 344 pp.

Publications: Books and Journal Volumes

- Mueller, G. M. 1992. *Systematics of Laccaria (Agaricales) in the Continental United States and Canada, with Discussions on Extralimital Taxa and Descriptions of Extant Types*. *Fieldiana: Botany, n.s.*, 30. Chicago: Field Museum of Natural History. 158 pp.
- Carranza, J. and G. M. Mueller, eds. 1996. *Fungi of Costa Rica: Selected Studies on Biodiversity and Ecology*. *Revista de Biología Tropical*, no. 44 (Supplement) 4. 154 pp.
- Mueller, G. M. and Q.-X. Wu, eds. 1997. *Mycological Contributions of Rolf Singer: Field itinerary, Index to New Taxa, and List of Publications*. *Fieldiana, Botany: n.s.*, 38. Chicago: Field Museum of Natural History. 124 pp.
- Mata, M., R. Halling, and G. M. Mueller. 2003. *Macrohongos de Costa Rica/ Costa Rica Macrofungi*. Vol. 2. Instituto Nacional de Biodiversidad (INBio), Costa Rica. 240 pp.
- Mueller, G. M., G. F. Bills, and M. S. Foster, eds. 2004. *Biodiversity of Fungi: Inventory and Monitoring Methods*. Elsevier Academic Press, San Diego, CA. 777 pp.
- Halling, R. E. and G. M. Mueller. 2005. *Common Mushrooms of the Talamanca Mountains, Costa Rica*. New York Botanical Garden Press, NY. 197 pp.

McFarland J. and G. M. Mueller. 2009. *Edible Wild Mushrooms of Illinois and Surrounding States*. University of Illinois Press. 232 pp.

Publications: Scientific Articles (peer reviewed)

- Mueller, G. M. and W. J. Sundberg. 1981. A floristic study of *Laccaria* in southern Illinois. *Nova Hedwigia* 34: 577-597.
- Mueller, G. M. 1984. New North American species of *Laccaria* (Agaricales). *Mycotaxon* 20: 101-116.
- Fries, N. and G. M. Mueller. 1984. Incompatibility systems, cultural features and species circumscriptions in the ectomycorrhizal genus *Laccaria* (Agaricales). *Mycologia* 76: 633-642.
- Mueller, G. M. 1985. Numerical taxonomic analyses on *Laccaria* (Agaricales). *Mycologia* 77: 121-129.
- Mueller, G. M. and E. C. Vellinga. 1986. Taxonomic and nomenclatural notes on *Laccaria* B. & Br.: *Laccaria amethystea*, *L. fraterna*, *L. laccata* *L. pumila*, and their synonyms. *Persoonia* 13: 27-43.
- Mueller, G. M. 1987. Designation of type collections for *Laccaria proxima*, *L. tortilis* and *L. trullissata*. *Mycotaxon* 28: 303-311.
- Vellinga, E. C. and G. M. Mueller. 1987. Taxonomic and nomenclatural notes on *Laccaria* B. & Br. II. *Laccaria bicolor*, *L. fraterna*, and *L. laccata* var. *pallidifolia*. *Persoonia* 13: 383-385.
- Mueller, G. M. and R. Singer. 1988. *Laccaria gomezii*, a new agaric species from the querceta of Colombia and Costa Rica. *Mycotaxon* 33: 223-227.
- Mueller, G. M. and E. C. Vellinga. 1990. Taxonomic and nomenclatural notes on *Laccaria* B. & Br.--III. *Laccaria amethystina* and *L. impolita*. *Mycotaxon* 37: 385-388.
- Gardes, M., J. A. Fortin, G. M. Mueller, and B. R. Kropp. 1990. Restriction fragment length polymorphisms in the nuclear ribosomal DNA of four *Laccaria* spp.: *L. bicolor*, *L. laccata*, *L. proxima*, and *L. amethystina*. *Phytopathology* 80: 1312-1317.
- Mueller, G. M. 1990 (1991). The Swedish taxa of *Laccaria* (Agaricales) with notes on their distribution. *Nordic Journal of Botany* 10: 665-680.
- Mueller, G. M. 1991. *Laccaria longipes*, a new North American species of the *Laccaria laccata* complex. *Mycotaxon* 40: 145-150.
- Mueller, G. M. 1991. *Laccaria laccata* complex in North America and Sweden: Inter-collection pairing and morphometric analyses. *Mycologia* 83: 578-594.
- Mueller, G. M. and M. Gardes. 1991. Intra- and interspecific relations within *Laccaria bicolor sensu lato*. *Mycological Research* 95: 592-601.
- Mueller, G. M. and M. Rajchenberg. 1991. First report of *Cordyceps* from South American *Nothofagus* forests. *The Mycologist* 5: 46-47.
- Gardes, M., G. M. Mueller, J. A. Fortin, and B. R. Kropp. 1991. Mitochondrial DNA polymorphisms in *Laccaria bicolor*, *L. laccata*, *L. proxima*, *L. amethystina*. *Mycological Research* 95: 206-216.
- Mueller, G. M. and B. A. Strack. 1992. Evidence for a mycorrhizal host shift during migration of *Laccaria trichodermophora* and other agarics into neotropical oak forests. *Mycotaxon* 45: 249-256.
- Petersen, R. H. and G. M. Mueller. 1992. New South American taxa of *Cantharellus*, *C. nothofagorum*, *C. xanthoscyphus*, and *C. lateritius* var. *colombianus*. *Boletín de la Sociedad Argentina de Botánica* 28: 195-200.
- Mueller, G. J., G. M. Mueller, L. Shih, and J. F. Ammirati. 1993. Cytological studies in *Laccaria* (Agaricales). I. Meiosis and postmeiotic mitosis. *American Journal of Botany* 80: 316-321.
- Mueller, G. M. and J. F. Ammirati. 1993. Cytological studies in *Laccaria* (Agaricales). II. Assessing phylogenetic relationships among *Laccaria*, *Hydnangium*, and other Agaricales. *American Journal of Botany* 80: 322-329.

- Mueller, G. M., A. von Hofsten, A. Axén, and B. A. Strack. 1993. Basidiospore wall ultrastructure of the false-truffle *Hydnangium* and its phylogenetic significance. *Mycologia* 85: 890-893.
- Fischbein, C. B., J. W. Lipscomb, G. M. Mueller, J. B. Leikin. 1993. Field test of the new fungal identification system in Poisindex. *Veterinary and Human Toxicology* 35: 204-206.
- Mueller, G. M. and E. M. Pine. 1994. DNA data provide evidence on the evolutionary relationships between mushrooms and false truffles. *Mcllvainea* 11(2): 61-74.
- Mueller, G. M. 1995. Macrofungi. Pages 192-194 In LaRoe, E.T., G. S. Farris, C. E. Puckett, P.D. Doran, and M. J. Mac., eds., *Our Living Resources: A Report to the Nation on the Distribution, Abundance, and Health of U.S. Plants, Animals, and Ecosystems*. U.S. Department of the Interior, National Biological Service, Washington, DC.
- Mueller, G. M. and R. E. Halling. 1995. Evidence for high biodiversity of Agaricales (Fungi) in neotropical montane *Quercus* forests. Pages 303-312. In Churchill, S. P., Balslev, H., Forero, E., and Luteyn, J. L., eds., *Biodiversity and Conservation of Neotropical Montane Forests*. The New York Botanical Garden Press.
- Lodge, D. J. et. al. (including G. Mueller). 1995. A survey of patterns of diversity in non-lichenized fungi. *Mitteilungen der Eidgenossischen Forschungsanstalt für Wald, Schnee und Landschaft* 70: 157-173.
- Wu, Q.-X. and G. M. Mueller. 1995. The genus *Craterellus* (Basidiomycetes, Aphyllophorales) in Costa Rica and Colombia. *Documents Mycologiques* XXV (98-100): 487-496.
- Mueller, G. M. 1996. Distribution and species composition of *Laccaria* (Agaricales) in tropical and subtropical America. In Carranza, J. and G. M. Mueller, eds. *Fungi of Costa Rica: Selected Studies on Biodiversity and Ecology*. *Revista de Biología Tropical* 44 (Suppl.) 4: 131-136.
- Mueller, G. M. 1996. Introduction and dedication. In Carranza, J. and G. M. Mueller, eds. *Fungi of Costa Rica: Selected Studies on Biodiversity and Ecology*. *Revista de Biología Tropical* 44 (Suppl.) 4: 7.
- Albee, S. A., G. M. Mueller, and B. R. Kropp. 1996. Polymorphisms in the large intergenic spacer of the nuclear ribosomal repeat identify *Laccaria proxima* strains. *Mycologia* 88: 970-976.
- Mueller, G. M. 1997. Designation of epitypes for *Laccaria proxima* and *Laccaria tortilis* (Agaricales). *Mycotaxon* 61: 205-207.
- Mueller, G. M. and Q.-X. Wu. 1997. Summary of Rolf Singer's contributions to mycology. In. Mueller, G. M. and Q.-X. Wu, eds. *Mycological Contributions of Rolf Singer: Field Itinerary, Index to New Taxa, and List of Publications, 1-7*. *Fieldiana, Botany: n.s.* 38. Chicago: Field Museum of Natural History.
- Mueller, G. M., Q.-X. Wu, J. H. Ginns, and S. A. Redhead. 1997. The publications of Rolf Singer. In Mueller, G. M. and Q.-X. Wu, eds. *Mycological Contributions of Rolf Singer: Field Itinerary, Index to New Taxa, and List of Publications, 101-111*. *Fieldiana, Botany: n.s.* 38. Chicago: Field Museum of Natural History.
- Strack, B. A. and G. M. Mueller. 1997. The field itinerary of Rolf Singer. In Mueller, G. M. and Q.-X. Wu, eds. *Mycological Contributions of Rolf Singer: Field Itinerary, Index to New Taxa, and List of Publications, 9-12*. *Fieldiana, Botany: n.s.* 38. Chicago: Field Museum of Natural History.
- Wu, Q.-X. and G. M. Mueller. 1997. An index to genera, species, and infraspecific taxa of Basidiomycete fungi described by Rolf Singer. In Mueller, G. M. and Q.-X. Wu, eds. *Mycological Contributions of Rolf Singer: Field Itinerary, Index to New Taxa, and List of Publications, 13-99*. *Fieldiana, Botany: n.s.* 38. Chicago: Field Museum of Natural History.
- Wu, Q.-X. and G. M. Mueller. 1997. Biogeographic relationships between the macrofungi of temperate eastern Asia and eastern North America. *Canadian Journal of Botany* 75 (12): 2108-2116.
- Mueller, G. M., C. B. Fischbein, and S. E. Aks. 1998. Approach to mushroom poisoning. Pages 769-771 In Leikin, J. B. and F. P. Paloucek, eds. *Poisoning and Toxicology Compendium with Symptoms Index*. Lexi-Comp Inc., Hudson (Cleveland), Ohio.
- Mueller, G. M., C. B. Fischbein, and S. E. Aks. 1998. Mushrooms, toxic (group I) cyclopeptides. Mushrooms, toxic (group II) monomethylhydrazines.... Mushrooms, toxic (group VIII) renal toxic.

