

CURRICULUM VITAE: Christy M. McCain

CU Museum of Natural History and Dept. of Ecology & Evolutionary Biology
Campus Box 265, University of Colorado, Boulder, CO 80309-0265
Office phone: (303) 735-1016; Email: christy.mccain@colorado.edu

EDUCATION:

PhD in Biology from University of Kansas (2003, honors)

BS in Wildlife Biology from Humboldt State University, CA
(1994; summa cum laude; & BA in Studio Art)

EMPLOYMENT:

- **Assistant Professor:** Department of Ecology & Evolutionary Biology, University of Colorado, Boulder (Jan. 2008–)
- **Curator of Vertebrates:** University of Colorado Natural History Museum, University of Colorado, Boulder (Jan. 2008–)
- Postdoctoral Fellow: University of New Mexico (Jan. 2007–Oct. 2007)
- Postdoctoral Fellow: National Center for Ecological Analysis & Synthesis, University of California, Santa Barbara (2004–2007)
- Teaching Assistant: Department of Biology, University of Kansas (2002–2003)
- Curatorial Assistant: Division of Mammals, KU Natural History Museum (2002)
- Natural Resources & Protected Areas Specialist: Peace Corps, Honduras (1994–96)

PUBLICATIONS:

Hawkins, B.A. **McCain, C.M.**, Davies, T.J., Ackerly, D.D., Anacker, B., Buckley, L.B., Cornell, H.V., Damschen, E.I., Grytnes, J.-V., Harrison, S.P., Kraft, N.J.B., and Stephens, P.R. In press. Multiple evolutionary pathways to climate-induced convergence of the global diversity gradients of birds and mammals. *Journal of Biogeography*.

McCain, C. M. and R. K. Colwell. 2011. Assessing the threat to montane biodiversity from discordant shifts in temperature and precipitation in a changing climate. *Ecology Letters* 14:1236–1245.

Cadena, C.D., Kozak, K.H., Gómez, J.P., Parra, J.L. **McCain, C.M.**, Bowie, R.C.K., Carnaval, A.C., Moritz, C., Rahbek, C., Roberts, T., Sanders, N., Schneider, C., VanDerWal, J., Zamudio, K., and Graham, C.H. 2011. Latitude, elevational climatic zonation, and speciation in New World vertebrates. *Proceedings of the Royal Society (B)*.

PUBLICATIONS (Cont.):

- Fierer, N., **McCain, C. M.**, Meir, P., Zimmerman, M., Rapp, J. M., Silman, M. R., and Knight, R. 2011. Microbial elevational diversity does not follow the biogeographical trends of plants and animals. *Ecology* 92: 797–804.
- McCain, C. M.** 2010. Global analysis of reptile elevational diversity. *Global Ecology and Biogeography* 19:541–553.
- McCain, C. M.**, and N. J. Sanders. 2010. Metabolic theory and elevational diversity of vertebrate ectotherms. *Ecology* 91:601–609.
- McCain, C. M.** and J. A. Grytnes. 2010. Elevational gradients in species richness. *Encyclopedia of Life Sciences*, John Wiley & Sons, Inc.; 13 pp. [Invited & Peer-reviewed; online 17 August 2010]
- Buckley, L.B., Davies, T.J., Ackerly, D.D., Kraft, N.J.B., Harrison, S.P., Anacker, B., Cornell, H.V., Damschen, E.I., Grytnes, J.-V., Hawkins, B.A. **McCain, C.M.**, Stephens, P.R. and Wiens, J.J. 2010. Mammalian climate-diversity gradients: An inevitable product of aggregating clades with distinct evolutionary histories? *Proceedings of the Royal Society of London* 277:2131–2138.
- Smith, F.A., Boyer, A.G., Brown, J.H., Costa, D.P., Dayan, T., Ernest, S.K.M., Evans, A.R., Fortelius, M., Gittleman, J.L., Hamilton, M.J., Harding, L.E., Lintulaakso, K., Lyons, S.K., **McCain, C.M.**, Okie, J.G., Saarinen, J.J., Sibly, R.M., Stephens, P.R., Theodor, J., and M.D. Uhen. 2010. The evolution of maximum body size in terrestrial mammals. *Science* 330:1216–1219.
- Wiens, J.J, Ackerly, D.D., Allen, A.P., Anacker, B.L., Buckley, L.B., Cornell, H.V., Damschen, E.I. Davies, T.J., Grytnes, J.-A., Harrison, S.P., Hawkins, B.A., Holt, R.D., **McCain, C.M.** & Stephens, P.R. 2010. Niche conservatism as an emerging principle in ecology and conservation biology. *Ecology Letters* 13:1310–1324.
- McCain, C. M.** 2009. Vertebrate range sizes indicate that mountains may be ‘higher’ in the tropics. *Ecology Letters* 12:550–560. (*Recommended in Faculty of 1000*)
- McCain, C. M.** 2009. Global analysis of bird elevational diversity. *Global Ecology and Biogeography* 18:346–360.
- Gotelli, N.J., Anderson, M.J., Arita, H.T., Chao, A., Colwell, R.K. Connolly, S.R. Currie, D.J. Dunn, R.R., Graves, G.R. Green, J.L., Grytnes, J.-A., Jiang, Y.-H., Jetz, W., Lyons, S.K., **McCain, C.M.**, Magurran, A.E., Rahbek, C., Rangel, T.F.L.V.B., Soberón, J., Webb, C.O., and M.R. Willig. 2009. Patterns and causes of species richness: a general simulation model for macroecology. *Ecology Letters* 12: 873–886.
- McCain, C. M.** 2007. Area and mammalian elevational diversity. *Ecology* 88:76–86.