- Pages 805-808 In Leikin, J. B. and F. P. Paloucek, eds. *Poisoning and Toxicology Compendium with Symptoms Index*. Lexi-Comp Inc., Hudson (Cleveland), Ohio.
- Aruguete, D. M., J. H. Aldstadt, and G. M. Mueller. 1998. Accumulation of several heavy metals and lanthanides in mushrooms (Agaricales) from the Chicago region. *The Science of the Total Environment* 224: 43-56.
- Mueller, G. M. 1999. A new challenge for mycological herbaria: Destructive sampling of specimens for molecular data. Pages 287-300 In Metsger, D. A. and S. C. Byers, eds., *Managing the Modern Herbarium: An Interdisciplinary Approach*. Elton-Wolf Publishing, Vancouver, B.C.
- Halling, R. E. and G. M. Mueller. 1999. A new species and a new record for the genus *Xerula* (Agaricales) from Costa Rica. *Mycotaxon* 71: 105-110.
- Halling, R. E. and G. M. Mueller. 1999. New boletes from Costa Rica. *Mycologia* 91: 893-899.
- Halling, R. E., G. M. Mueller, and M. J. Dallwitz. 1999. A new *Phylloporus* (Basidiomycetes, Boletaceae) with a key to species in Costa Rica and Colombia. *Mycotaxon* 73: 63-68.
- Kropp, B. R. and G. M. Mueller. 1999. *Laccaria*. Pages 65-88 In Cairney, J.W. G. and S. M. Chambers, eds. *Ectomycorrhizal Fungi: Key Genera in Profile*. Springer Press, Berlin.
- Schmit, J. P., J. F. Murphy, and G. M. Mueller. 1999. Macrofungal diversity in a temperate oak forest: A test of species richness estimators. *Canadian Journal of Botany* 77: 1014-1027.
- Wu, Q.-X., G. M. Mueller, F. M. Lutzoni, Y.-Q. Huang, and S.-Y. Guo. 2000. Phylogenetic and biogeographic relationships of eastern Asian and eastern North American disjunct *Suillus* species (Fungi) as inferred from nuclear ribosomal RNA ITS sequences. *Molecular Phylogenetics and Evolution* 17: 37-47.
- Mueller, G. M., Q.-X. Wu, Y.-Q. Huang, S.-Y. Guo, R. Aldana Gomez, and R. Vilgalys. 2001. Assessing biogeographic relationships between North American and Chinese macrofungi based on molecular data. *Journal of Biogeography* 28: 271-281.
- Halling, R. E. and G. M. Mueller. 2001. *Tylophilus bulbosus* sp. nov. from Costa Rica. *Harvard Papers in Botany* 6: 109-112.
- Amtoft, A., R. E. Halling, and G. M. Mueller. 2002 [2003]. *Tylophilus alkalixanthus*, a new species of Boletaceae from Costa Rica and Japan. *Brittonia* 54: 262-265.
- Halling, R. E. and G. M. Mueller. 2002. Agarics and boletes of neotropical oakwoods. Pages 1-10 In Watling, R., J. C. Frankland, A. M. Ainsworth, S. Isaac, and C. H. Robinson, eds. *Tropical Mycology : Vol. 1, Macromycetes*. CABI Publishing, Wallingford, Oxon, UK
- Moskovits, D. K., C. Fialkowski, G. M. Mueller, and T. A. Sullivan. 2002. Chicago Wilderness: A new force in urban conservation. *Annals of Missouri Botanical Garden* 89: 153-163.
- Fischbein, C.B., G. M. Mueller, P. R. Leacock, M. S. Wahl, and S. E. Aks. 2003. Digital imaging: A promising tool for mushroom identification. *Academic Emergency Medicine* 10: 808-811.
- Guzmán-Dávalos, L., G. M. Mueller, J. Cifuentes, A. N. Miller, and A. Santerre. 2003. Traditional infrageneric classification of *Gymnopilus* is not supported by ribosomal DNA sequence data. *Mycologia* 95: 1204-1214.
- Halling, R. E. and G. M. Mueller. 2003. *Leccinum* (Boletaceae) in Costa Rica. *Mycologia* 95: 488-499.
- Mueller, G. M. and G. Bills. 2004. Introduction. Pages 1-4, In: Mueller, G. M., G. Bills, and M. S. Foster, eds. *Biodiversity of Fungi: Inventory and Monitoring Methods*. Elsevier Academic Press, San Diego, CA.
- Mueller, G. M., J. P. Schmit, S. M. Huhndorf, L. Ryvarden, T. E. O'Dell, D. J. Lodge, P. R. Leacock, M. M. Mata, L. Umaña, Q.-X. Wu, and D. Czederpiltz. 2004. Recommended protocols for sampling macrofungi. Pages 168-172, In: Mueller, G. M., G. Bills, and M. S. Foster, eds. *Biodiversity of Fungi: Inventory and Monitoring Methods*. Elsevier Academic Press, San Diego, CA.
- Lodge, D. J., J. Ammirati, T. E. O'Dell, and G. M. Mueller. 2004. Collecting and describing macrofungi. Pages 128-158, In: Mueller, G. M., G. Bills, and M. S. Foster, eds. *Biodiversity of Fungi: Inventory and Monitoring Methods*. Elsevier Academic Press, San Diego, CA.

- O'Dell, T. E., D. J. Lodge, and G. M. Mueller. 2004. Approaches to sampling macrofungi. Pages 163-168, In: Mueller, G. M., G. Bills, and M. S. Foster, eds. *Biodiversity of Fungi: Inventory and Monitoring Methods*. Elsevier Academic Press, San Diego, CA.
- Buschbom, J. and G. Mueller. 2004. Resolving evolutionary relationships in the lichen-forming genus *Porpidia* and related allies (Porpidiaceae, Ascomycota). *Molecular Phylogenetics and Evolution* 32: 66-82.
- Halling, R. E., M. Mata, and G. M. Mueller. 2004. Three new Boletes for Costa Rica. Pages 141-147, In: C. L. Cripps ed., *Fungi in Forest Ecosystems: Systematics, Diversity, and Ecology*. *Memoirs of the New York Botanical Garden* 89.
- Fischbein, C. S. Aks, and G. M. Mueller. 2004/2005. Mushroom poisoning. Pages 533-540, In: Erickson, T. B., W. R. Ahrens, S. E. Aks, C. R. Baum, and L. Ling, eds. *Pediatric Toxicology: Diagnosis and Management of the Poisoned Child*. McGraw-Hill Press.
- Buyck, B., R. E. Halling, and G. M. Mueller. 2005. The inventory of *Russula* in Costa Rica: Discovery of two very rare North American species in montane oak forest. *Bollettino del Gruppo Micologico "G. Bresadola" (Nuova Serie)* 46: 57-74.
- Schmit, J. P., G. M. Mueller, Y.-Q. Huang, P. R. Leacock, J. L. Mata, and Q.-X. Wu. 2005. Assessment of tree species richness as a surrogate for macrofungal species richness. *Biological Conservation* 121: 99-110.
- Hawksworth, D. L. and G. M. Mueller. 2005. Fungal communities: Their diversity and distribution. Pp 27-37. In: J. Dighton, J. White, and P. Oudemans eds. *The Fungal Community: Its Organization and Role in the Ecosystem*, 3rd ed. CRC Taylor and Francis, New York
- Schmitt, I., G. Mueller, and T. Lumbsch. 2005. Ascocarp morphology is homoplasious and phylogenetically misleading in some pyrenocarpous lichens. *Mycologia* 97: 362-374.
- Osmundson, T. W., C. L. Cripps, and G. M. Mueller. 2005. Morphological and molecular systematics of Rocky Mountain alpine *Laccaria*. *Mycologia* 97: 949-972.
- Buschbom, J. and G. M. Mueller. 2005. Testing "species pair" hypotheses: evolutionary processes in the lichen-forming species complex *Porpidia flavocoerulescens* and *Porpidia melinodes* *Molecular Biology and Evolution* 23: 574-586.
- Mueller, G. M., R. E. Halling, J. Carranza, M. Mata, J. P. Schmit. 2006. Saprotrophic and ectomycorrhizal macrofungi of Costa Rican Oak Forests. Pp. 55-68 In: M. Kappelle (ed). *Ecology and Conservation of Neotropical Montane Oak Forests*. Ecological Studies, Springer.
- Avis, R., I. A. Dickie, and G. M. Mueller. 2006. A "dirty" business: Testing the limitations of terminal restriction fragment length polymorphism (TRFLP) analysis of soil fungi. *Molecular Ecology* 15: 873-882.
- Mueller, G. M. and J. P. Schmit. 2007. Fungal biodiversity: What do we know? What can we predict? *Biodiversity and Conservation* 16: 1-5.
- Mueller, G. M. J. P. Schmit, P. R. Leacock, B. Buyck, J. Cifuentes, D. E. Desjardin, R. E. Halling, K. Hjortstam, T. Iturriaga, K.-H. Larsson, D. J. Lodge, T. W. May, D. Minter, M. Rajchenberg, S. A. Redhead, L. Ryvarden, J. M. Trappe, R. Watling, and Q.-X Wu. 2007. Global diversity and distribution of macrofungi. *Biodiversity and Conservation* 16: 37-48.
- Schmit, J. P. and G. M. Mueller. 2007. An estimate of the lower limit of global fungal diversity. *Biodiversity and Conservation* 16: 99-111.
- Ammirati, J., S. Garnica, R. E. Halling, M. Mata, G. M. Mueller, and J. Carranza. 2007. New *Cortinari* species associated with *Quercus* and *Comarostaphylis* in Costa Rica. *Canadian Journal of Botany* 85:794-812.
- Lumbsch, H. T., P. K. Buchanan, T. W. May and G. M. Mueller, eds. 2008. Phylogeography and Biogeography of Fungi. *Mycological Research* 112: 423-484.
- Lumbsch, H. T., P. K. Buchanan, T. W. May, G. M. Mueller. 2008. Introduction. Phylogeography and Biogeography of Fungi. *Mycological Research* 112: 423-424.

- Avis, P. G., G. M. Mueller, and J. Lussenhop. 2008. Ectomycorrhizal fungal communities in two North American oak forests respond at larger spatial scales to nitrogen addition. *New Phytologist* 179: 472–483.
- Wang L., Z. L. Yang, L. F. Zhang, G. M. Mueller. 2008. Synopsis and systematic reconsideration of *Xerula* s. str. (Agaricales). *Acta Botanica Yunnanica* 30: 631-644.
- Yang, Z.-L., L. F. Zhang, G. M. Mueller, G. W. Kost, K.-H. Rexer. 2009. A new systematic arrangement of the genus *Oudemansiella* s. str. (Physalacriaceae, Agaricales). *Mycosytema* 29: 1-13.
- Keirle, M.R., P.G. Avis, D.E. Deesjardin, D.E. Hemmes, and G.M. Mueller. 2010. Geographic origins and phylogenetic affinities of the putative Hawaiian endemic *Rhodocollybia laulaha*. *Mycotaxon* 112: 463-473.
- Dahlberg, A. and G.M. Mueller. 2011. Applying IUCN Red Listing Criteria for assessing and reporting on the conservation status of fungal species. *Fungal Ecology* 4: 147-162.
- Keirle, M.R., P.G. Avis, D.E. Hemmes, and G.M. Mueller. 2011. Variability in the IGS1 region of *Rhodocollybia laulaha*: Is it allelic, genomic, or artificial? *Fungal Biology* 115: 310-316.
- Keirle, M. R., P. G. Avis, K. A. Feldheim, D. E. Hemmes, and G. M. Mueller. 2011. Investigating the allelic evolution of an imperfect microsatellite locus in the Hawaiian mushroom *Rhodocollybia laulaha*. *Journal of Heredity* 102: 727-734.
- Tulloss, R. E., R. E. Halling, and G. M. Mueller, G.M. 2011. Studies in *Amanita* (*Amanitaceae*) of Central America. I. Three new species from Costa Rica and Honduras. *Mycotaxon* 117: 165–206.
- Keirle, M.R., P.G. Avis, D.E. Hemmes, and G.M. Mueller. 2012. Limited divergence in the spatially subdivided island population of the Hawaiian mushroom *Rhodocollybia laulaha*. *Botany* 90: 1103-1112.
- Wilson, A.W., M.C. Aime, J. Dierks, G.M. Mueller, T.W. Henkel. 2012. *Craterellus* and *Cantharellus* in Guyana I. New species, distribution records, and a synopsis of known taxa. *Mycologia* 104: 1466-1477.
- Henkel, T.W., A.W. Wilson, M.D. Aime, J. Dierks, J.K. Uehling, M. Roy, H. Schimann, F. Wartchow, G.M. Mueller. 2013. Cantharellaceae of Guyana II. New species of *Craterellus*, new South American distribution 2 records for *Cantharellus guyanensis* and *Craterellus excelsus*, and a key to the Neotropical taxa. *Mycologia*.
- Wilson, A.W., K. Hosaka, B. Perry, and G.M. Mueller. 2013. *Laccaria* (Agaricomycetes, Basidiomycota) from Tibet (Xizang Autonomous Region, China). *Mycoscience* 54: 406-419.
- Mueller, G.M., A. Dahlberg, M. Krikorev. 2014. Bringing Fungi Into The Conservation Conversation: The Global Fungal Red List Initiative. *Fungal Conservation* 4:12-16.
- Keirle, M.R., P.G. Avis, D.E. Hemmes, and G.M. Mueller. 2014. Testing the 'one-log-one-genet' hypothesis: Methodological Challenges of Population Sampling for the Hawaiian Wood-Decay Mushroom *Rhodocollybia laulaha*. *Mycologia* 106:896-903; *Preliminary version published online: June 2, 2014, doi:10.3852/13-079*.
- Wilson, A.W. N. Wickett, P. Grabowski, J. Fant, J. Borevitz, G.M. Mueller. 2015. Examining the efficacy of genotyping-by-sequencing techniques for population genetic analysis of the mushroom *Laccaria bicolor* and evaluating whether a reference genome is necessary to assess homology. *Mycologia* 107: 217–226. DOI: 10.3852/13-278
- Suz, L.M., N. Barsoum, C. Cheffings, F. Cox, L. Hackett, A. Jones, G.M. Mueller, D. Orme, W. Seidling, S. van der Linde, and M.I. Bidartondo. 2015. Monitoring forest mycorrhizas at large scales to inform science, management and conservation. *Annals of Forest Science*. DOI 10.1007/s13595-014-0447-4
- Lim, C.S, N. Chhabra, S. Leikin, C. Fischbein, G. M. Mueller, M.E. Nelson, eds. 2016. Atlas of Select Poisonous Plants and Mushrooms. *Disease-A-Month* 62(3): 39-66.
- Leacock, P.R., J. Riddell, A.W. Wilson, R. Zhang, C. Ning, G.M. Mueller. 2016. *Cantharellus chicagoensis* sp. nov. is supported by molecular and morphological analysis as a new yellow chanterelle in the midwestern United States. *Mycologia* 108:765-72. doi: 10.3852/15-230.
- Wilson, A.W. K. Hosaka, G.M. Mueller. 2016. Evolution of ectomycorrhizae as a driver of diversification

- and biogeographic patterns in the model mycorrhizal mushroom genus *Laccaria*. *New Phytologist*. DOI: 10.1111/nph.14270
- Desai, N.S., A.W. Wilson, J.S. Powers, G.M. Mueller, and L.M. Egerton-Warburton. 2016. Ectomycorrhizal diversity and community structure in stands of *Quercus oleoides* in the seasonally dry tropical forests of Costa Rica. *Environmental Research Letters* 11 125007.
- Tripp, E.A., N. Zhang, H. Schneider, Y. Huang, G.M. Mueller, Z. Hu, M. Haggblom, and D. Bhattacharya. 2017. Reshaping Darwin's tree: Impact of the symbiome. *TREE*: DOI: <http://dx.doi.org/10.1016/j.tree.2017.05.002>
- Wilson, A.W., T.W. May, G.M. Mueller. 2017. Biogeography of the Ectomycorrhizal Mushroom Genus *Laccaria*, pages 273-297 in L. Tedersoo (ed.), *Biogeography of Mycorrhizal Symbiosis*, *Ecological Studies* 230, DOI 10.1007/978-3-319-56363-3_13
- Zhang, R. G.M. Mueller, X-F Shi, PG Liu. 2017. Two new species in the *Suillus spraguei* complex from China. *Mycologia* Vol. 109 , Iss. 2,2017
- Chen N., C., G.M. Mueller, L.M. Egerton-Warburton, A.W. Wilson, W. Yan, W. Xiang. 2018. Functional response of ectomycorrhizal fungal community to nitrogen deposition in slash pine (*Pinus elliottii*) plantation in south-central China. *Forests* 2018, 9, 99; doi:10.3390/f9030099
- Dudley, N., S.A. Bhagwat, J. Harris, S. Maginnis, J.G. Moreno, G.M. Mueller, S. Oldfield, and G. Walters. 2018. Towards an applied framework for identifying abiotic and biotic indicators to measure success in forest landscape restoration. *Restoration Ecology* 26:5-12.
- Cho, H.J., M.S.Park, H. Lee, S.-Y. Oh, A.W. Wilson, G.M. Mueller, and Y.W. Lim. 2018. Taxonomic re-evaluation of *Laccaria* (Agaricales, Basidiomycota) in Korea based on morphological and molecular evidence. *Mycologia* 110: 948-961.
- Ainsworth, A.M, C. Canteiro, A. Dahlberg, B. Douglas, G. Furci, D. Minter, G.M. Mueller, C. Scheidegger, B. Senn-Irlet, T. Wilkins, E. Williams. 2018. Conservation of fungi. In: K. J. Willis (ed.), *State of the World's Fungi*. Report. Royal Botanic Gardens, Kew. pp. 70–77.
- May, T.W., J.A. Cooper, A. Dahlberg, G. Furci, D.W. Minter, G.M. Mueller, A. Pouliot, Z. Yang. 2018. Recognition of the discipline of conservation mycology. *Conservation Biology*. <https://doi.org/10.1111/cobi.13228>.
- Ning, C., G.M. Mueller, L.M. Egerton-Warburton, W. Xiang, and W. Yan. 2019. Host Phylogenetic Relatedness and Soil Nutrients Shape Ectomycorrhizal Community Composition in Native and Exotic Pine Plantations. *Forests*. doi:10.3390/f10030263.
- Corrales, A., A.W. Wilson, G.M. Mueller, C. Ovrebo. 2020. Novel *Laccaria* species from Juglandaceae forest in Panama with notes on their ecology. *Frontiers in Microbiology*, 11:1597 doi:10.3389/fmicb.2020.01597
- Hochkirch, A., M.J. Samways, J. Gerlach, M. Böhm, P. Williams, P. Cardoso, N. Cumberlidge, P.J. Stephenson, M.B. Seddon, V. Clausnitzer, P.A.V. Borges, G.M. Mueller, P. Pearce-Kelly, D. C. Raimondo, K.-D. B. Dijkstra. 2020. A strategy for the next decade to address data deficiency in neglected biodiversity. *Conservation Biology*, <https://doi.org/10.1111/cobi.13589>
- Johnson, L.J.A.N., M.C.A. González-Chávez, R. Carrillo-González, A. Porrás-Alfaro, G.M. Mueller. 2020. Vanilla aerial and terrestrial roots host rich orchid mycorrhizal and ectomycorrhizal fungi communities. *Plants, People, Planet* <https://doi.org/10.1002/ppp3.10171>
- Lughadha, E.N., S.P. Bachman, T. Leão, F. Forest, J. Halley, J. Moat, C. Acedo, K. Bacon, R. Brewer, G. Gateble, S.P. Gonçalves, R. Govaerts, P. Hollingsworth, I. Krisai-Greilhuber, E.J. de Lirio, P. Moore, R. Negrão, P. Reich, S. Richards, M. Rivers, A. Cooper, J. Iganci, E. Smidt, A. Antonelli, G.M. Mueller, B.E. Walker. 2020 Extinction Risk and Threats to Plants and Fungi. *Plant, People, Planet* 2:389–408. DOI: 10.1002/ppp3.10146
- Pearce, T., A. Antonelli, F.Q. Brearley, E. Breman, B. Bonglim, C. Couch, R. Campostrini Forzza, S.C. Gonçalves, M.P. Morim, G.M. Mueller, E.N. Lughada, S. Sharrock, M. Simmonds, T. Utteridge. 2020. International collaboration between collections-based institutes for halting biodiversity loss and

- unlocking the useful properties of plants and fungi. *Plant, People, Planet* 2020-2: 515-534. DOI: 10.1002/ppp3.10149
- Ullah, S., A.W. Wilson, M. Fiaz, S. Hussain, G.M. Mueller, A.N. Khalid. 2020. *Russula shanglaensis* sp. nov. (Basidiomycota: Russulales), a new species from the mixed coniferous forests in District Shangla, Pakistan. *Turkish Journal of Botany* 44:1-8.
- Ning, C., L.M. Egerton-Warburton, G.M. Mueller, W. Xiang, W. Yan, S. Liu. 2021. Shifts in ectomycorrhizal fungal community composition during the early establishment of native and exotic pine seedlings. *Applied Soil* 157 <https://doi.org/10.1016/j.apsoil.2020.103722>
- Diego Simijaca, D., G.M. Mueller & A.M. Vasco-Palacios. 2022. Fungal Conservation in Colombia. Chapter 14 in *CATALOGUE OF FUNGI OF COLOMBI*. Eds. Almeida, R.F. R. Lücking, A.M. Vasco-Palacios, E. Gaya, M. Diazgranados. RBG Kew.
- Heisecke, C., D.F. Lima, G.M. Mueller, M.A. Neves. 2022. *Leucoagaricus taniae* sp. nov. (Agaricaceae), a sand loving mushroom from Brazil. *Brittonia*. 10.1007/s12228-021-09693-6
- Andrew, C., G.M. Mueller, P.G. Avis. 2022. Do local-scale context dependencies shape how ectomycorrhizal fungal diversity structures with reduced or sustained experimental N addition? *Pedobiologia - Journal of Soil Ecology* 90. 150791
- Mueller, G.M. et al. 2022. What Do the First 597 Global Fungal Red List Assessments Tell Us about the Threat Status of Fungi? *Diversity* 14(9): 736; <https://doi.org/10.3390/d14090736>
- Zhang, R., X.-F. Shi, P.-G. Liu, A.W. Wilson, G.M. Mueller. 2022. Host Shift Speciation of the Ectomycorrhizal Genus *Suillus* (Suillineae, Boletales) and Biogeographic Comparison With Its Host Pinaceae *Frontiers of Microbiology* 2022 Mar 30;13:831450 doi: 10.3389/fmicb.2022.831450
- Johnson, L.J.A.N, M.E. Kane, L.W. Zettler and G.M. Mueller. 2023. Diversity and specificity of orchid mycorrhizal fungi in a leafless epiphytic orchid, *Dendrophylax lindenii* and the potential role of fungi in shaping its fine-scale distribution. *Front. Ecol. Evol.* 11:1057940. doi: 10.3389/fevo.2023.1057940
- Mueller, G.M. and J.L. Allen. 2023 An account of the diversity and conservation of fungi and their close relatives. Chapter 16 in *The Living Planet: the present state of the world's wildlife*. N. Maclean ed.
- Niskanen, T., . . . G.M. Mueller, . . . Pushing the frontiers of biodiversity research: Unveiling the Global Diversity, Distribution and Conservation of Fungi. *Annual Review of Environment and Resources*. In press.

Publications: Other Scientific and Popular Articles

- Mueller, G. M. and N. Fries. 1985. Identifying isolates of *Laccaria* using cultural and mating studies. Page 435 in R. Molina, ed. *Proceedings of the 6th North American conference on mycorrhizae*. Forest Research Laboratory, Corvallis, OR.
- Mueller, G. M. 1987. How does a taxonomist approach a problem like *Laccaria*? *Mcllvainea* 8: 52-58.
- Mueller, G. M. 1987. Texas mushrooms come to Field Museum. *Field Museum of Natural History Bulletin*. April: 20-21.
- Mueller, G. M. 1988. Old techniques with new possibilities: Importance of herbarium-based taxonomy today and tomorrow. *Mcllvainea* 8: 5-6.
- Singer, R. and G. M. Mueller. 1988. How to become a mycologist. III. Mutualistic interactions. *Mcllvainea* 8: 10-11.
- Mueller, G. M. 1991. REVIEW of *Flora Agaricina Neerlandica* Vol. 2. by C. Bas, T. Kuyper, M. E. Noordeloos, and E. C. Vellinga, A. A. Balkema Publ., Rotterdam. In *Mycologia* 83: 682-683.
- Wason, R., W. J. Sundberg, and G. M. Mueller. 1991. Mushrooms of the Morton Arboretum: II. *The Morton Arboretum Quarterly* 27: 17-28.
- Blackwell, M. and G. M. Mueller. 1992. NSF funding in systematics. *Inoculum* 43: 1, 4-8.
- Mueller, G. M. 1994. Rolf Singer's mycological legacy. *Mcllvainea* 11(2): 7-10.
- Mueller, G. M. 1995. Rolf Singer, 1906-1994. *Mycologia* 87: 144-147.
- Mueller, G. M. 1995. Prof. Nils Fries, 1912-1994. *Inoculum* 46: 3.

- Wu, Q.-X. and G. M. Mueller. 1998. REVIEW of *Fungi of China* by S.C. Teng, edited by R. P. Korf. *Mycologia* 90:1091-1092.
- Leacock, P. R., G. M. Mueller, D. P. Lewis, and J. F. Murphy. 1999. Utilizing foray records to document fungal diversity across North America. *Mcllvainea* 14: 88-92.
- Agerer, R. et. al. (including G. M. Mueller). 2000. Open letter to the mycological scientific community. *Inoculum, Supplement to Mycologia* 51: 2-4.
- Mueller, G. M. and M. Mata. 2001. The Costa Rican National Fungal Inventory: A large-scale collaborative project. *Inoculum* 52(5): 1-4.
- Mueller, G. M., J. Wen, and E. Davion. 2002. The great divide: Living in two places at once. Special Issue: The Field Museum in China. *In The Field* 73(5): 2-3.
- Huhndorf, S. M., R. E. Halling, G. M. Mueller, and F. Fernández. 2003. The Costa Rican mycology training workshops. *Inoculum*. 54(2):1-4.
- Guzmán-Dávalos, L., J. Cifuentes, M. Villegas, G. Mueller, A. Miller, E. de Luna, and A. Santerre. 2003. Filogenética del género *Gymnopilus* P. Karst. (Fungi, Agaricales, Cortinariaceae). Pages 125-127 In *2003 Avances en la investigación Científica en el CUCBA*. Universidad de Guadalajara, Mexico.
- Fussman, C. with Mueller, G. M. (2005). In his own words: Dr. Mushroom. *Discover* 2005 (7): 44-53.
- Mueller, G. M. 2006. Review of *North American Mushrooms: A Field Guide to Edible and Inedible Fungi* by O. J. Miller, Jr. and H. Miller. *Inoculum*.
- Bidartondo, M. I. et al. (G. M. Mueller one of 256 authors). 2008. Preserving Accuracy in GenBank. *Science* 319: 1616.
- DeVore, S., G. M. Mueller, and T. Anton. 2008. Middlefork BioBlitz Revealed. *Chicago Wilderness* 12: 14.
- Mueller, G. M. 2011. Mushroom, Bracket and Puffball Specialist Group, A voice for fungi conservation. *Species, Magazine of the IUCN Species Survival Commission*. 53: 28-29.
<http://cmsdata.iucn.org/downloads/species_53_final.pdf>
- Mueller, G.M., A. Dahlberg. 2013. The Global Fungal Red List Initiative. *Inoculum* 64(6): 1-2.
- Vellinga, E.C., T.W. Kuyper, J. Ammirati, D.E. Desjardin, R.E. Halling, A. Justo, T. Læssøe, T. Lebel, D.J. Lodge, P.B. Matheny, A.S. Methven, P.A. Moreau, G.M. Mueller, M.E. Noordeloos, J. Nuytinck, C.L. Ovrebo, and A. Verbeken. 2015. Six simple guidelines for introducing new genera of fungi. *IMA Fungus* 6: 65-68.
- Vellinga, E.C., J.A. Bérubé, M.A. Castellano, G.M. Mueller. 2015. Adding North American mushroom species to the IUCN Global Red List of Threatened Species. *Inoculum* 66(4): 3-4.
- Mueller, G.M. 2017. Progress in conserving fungi: engagement and red listing. *BGJournal* 14: 30-33.
- Mueller, G.M., A. Dhalberg, J. Scot, J. Westrip. 2020. Global Fungal Red List Initiative Update. IUCN SSC Quarterly Report, March.

Publications: Electronic

- Halling, R. E. and G. M. Mueller. 1996-present. Macrofungi of Costa Rica. URL: <<http://www.nybg.org/bsci/res/hall/costaric.html>>. Awards: bigchalk.com exceptional educational site <<http://www.bigchalk.com>> and a Links2Go Key Resource , etc. <<http://www.links2go.com/topic/Fungi>>.
- Mueller, G. M. 1997. The mushroom genus *Laccaria* in North America. URL: <http://www.fieldmuseum.org/research_collections/botany>. Awards: Scout Report for Science & Engineering Selection (<http://scout.cs.wisc.edu/report/sci-eng/current/index.html>) and HMS Beagle WebPick (<http://biomedlink.com>)
- Murphy, J. and G. M. Mueller. 1997. Survey of northern Illinois and Indiana fungi. URL: <http://www.fieldmuseum.org/research_collections/botany>.
- Wu, Q.-X. and G. M. Mueller. 1997. Comparative studies on the macrofungi of China and eastern North America. URL: <http://www.fieldmuseum.org/research_collections/botany> (expanded and revised, March 1998).

- Halling, R. E., G. M. Mueller, and M. J. Dallwitz. 1998. *Leccinum* and *Phylloporus* in Costa Rica: Descriptions, illustrations, identification and information retrieval. URL: <<http://www.nybg.org/bsci/res/hall/deltaindent.html>>. [searchable database]
- Wu, Q.-X. and G. M. Mueller. 1999. A searchable database for Rolf Singer's fungal genera, species, infra-specific taxa, and publications. URL: <http://www.fieldmuseum.org/research_collections/botany>
- Mueller, G. M. and M. Mata. 2000. Inventory of Costa Rican fungi. URL: <http://www.inbio.ac.cr/papers/gt_Hongos/en/index.htm>
- Schaub, M., G. Tonkovich, P. R. Leacock, W. Alverson, C. Dunn, K. Havens, and G. M. Mueller. 2002-present. vPlants: A virtual herbarium of the Chicago region. URL: <<http://www.vplants.org/>>
- Leacock, P. R. and G. M. Mueller. 2003-present. NAMA Voucher Collections Project. <http://www.fieldmuseum.org/nama/>.
- Mueller, G. M. 2004. Surveying Costa Rican Mushrooms. <<http://www.fieldmuseum.org/expeditions>>.
- McFarland, J. and G.M. Mueller. 2009-present. Illinois Mushrooms. <http://illinoismushrooms.com>
- Dahlberg, A., M. Krikorev, and G.M Mueller. 2013-present. The Global Fungal Red List Initiative. <http://iucn.ekoo.se/en/iucn/>

Reports and Manuals Distributed (not published)

- Mueller, G. M. and M. Mata. 1998. Report of the International Workshop on the Fungal Inventory of Costa Rica. INBio, Santo Domingo de Heredia, Costa Rica. 36 pp.
- Mueller, G. M. and M. Mata. 1999. Protocols for the National Inventory of Costa Rican Fungi. INBio, Santo Domingo de Heredia, Costa Rica. 13 pp.
- Leacock, P. and G. Mueller. 2000. Urban Watch target organisms: Mushrooms and other fungi. *In Illinois UrbanWatch Monitoring Manual*. Field Museum and Illinois Department of Natural Resources, eds. Illinois Department of Natural Resources, Springfield, IL.
- Leacock, P., S. Huhndorf, and G. Mueller. 2000. Urban Watch target organisms: Tree health. *In Illinois UrbanWatch Monitoring Manual*. Field Museum and Illinois Department of Natural Resources, eds. Illinois Department of Natural Resources, Springfield, IL.
- Mueller, G. M., B. Yang, and S. Ge. 2003. Fungi. Pages 72-73, 92-95 *In China: Yunnan, Southern Gaoligongshan*. Rapid Biological Inventories Report 4. The Field Museum, Chicago.

Abstracts of Presented Papers at Professional Meetings

- Mueller, G. M. 1978. The genus *Laccaria* in southern Illinois. *Abstracts of Illinois State Academy of Science*. Annual Meeting, Normal, Illinois. p. 13. (Abstr.)
- Mueller, G. M. 1980. Studies on Southeastern *Laccaria*. *Association of Southeastern Biologists Bulletin* 27: 53. (Abstr.)
- Mueller, G. M. 1980. *Laccaria*, a common genus of mushrooms from the Great Smoky Mountains. *Report from the 6th Annual Scientific Research Meeting, National Park Service, Southeast Region, Gatlinburg, Tennessee*. p. 22. (Abstr)
- Mueller, G. M. 1981. Taxonomically important diagnostic characters in the genus *Laccaria*. *Association of Southeastern Biologists Bulletin* 28: 54. (Abstr.)
- Mueller, G. M. 1981. A preliminary taxometric analysis of the genus *Laccaria*. *Mycological Society of America Newsletter* 32: 43. (Abstr.)
- Petersen, R. H. and G. M. Mueller. 1982. Biosystematics of the Basidiomycetes comes of age. *Mycological Society of America Newsletter* 33: 41. (Abstr.)
- Mueller, G. M. 1983. Somatic culture mat analysis as a taxonomic tool in *Laccaria*. *Mycological Society of America Newsletter* 34: 31. (Abstr.)
- Mueller, G. M., J. F. Ammirati, and L. Shih. 1985. Intra- and intercontinental pairings studies in *Laccaria* (Agaricales). *Mycological Society of America Newsletter* 36: 35. (Abstr.)

- Mueller, G. M. and M. Coleman. 1986. Morphological variation in an isolate of the mushroom genus *Laccaria* in response to exogenously-applied phosphorus. *Trans. of the Illinois State Academy of Science Supplement* p. 35. (Abstr.)
- Shih, L., G. M. Mueller, and J. F. Ammirati. 1986. Basidial cytology of *Laccaria* species (Agaricales). *Mycological Society of America Newsletter* 37: 42. (Abstr.)
- Mueller, G. M., K. F. LoBogio, P. A. Kaiser, J. F. Ammirati. 1987. Morphology of mycorrhizae formed by *Laccaria* and western N.A. conifers. *Mycological Society of America Newsletter* 38: 41. (Abstr.)
- Mueller, G. M. 1988. *Laccaria* in northern South America. *Mycological Society of America Newsletter* 39: 41. (Abstr.)
- Mueller, G. M. 1988. El género *Laccaria* en la costa del Golfo de Estados Unidos, México, Centroamérica y la partenorte de Sudamérica. *Resúmenes III Congreso Nacional de Micología de la Sociedad Mexicana de Micología*. p. 44. (Abstr.)
- Mueller, G. M. and B. A. Strack. 1988. Hongos ectomicorrízicos asociados con especies de *Nothofagus* de América del Sur: composición de especies, distribución y especificad del huésped. *Resúmenes III Congreso Nacional de Micología de la Sociedad Mexicana de Micología*. p. 111. (Abstr.)
- Mueller, G. M. 1989. Phenetic and cladistic analyses of the genus *Laccaria*. *Mycological Society of America Newsletter* 40: 40. (Abstr.)
- Mueller, G. M. 1990. Herbaria: Repositories of ecological, morphological and molecular data. *Mycological Society of America Newsletter* 41 (Abstr.)
- Mueller, G. M. 1990. Ectomycorrhizal agarics of neotropical *Quercus* forests: notes on species composition and distribution. *Abstracts: Fourth International Mycological Congress, Regensburg, Germany*. p. 40. (Abstr.)
- Mueller, G. M. 1991. Evidence for limited geographic range in putatively cosmopolitan species of *Laccaria*. *Mycological Society of America Newsletter* 42: 28. (Abstr.)
- Methven, A. S. and G. M. Mueller. 1991. Preliminary observations on the mushroom genus *Lactarius* in the oak forests of Costa Rica. *Transactions of the Illinois Academy of Science*. 84 (Suppl.): 35. (Abstr.)
- Mueller, G. M., Q. X. Wu, and C. L. Ovrebo. 1992. Development of an index of taxa described by Rolf Singer. *Inoculum, Newsletter of the Mycological Society of America* 43: 44. (Abstr.)
- Fischbein, C. B., G. M. Mueller, J. W. Lipscomb, and J. B. Leikin. 1992. Field test of the new fungal identification system in Poisindex. Presented at American Association of Poison Control Centers, Tampa, FL. 21 September 1992. (Abstr.)
- Methven, A. S. and G. M. Mueller. 1992. Preliminary observations on *Lactarius* (Basidiomycetes, Russulaceae) in the oak forests of Costa Rica. *Inoculum, Newsletter of the Mycological Society of America* 43: 43. (Abstr.)
- Pine, E. M. and G. M. Mueller. 1992. Evolutionary studies of *Laccaria* (Fungi, Basidiomycetes). Presented at the 6th National Conference On Undergraduate Research, University of Minnesota, Minneapolis, MN. Abstract No. 144. (Abstr.)
- Mueller, G. M. 1993. Evidence for high biodiversity in montane neotropical Agaricales. *Neotropical Montane Forests: Biodiversity and Conservation Symposium, Abstracts from a Symposium at The New York Botanical Garden*. *AAU Reports* 31: 17. (Abstr.)
- Pine, E. M. and G. M. Mueller. 1993. Clarifying evolutionary relationships between and within two major groups of basidiomyceteous fungi (mushrooms and false-truffles) by means of rDNA sequencing. *Inoculum, Newsletter of the Mycological Society of America* 44: 53. (Abstr.)
- Mueller, G. M. 1994. Neotropical Holobasidiomycetes: A preliminary assessment of biodiversity and distribution based on studies in Costa Rica and Colombia - Introduction. *Abstracts from the Fifth International Mycological Congress*. p. 150. (Abstr.)

- Wu, Q.-X. and G. M. Mueller. 1994. Biogeography of macrofungi: relationships between temperate eastern Asia and eastern North America. *American Journal of Botany* 81 (Suppl.). (Abstr.)
- Wu, Q.-X. and G. M. Mueller. 1994. A preliminary study on *Cantharellus* and *Craterellus* of Costa Rica. *Abstracts from the Fifth International Mycological Congress*. p. 246. (Abstr.)
- Halling, R. E., A. E. Franco, and G. M. Mueller. 1994. Agaricales of Costa Rican *Quercus* forests. Poster at the Latin American Botanical Congress, La Plata, Argentina. (Abstr.)
- Mueller, G. M. and E. M. Pine. 1995. Evidence for monophyly of *Hydnangium*, *Laccaria*, and *Podohydnangium* based on rDNA sequence data. *Inoculum, Newsletter of the Mycological Society of America* 46(3): 30. (Abstr.)
- Mueller, G. M. and E. M. Pine. 1995. Support for monophyly of the agaric *Laccaria* and the false-truffle *Hydnangium*. *Abstracts of the 12th Congress of European Mycologists*. p. 43. (Abstr.)
- Mueller, G. M. 1995. The mycological world: Are the issues and solutions the same? *Managing the Modern Herbarium Workshop Abstracts* p. 16. (Abstr.)
- Schmit, J. P. and G. M. Mueller. 1995. Fungal diversity in temperate and tropical oak forests. *Abstracts of the 12th Congress of European Mycologists* p. 53. (Abstr.)
- Schmit, J. P. and G. M. Mueller. 1995. Diversity of macromycetes in temperate and tropical oak forests. *Inoculum, Newsletter of the Mycological Society of America* 46(3): 37. (Abstr.)
- Wu, Q.-X. and G. M. Mueller. 1995. Are the mycotas of eastern North America and eastern Asia similar? *Inoculum, Newsletter of the Mycological Society of America* 46(3): 44. (Abstr.)
- Murphy, J. F., S. Packard, D. K. Moskovits, and G. M. Mueller. 1996. Chicago Wilderness, a model for conservation of biodiversity within an urban setting. *Society for Conservation Biologists Abstracts*. (Abstr.)
- Kosinski, A., Q-X, Wu, and G. M. Mueller. 1996. Comparative studies on disjunct macrofungi in eastern North America and eastern Asia. *Inoculum, Newsletter of the Mycological Society of America* 47 (3): 16. (Abstr.)
- Murphy, J. F. and G. M. Mueller. 1996. Higher fungi of the Chicago region in the twentieth century. *Inoculum, Newsletter of the Mycological Society of America* 47 (3): 23. (Abstr.)
- Schmit, J.P., J. F. Murphy, and G. M. Mueller. 1996. Diversity and abundance of Macromycetes in Cowles Bog, Indiana Dunes. *23rd Natural Areas, 15th North American Prairie, and Indiana Dunes Ecosystems Conferences Abstract Book*, p. 84. (Abstr.).
- Schmit, J. P., J. F. Murphy, and G. M. Mueller. 1996. Diversity and abundance of Macromycetes in Cowles Bog, Indiana Dunes. *Inoculum, Mycological Society of America* 47 (3): 28. (Abstr.)
- Aruguete, D. M., J. H. Aldstadt, and G. M. Mueller. 1997. Toxic metal and lanthanide accumulation in fungi from the Chicago region. Paper presented at the 20th Midwest Environmental Chemistry Workshop, Indiana University, Bloomington. (Abstr.)
- Halling, R. E. and G. M. Mueller. 1997. Diversity and composition of Agaricales in Costa Rican oak forests. *Inoculum, Mycological Society of America Newsletter* 48(3): 13 (Abstr.)
- Mata Hildago, M. and G. M. Mueller. 1997. Survey of the macrofungi from the Guanacaste Conservation Area (GCA), Costa Rica. *Tropical Diversity Origins, Maintenance, and Conservation ATB/OTS Symposium and Annual Meeting Abstracts*. p. 82. (Abstr.)
- Mueller, G. M. and J. P. Schmit. 1997. Quantitative sampling documents high diversity of macrofungi in Costa Rican *Quercus* forests. *Tropical Diversity Origins, Maintenance, and Conservation ATB/OTS Symposium and Annual Meeting Abstracts*. p. 88. (Abstr.)
- Murphy, J. F., J. P. Schmit, G. M. Mueller, and J. F. Stepan. 1997. Ectomycorrhizal fungi in the oak forests of northern Illinois and Indiana. *Inoculum, Mycological Society of America Newsletter* 48(3): 27. (Abstr.)
- Wu, Q.-X and G. M. Mueller. 1997. Phylogenetic analyses of disjunct *Suillus* species based on sequences of ITS regions of rDNA. *Inoculum, Mycological Society of America Newsletter* 48(3): 41 (Abstr.)
- Ammirati, J., M. Seidl, R. Halling, and G. Mueller. 1998. The genus *Cortinarius* (Agaricales), subgenus *Myxaciium* in Costa Rica. *Inoculum, Supplement to Mycologia* 49: 7 (Abstr.)

- Mueller, G. M., P. R. Leacock, and J. F. Murphy. 1998. Rapid methods for assessing the diversity and distribution of Illinois macrofungi. *Inoculum, Supplement to Mycologia* 49: 38 (Abstr.)
- Mueller, G. M., P. R. Leacock, and J. F. Murphy. 1998. Rapid methods for surveying and monitoring Illinois macrofungi diversity. *Transactions of the Illinois State Academy of Science (Supplement)* 90: 33 (Abstr.)
- Mueller, G. M. and Q.-X. Wu. 1998. How host specific are *Suillus americanus* and *S. spraguei*? *Second International Congress on Mycorrhiza Abstracts* p. 124. (Abstr.)
- Schmit, J. P., J. F. Murphy, and G. M. Mueller. 1998. Macrofungal diversity in a temperate oak forest. *Inoculum, Supplement to Mycologia* 49: 47 (Abstr.)
- Wu, Q.-X., G. M. Mueller, Y.-Q. Huang, and D. Quist. 1998. Preliminary assessment of macrofungal diversity in the temperate forests of Chang Bai Mountain, China. *Inoculum, Supplement to Mycologia* 49: 55 (Abstr.)
- Mueller, G. M., Schmit, J. P., and Leacock, P. R. 1999. Responses of mushroom-tree mutualists of our dune and forest ecosystems to a witch's brew of atmospheric contaminants. *Ecology and the Chicago Region: from Cowles to Chicago Wilderness Symposium Abstracts*. (Abstr.)
- Mueller, G. M., Schmit, J. P., and Leacock, P. R. 1999. Diversity of macrofungi at Cowles Bog, Indiana Dunes National Lakeshore, a site impacted by airborne pollutants. *Soil Ecology Society International Conference Program and Abstracts*, p. 40 (Abstr.).
- Mueller, G. M., Q.-X. Wu, Y.-Q. Huang, and S.-Y. Guo. 1999. Biogeographic relationships between North American and Chinese Macrofungi. *XVI International Botanical Congress Abstracts*, p. 199 (Abstr.)
- Mueller, G. M., Schmit, J. P., and Leacock, P. R. 1999. Macrofungal diversity at a midwestern U. S. oak woodland impacted by airborne pollutants. *XVI International Botanical Congress Abstracts*, p. 485 (Abstr.) (poster).
- Leacock, P. R., D. P. Lewis, and G. M. Mueller. 1999. Utilizing foray records to document fungal diversity across North America. *XVI International Botanical Congress Abstracts*, p. 304 (Abstr.) (poster)
- Mueller, G. M. 1999. Diversity and biogeography of the genus *Laccaria* inferred from DNA sequence data. *Latin American Mycological Congress Abstract Book*, p. 63. (Abstr.)
- Fischbein, C., G. Mueller, P. Leacock, M. Wahl, and S. Aks. 2000. Digital imaging: A promising tool for mushroom identification. *NACCT (The American Academy of Clinical Toxicology) Meeting Abstracts*. (Abstr.) (poster)
- Foster, R. and G. Mueller. 2000. Rapid Reference Resources: New tools for conservation. *Association of Systematics Collections Annual Meeting Abstracts*. (Abstr.)
- Halling, R. E. and G. M. Mueller. 2000. Macromycetes of Neotropical Oakwoods. *Abstracts of Brit. Mycol. Soc. Symposium "Tropical Mycology 2000."* p. 2. (Abstr.).
- Leacock, P. R., G. M. Mueller, J. P. Schmit, and J. F. Murphy. 2000. Diversity and composition of macrofungi in oak woodland communities of the Chicago region. *Inoculum, Supplement to Mycologia* 51: 41 (Abstr.)
- Mueller, G. M. 2000. Fungi: Important components of the Calumet region. *Calumet Research Summit Abstracts* (Abstr.)
- Schmit, J. P., G. M. Mueller, Y.-Q. Huang, P. R. Leacock, J. L. Mata, and Q.-X. Wu. 2000. A meta-analysis of macrofungal diversity studies. *Inoculum, Supplement to Mycologia* 51: 57 (Abstr.)
- Moskovits, D. K., C. Fialkowski, G. M. Mueller, and T. A. Sullivan. 2000. Chicago Wilderness: a new force in urban conservation. *Missouri Botanical Garden Fall Symposium Abstracts*. (Abstr.)
- Mueller, G. M. and C. Dunn. 2001. Chicago Wilderness. *Association of Systematics Collections Annual Meeting, Chicago*. (Abstr.)
- Dunn, C., W. Alverson, G. M. Mueller, M. Schuab, K. Havens. 2001. v-Plants: The Chicago Regional Virtual Herbarium as a Model Multi-Institutional Plant Data Resource. *Association for Systematic Collections Annual Meeting, Chicago*. (Abstr.)

- Fischbein, C., G. M. Mueller, P. Leacock, M. Wahl, and S. Aks. 2001. Digital imaging: A promising tool for mushroom identification. Mycological Society of America Annual Meeting, Salt Lake City, Utah. (Abstr.) (poster)
- Mueller, G. M., M. Mata, L. Umaña, S. Huhndorf, F. Fernandez, J. Carranza, and R. E. Halling. 2001. Costa Rican National Fungal Inventory. Mycological Society of America Annual Meeting, Salt Lake City, Utah. *Inoculum* 52(3): 51. (Abstr.)
- Mueller, G. M. and M. Mata. 2002. El Inventario de Hongos de Costa Rica. Latin American Congress of Mycology. Xalapa, Mexico. (Abstr.).
- Mueller, G. M., M. Mata, and R. E. Halling. 2002. Agaricales de Costa Rica. Latin American Congress of Mycology. Xalapa, Mexico. (Abstr.).
- Halling, R. E., M. Mata, and G. M. Mueller. 2002. Diversity and Distribution of Boletes in Costa Rica. Latin American Congress of Mycology. Xalapa, Mexico. (Abstr.).
- Leacock, P. R., G. M. Mueller, J. P. Schmit, and J. F. Murphy. 2002. Effects of prescribed burning on macrofungi in an oak woodland community near Chicago, IL. *Inoculum* 53(3): 40. (Abstr.).
- Guzmán-Dávalos, L., G. M. Mueller, J. Cifuentes, A. N. Miller, and A. Santerre. 2002. Traditional infrageneric classifications of *Gymnopilus* (Agaricales, Cortinariaceae) are not supported by ribosomal DNA sequence data. International Mycological Congress, Oslo, Norway, p. 204 (Abstr.).
- Aldana-Gomez, R., G.M. Mueller, and B. Buyck. 2002. Preliminary results in assessing phylogenetic and biogeographic relationships among species of *Russula* subgenus *Ingratula*. International Mycological Congress, Oslo, Norway, IMC7 Book of Abstracts, p. 189 (Abstr.).
- Halling, R. E. and G. M. Mueller. 2002. Disjunct distributions of some tropical agarics and boletes. International Mycological Congress, Oslo, Norway, IMC7 Book of Abstracts, p. 12. (Abstr.).
- Mueller, G. M., J.P. Schmit, R. Courtecuisse, L. Ryvarden, K.-H. Larsson, J.M. Trappe, R.E. Halling, M. Rajchenberg, T.W. May, J. Cifuentes, D.E. Desjardin, K. Hjortstam, Q.-X. Wu, P. Leacock, D.J. Lodge, T. Iturriaga, R. Watling, S.A. Redhead, and B. Buyck. 2002. Global diversity and distribution of macrofungi. International Mycological Congress, Oslo, Norway, IMC7 Book of Abstracts, p. 33 (Abstr.).
- Mueller, G.M., J.P. Schmit, and R. Courtecuisse. 2002. Fungal biodiversity: What do we know? What can we predict? International Mycological Congress, Oslo, Norway, IMC7 Book of Abstracts, p. 33 (Abstr.).
- Schmit, J.P., G.M. Mueller, and R. Courtecuisse. 2002. Fungal diversity: Estimates, predictions and future challenges. International Mycological Congress, Oslo, Norway, IMC7 Book of Abstracts, p. 35 (Abstr.).
- Mueller, G. M. and J. P. Schmit. 2003. Assessing the diversity, species composition, and distribution of northern hemisphere macrofungi. XIV Congress for European Mycologists, Yalta, Ukraine, Abstracts, p. 82 (Abstr.).
- Mueller, G. M. 2004. Current ideas on the diversity and distribution of macrofungi. North American Mycological Association.
- Halling, R. E. and G. M. Mueller. 2004. Mushrooms of the Talamancas, Costa Rica. Mycological Society of America Meeting Abstracts, p. 57.
- Leacock, P. R. and G. M. Mueller. 2004. Fungi of the Chicago region: a century of progress. Mycological Society of America Meeting Abstracts, p. 68.
- Schmitt, I., G. M. Mueller, and H. T. Lumbsch. 2004. Ascoma morphology is homoplasious in some pyrenocarpous lichens. Mycological Society of America, Abstracts, p. 92.
- Buschbom, J. and G. M. Mueller. 2004. Testing "species pair" concepts: An analysis of processes driving the evolution of *Porpidia flavocoerulescens*/*P. melinodes*. Abstracts of the International Association of Lichenologists Meeting, Tartu, Estonia.
- Mueller, G. M. 2005. Overview of fungal biogeography. Mycological Society of America Meeting Abstracts. *Inoculum* 56(4): 42.
- Keirle, M. and G. Mueller. 2005. Covariance patterns in basidiome morphology revealed through

- multivariate analysis of selected *Laccaria* species. Mycological Society of America Meeting Abstracts. *Inoculum* 56(4): 30.
- Mueller, G. M. and K. Hosaka. 2006. Biogeography and host preference of austral members of *Laccaria* – *Hydnangium*, a model clade of ectomycorrhizal fungi. International Mycological Congress, Cairns, Australia. (abstracts).
- Mueller, G. M., P.G. Avis, P.R. Leacock. 2007. Diversity and Species Composition of the Chicago Region's Macrofungi" Indiana Dunes Research Forum, Indiana Dunes National Lake Shore, IN
- Mueller, G. M. and K. Hosaka. 2007. Host Specificity Versus Geology in Shaping Biogeographic Patterns of Ectomycorrhizal Fungi. Botanical Society of America – American Society of Plant Taxonomist Meeting, Chicago, IL (abstracts).
- Mueller, G. M. and K. Hosaka. 2007. Presidential Address: Using the *Laccaria-Hydnangium* Clade as a Model to Study Diversity and Biogeographic Patterns of Ectomycorrhizal Fungi. Mycological Society of America, Baton Rouge, LA (abstracts).
- Mueller, G. M. and K. Hosaka. 2007. Diversity, Biogeography, and Host Specificity of the *Laccaria-Hydnangium* Clade (Basidiomycota, Agaricomycetes). XVth Congress of European Mycologists and 1st meeting of the European Mycological Association, St. Petersburg, Russia. (abstracts).
- Mueller, G. M. and K. Hosaka. 2007. Using the *Laccaria-Hydnangium* Clade as a Model to Study Diversity and Biogeographic Patterns of Ectomycorrhizal Fungi. 1st Workshop and Symposium on Pyrenees Fungi, Moulis, France.
- Jennifer Schwarz Ballard, J. G.M. Mueller, P. Beneveniste. 2010. The Science Career Continuum, an education ladder program to engage and educate underserved minority students in environmental sciences at the Chicago Botanic Garden. 4th Global Botanic Garden Congress, Dublin, Ireland.
- Mueller, G. M. and K. Hosaka. 2010. A Gondwanan origin for the *Laccaria* – *Hydnangium* clade (Basidiomycota, Agaricomycotina) Clade. VI Southern Connection Congress, San Carlos de Bariloche, Argentina
- Mueller, G. M. and A. Dahlberg. 2010. IUCN Red-Listing and Fungal Conservation: Using Established Tools for Assessing and Reporting on the Conservation Status of Fungal Species. 9th International Mycological Congress, Edinburgh, UK.
- Wilson, A. W., M. C. Aime, T. W. Henkel, and G. M. Mueller. 2010. Systematics and biogeography of *Dicymbe* associated Cantharellaceae from the Guiana Shield. Mycological Society of America, Lexington, KY.
- Mueller, G. M. 2011. Conserving mushrooms and their relatives. Latin American Mycological Congress, San José, Costa Rica.
- Mueller, G. M. 2011. Climate change and fungal conservation. European Mycological Congress, Greece.
- Wilson, A. W., R. Zang, K. Hosaka, and G. M. Mueller. 2011. *Laccaria* from the eastern Himalayas. Mycological Society of America Annual Meeting, Fairbanks, Alaska.
- Wilson, A.W. N. Wickett, P. Grabowski, J. Fant, J. Borevitz, G.M. Mueller. 2012. Using genotyping-by-sequencing techniques for population genetic studies in mushroom-forming fungi. Mycological Society of America Annual Meeting, New Haven, CT.
- Mueller, G.M. 2012. Fungi – Diverse, Important, and Understudied. IUCN World Conservation Congress, Jeju, Korea.
- Mueller, G.M. 2013. Fungal conservation in the USA. International Fungal Conservation Congress. Gokova, Turkey.
- Mueller, G.M. 2013. Mitigating the Loss of Botanical Capacity – Examples from Chicago Botanic Garden. Global Botanic Garden Congress, Dunedin, New Zealand.
- Mueller, G.M., A.Wilson, K. Hosaka, E. Sheedy, and T.W. May. 2014. Incorporating conservation assessments into taxonomic revisions: lessons learned from Hydnangiaceae. International Mycological Congress, Bangkok, Thailand.
- May, T.W., A.W. Wilson, E.M. Sheedy, and Mueller, G.M. Mueller. 2014. Biogeographic analysis of Southern Hemisphere *Laccaria* based on phylogenetic species concepts and extensive geographic

- sampling. International Mycological Congress, Bangkok, Thailand.
- Mueller, G.M. 2014. Challenges and opportunities for fungal conservation. 1st meeting of the Polish Mycological Society. Lodz, Poland.
- Mueller, G.M. 2014. Assessing the Conservation Status of Fungi: The Global Fungal Red List Initiative. Latin American Mycological Congress. Medellin, Colombia.
- Johnson, L., K. Sandona, C. González Chávez, R. Carrillo, C. Gilberto, G.M. Mueller, and A. Porrás-Alfaro. 2014. Root-associated fungi in *Vanilla planifolia* from four plantation systems in Mexico. Mycological Society of America Meeting. East Lansing, Michigan.
- Mueller, G.M. and A. Dahlberg. 2014. Mainstreaming Fungal Conservation. Mycological Society of America Meeting. East Lansing, Michigan.
- Mueller, G.M. 2015. Desafíos y Oportunidades para la Conservación de Hongos. V Congreso Biodiversidad y Manejo de Ecosistemas. Havana, Cuba
- Rui Zhang, R., X. Shi, P.G. Liu, G.M. Mueller. 2015. Twelve New Species of *Suillus* from China and a Multigene Phylogeny of the Genus Based on Representatives from North America, Eastern Asia and Europe. MSA / BSA / ASPT Joint Meeting. Edmonton, Canada.
- Wilson, A.W., E. Sheedy, T. May, G.M. Mueller. 2015. Population Genetics of *Laccaria* sp.: Comparison of Microsatellite and SNP Data. MSA / BSA / ASPT Joint Meeting. Edmonton, Canada
- Wilson, A.W., K. Hosaka, G.M. Mueller. 2015. Phylogeny and Diversification of *Laccaria*. 8th International Congress on Mycorrhiza. Flagstaff, AZ
- Mueller, G.M. 2015. Challenges and Opportunities for Fungal Conservation. North American Mycological Association Annual Meeting. Asheville, NC
- Mueller, G.M. 2017. Challenges and Opportunities for Fungal Conservation. IUCN SSC Public Symposium. Cartagena, Colombia.
- Mueller, G.M. 2017. Fungal Conservation and Botanic Gardens. Global Botanica Garden Conference. Geneva, Switzerland.
- Skogen, K., K. Havens, and G.M. Mueller. 2017. Bridging Botanic Gardens & Restoration Professionals: The Conservation & Land Management Internship Program. Global Botanica Garden Conference. Geneva, Switzerland.
- Mueller, G.M. 2017. Fungal Conservation: Science, Engagement, Action. Key Note, North American Mycological Association Annual Meeting. Wisconsin.
- Mueller, G.M. 2017. Desafíos y Oportunidades para la Conservación de Hongos (Challenges and Opportunities for Mushroom Conservation). Key Note Address, VIII Latin American Mycological Congress. Lima, Peru.
- Johnson, L.J.A.N., M.E. Kane, and G.M. Mueller. 2017 Role of mycorrhizal fungi in the nutrition and fine scale distribution patterns of epiphytic orchids. University of Pinar del Rio 40th Anniversary Symposium, Pinar del Rio, Cuba.
- Mueller, G.M. 2017. Ectomycorrhizal fungi: Key Components of Forest Ecosystems. University of Pinar del Rio 40th Anniversary Symposium, Pinar del Rio, Cuba.
- Johnson, L.J.A.N., L. Taylor, G.M. Mueller. 2018. Mycorrhizal Specificity and Dependence of the Leafless Ghost Orchid, *Dendrophylax lindenii*. IMC 11, Puerto Rico.
- Dahlberg, A., G.M. Mueller. 2018. The Global Fungal Red List Initiative: A call for participation. IMC 11. Puerto Rico.
- Jordan Wood J., J. B. Fant, A.T. Kramer, K. Havens, G.M. Mueller. 2018. What to do when we can't bank on seeds: Applying zoo population management protocols to rare plants in living collections. Global Partnership for Plant Conservation Meetings. Cape Town, South Africa
- Mueller, G.M. 2018. Global red listing: assessing, communicating, taking action. Kew State of the Worlds Fungi. Kew, UK.
- Mueller, G.M. 2019. Advancing Fungal Conservation. Congress of European Mycologists, Poland.
- Mueller, G. M. 2021. Documenting and Understanding Threats to Cloud Forest Fungi
A key step in conserving these critical organisms. Cloud Forest Fungi Symposium.

- Mueller, G. M. 2021. Engaging community scientists in collecting data for conservation assessments, the Fungal Diversity Survey (FunDiS). MSA Annual Meeting.
- Mueller, G.M., B. Sheehan. 2021. The need and opportunities for including fungi in biodiversity databases and conservation activities. NatureServe Biodiversity Without Borders Conference.
- Keifer, G. and G.M. Mueller. 2022. Plants of Concern program brings together community science & technology for rare plant monitoring. NatureServe Biodiversity Without Borders Conference. Pittsburgh, PA.
- Mueller, G.M. and G. D'Elia. 2022. Fungal Diversity Survey: Conserving fungi with community science. NatureServe Biodiversity Without Borders Conference. Pittsburgh, PA.

Symposia, Workshops, Short courses (seminars and other invited lectures not included)

- Mueller, G. M., J. Polishook, and S. Miller. 1988. "Basidiospore Germination and Tissue Culture Techniques for Agarics, Especially Those That Form Ectomycorrhizae." AIBS/MSA Workshop, Davis, CA. (organizer).
- Mueller, G. M. 1989. Phenetic and cladistic analyses of the genus *Laccaria*. AIBS/MSA Symposium entitled "Numerical Analysis in Fungal Systematics." Toronto, Ontario. (see Abstracts of Presented Papers). Wolfe, C. B. and G. M. Mueller (co-chairs).
- Mueller, G. M. 1990. Herbaria: Repositories of ecological, morphological and molecular data. MSA Evening Discussion entitled "Use of Molecular Techniques, the Impact on Herbarium Specimens and the Preservation of Related Voucher Materials." Madison, WI. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M. 1990. Ectomycorrhizal agarics of neotropical *Quercus* forests: notes on species composition and distribution. International Mycological Congress (IMC-4) Symposium entitled "Tropical Fungi" Regensburg, Germany. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M. 1993. Evidence for high biodiversity in montane neotropical Agaricales. Symposium entitled "Neotropical Montane Forests: Biodiversity and Conservation." The New York Botanical Garden. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M., R. E. Halling, and C. L. Ovrebo. 1994. "Neotropical Holobasidiomycetes: A Preliminary Assessment of Biodiversity and Distribution Based on Studies in Costa Rica and Colombia." IMC-5 Symposium, Vancouver, British Columbia, Canada. (see Abstracts of Presented Papers) (co-organizer).
- Vilgalys, R. and G. M. Mueller. 1994. "Foraging an Integrated Approach to Phylogeny of Homobasidiomycetes." IMC-5 Symposium, Vancouver, British Columbia, Canada. (co-organizer).
- Wu, Q.-X. and G. M. Mueller. 1994. Biogeography of macrofungi: relationships between temperate eastern Asia and eastern North America. AIBS Symposium entitled "Relationships Between Plants of Eastern North America and Eastern Asia." Knoxville, TN. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M. 1995. The mycological world: Are the issues and solutions the same? Society for the Preservation of Natural History Collections Symposium entitled "Destructive Sampling and Molecular Systematics: Are We Moving Toward a Consensus?" Toronto, Ontario, Canada. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M. 1995. A week-long planning workshop entitled "Taxa Working Inventory Group: Fungi" of the All Taxa Biodiversity Inventory, Guanacaste Conservaton Area, Costa Rica. (invited participant).
- Mueller, G. M., G. Bills, and A. Rossman. 1995. A special 4-day workshop on "Measuring and Monitoring Biological Diversity: Standard Methods for Fungi." Washington, D. C. (co-organizer, moderator, and co-editor of symposium volumes).
- Mueller, G. M. 1996. Diversity and distribution of ectomycorrhizae in northern Illinois and Indiana. The Janet Meakin Poor Research Symposium entitled: "The Role of Mycorrhizal Fungi in Restoration Ecology." Chicago Botanic Garden. (invited presenter).

- Mueller, G. M. 1997. Symposium entitled "Assessing Costa Rican Fungal Diversity". The Association for Tropical Biology/Organization for Tropical Studies Annual Meeting, San José, Costa Rica. (see Abstracts of Presented Papers) (organizer).
- Mueller, G. M. 1997. Report from museum partners. Presentation at the All Taxa Biodiversity Inventory Planning Workshop "Discover Life in America." Great Smoky Mountains National Park, Gatlinburg, TN. (invited participant).
- Huhndorf, S. H., G. M. Mueller, F. Lutzoni, F. Fernandez, and A. Miller. 1998. Studies in the Lasiosphaeriaceae: Monographs to two key genera and family-level phylogeny (Fungi, Ascomycetes, Sordariales). Poster presented at NSF Partnership for Enhancing Expertise in Taxonomy Workshop, Woods Hole, MA. (invited participant).
- Rossmann, A. G. Mueller, S. Stephenson, and J. Lodge. 1998. "Initiatives and Issues in Fungal Biodiversity." MSA Informal Session, San Juan, Puerto Rico. (co-organizer).
- Mueller, G. M. and M. Mata. 1998. A week-long planning workshop entitled "National Fungal Inventory Workshop," National Institute of Biodiversity, Santa Domingo, Heredia, Costa Rica. (co-organizer and senior author of final report, 36 pp.).
- Mueller, G. M. and Q. X. Wu. 1998. How host specific are *Suillus americanus* and *S. spraguei*? Second International Congress on Mycorrhiza Symposium entitled "Phylogeny and Systematics." Uppsala, Sweden. (see Abstracts of Presented Papers) (invited presenter).
- Mueller, G. M. 1998. Morphological and molecular divergence between disjunct species of *Suillus*. Presentation at a special symposium on the biogeographic relationships between North American and Chinese macrofungi and lichens. Institute of Microbiology, Chinese Academy of Sciences, Beijing, China. (co-organizer).
- Mueller, G. M., F. Fernando, and M. Mata. 1999. Three-week-long field course on macro- and microfungi for Costa Rican fungal parataxonomists as part of the Costa Rican National Inventory, National Biodiversity Institute (INBio), Costa Rica. (instructor)
- Mueller, G., J. P. Schmit, and P. Leacock. 1999. Responses of mushroom-tree mutualists of our dune and forest ecosystems to a witch's brew of atmospheric contaminants. Field Museum/ Indiana Dunes/ Chicago Wilderness Symposium entitled "Ecology and the Chicago Region: from Cowles to Chicago Wilderness." Chicago. (invited presenter).
- Mueller, G. M. and J. Cifuentes. 1999. Symposium entitled "Methods for Studying Neotropical and South Temperate Agaricales." Latin American Mycological Congress, Caracas, Venezuela. (co-organizer).
- Mueller, G. M., T. J. Entwistle, and R. Vilgalys. 1999. Symposium entitled "Vicariance Biogeography Revisited - New Perspectives from Ferns, Bryophytes, Algae and Fungi." XVI International Botanical Congress, St. Louis, MO (co-organizer).
- Mueller, G. M., J. Lussenhop, et. al. 1999. Soil Ecology Society International Conference "Out of the Black Box: Ecological Lessons from the Underground." The Field Museum, Chicago (host and local organizing committee member).
- Mueller, G. M. 2000. Macrofungi as indicators of environmental stress. Research roundtable: Vegetation. Calumet Research Summit, Chicago. (invited participant)
- Halling, R. and G. Mueller. 2000. The macrofungi of Costa Rica: A collaborative study. NSF Biotic Surveys and Inventories Workshop, Orcas Island, WA.
- Moskovits, D. K., C. Fialkowski, G. M. Mueller, and T. A. Sullivan. 2000. Chicago Wilderness: a new force in urban conservation. Missouri Botanical Garden Fall Symposium, St. Louis, MO. (invited presenter).
- Mueller, G. M., M. Mata, L. Umaña, F. Fernandez, S. Huhndorf. 2001. Workshop on macrofungi and microfungi. National Biodiversity Institute (INBio), Costa Rica. (co-organizer)
- Halling, R. E., J. Carranza, and G. M. Mueller. 2001. Workshop for Central American students: Training on macrofungi. University of Costa Rica, San Pedro. (co-organizer)

- Mueller, G. M. 2002. Symposium entitled "Diversidad fúngica en Costa Rica" Latin American Congress of Mycology, Xalapa, Mexico. (organizer)
- Mueller, G. M., J. P. Schmit, and R. Courtecuisse. 2002. Symposium entitled "Fungal Biodiversity: What do we know? What can we predict?" International Mycological Congress, Oslo, Norway. (co-organizer).
- Mueller, G. M. 2002. Symposium entitled "A diversity of Fungal Diversity Studies" International Mycological Congress, Oslo, Norway. (organizer)
- Mueller, G. M., M. Mata, R. E. Halling, and J. Carranza. 2003. Workshop II for Central American students: Advance Training on Macrofungi. National Biodiversity Institute (INBio), Costa Rica (co-organizer).
- Carranza, J. and G. M. Mueller. 2005. Workshop and symposium on biodiversity of Central American macrofungi. University of Panama and Smithsonian Tropical Research Institute (co-organizer).
- Mueller, G. M. and H. T. Lumbsch, T. 2006. Symposium entitled "Phylogeography" International Mycological Congress, Cairns, Australia. (co-organizer).
- Mueller, G. M. 2009. Symposium on biogeography, International Conference on fungal evolution and Charles Darwin: from morphology to molecules, Pathumthani, Thailand (key note speaker and co-organizer).
- Hallingberg, N. and G. M. Mueller. 2009. Symposium entitled "Fungal Biogeography" Asian Mycological Congress, Taiwan (co-organizer).
- Franco, A.E. and G. M. Mueller. 2011. Pre-Congress Course "Basidiomycota," Latin American Mycological Congress, Guanacaste, Costa Rica.
- Mueller, G. M. 2011. Symposium on Fungal Conservation, Latin American Mycological Congress, San José, Costa Rica.
- Cannon, P. and G.M. Mueller. 2012. The Science of Fungal Conservation. Mycological Society of America Meeting, New Haven, CT.
- Mueller, G.M. and M. Krikorev. 2013. The Global Fungal Red List Initiative. International Society for Fungal Conservation Congress, Gokova, Turkey.
- Mueller, G.M. and A. Dahlberg. 2014. Assessing the conservation status of fungi - a practical workshop on Red-Listing Fungi using IUCN criteria. 10th International Mycological Congress, Bangkok, Thailand.
- Mueller, G.M. 2014. Fungal Conservation: Red Listing, Communicating, Taking Action. 1st Meeting of the Polish Mycological Society. Spala, Poland.
- Mueller, G.M. et al. 2014. Taxonomía, Ecología, y Conservación de Basidiomycota (Agaricomycetes). Precongress short course, VII Latin American Mycological Congress. Medellin, Colombia.
- Mueller, G.M. and A. Dahlberg. 2015. Global Fungal Red Listing Workshop, Ekenäs, Sweden (Co-Organizer)
- Mueller, G.M. and A. Dahlberg. 2016. North American Fungal Red Listing Workshop, Corvallis, Oregon (Co-Organizer).
- Mueller, G.M. et al. 2017. Taxonomía, Ecología, y Conservación de Basidiomycota (Agaricomycetes). Precongress short course, VIII Latin American Mycological Congress. Lima, Peru.
- Mueller, G.M. 2017. Fungal Conservation. Precongress short course, VIII Latin American Mycological Congress. Lima, Peru.
- Mueller, G.M. and A. Dahlberg. 2018. Red Listing Workshop. Oak Springs Foundation, Virginia. (Co-Organizer).
- Mueller, G.M., T. May, G. Furci, and Gryzenhout, M. 2018. Assessing the global conservation status of fungi. Pre-Congress workshop, IMC 11, Puerto Rico.
- Dahlberg, A. and G.M. Mueller. 2019. European Red List Fungal Workshop, Cambridge, UK.
- Ngadin A. and G.M. Mueller. 2019. 1st SE Asian Fungal Red List Workshop, Borneo, Malaysia.
- Buchanan, P. T. May, A. Dahlberg, and G.M. Mueller. 2019. Australasian Fungal Red List Workshop, Melbourne, Australia.

- Mueller, G.M., J. Westrip, J. Scott, G. Furci. 2020. South American Fungal Red List Workshop, 4-day long virtual event.
- Mueller, G. M. 2021. Fungal conservation pre-symposium workshop. Cloud Forest Fungi Symposium.
- Dahlber, A., J. Westrip, G.M. Mueller. 2021. European Fungal Red List Workshop 2. Virtual.
- Mueller, G.M., A. Ngadin, O. Raspe. 2021. 2nd Southeast Asian Fungal Red List Workshop. Virtual.
- Mueller, G.M. 2021. Collaborative Efforts to Conserve Fungi: A Case Study from Chile. IUCN World Conservation Congress. Marseille, France.
- Mueller, G.M. 2022. Conservación de Hongos. Argentine Mycological Congress. Virtual.