PUBLICATIONS (Cont.):

- McCain, C. M.** 2007. Could temperature and water availability drive elevational diversity? A global case study for bats. *Global Ecology and Biogeography* 16: 1–13 & Cover.
- Dunn, R. R., **C. M. McCain**, and N. J. Sanders. 2007. When does diversity fit null model predictions? Scale and range size mediate the mid-domain effect. *Global Ecology and Biogeography* 16:305–312.
- Mittelbach, G.G., D. Schemske, H.V. Cornell, A.P. Allen, J. Brown, M. Bush, S.P. Harrison, A. Hurlbert, N. Knowlton, H.A. Lessios, **C. M. McCain**, A.R. McCune, L.A. McDade, M.A. McPeck, T.J. Near, T.D. Price, R.E. Ricklefs, K. Roy, D.F. Sax, D. Schluter, J. M. Sobel, and M. Turelli. 2007. Evolution and the latitudinal diversity gradient: speciation, extinction, and biogeography. *Ecology Letters* 10:315–331.
- Grytnes, J. A. and **C. M. McCain**. 2007. Elevational trends in biodiversity. Pages 1–8 in *Encyclopedia of Biodiversity* (S. Levin, editor), Elsevier, Inc. [Invited & Peer-reviewed].
- McCain, C. M.**, R. M. Timm, and M. Weksler. 2007. *Sigmodontomys aphasus*: Redescription, taxonomic comparison, and natural history. *Proceedings of the Biological Society of Washington* 120:117–136.
- McCain, C. M.** 2006. Do elevational range size, abundance, and body size patterns mirror those documented for geographic ranges? A case study using Costa Rican rodents. *Evolutionary Ecology Research* 8:435–454.
- McCain, C. M.** 2005. Elevational gradients in diversity of small mammals. *Ecology* 86:366–372.
- McCain, C. M.** 2004. The mid-domain effect applied to elevational gradients: species richness of small mammals in Costa Rica. *Journal of Biogeography* 31:19–31.
- McCain, C. M.** 2003. North American desert rodents: a test of the mid-domain effect in species richness. *Journal of Mammalogy* 84:967–980.
- McCain, C. M.** 2001. First evidence of giant anteaters (*Myrmecophaga tridactyla*) in Honduras. *Southwestern Naturalist* 46:252–254.
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- PUBLICATIONS SUBMITTED:**
- McCain, C. M.** and K. Bracy Knight. In revision. Is Rapoport's Rule pervasive on mountains?

PUBLICATIONS IN PROGRESS/IN REVISION:

McCain, C. M. Global meta-analysis of amphibian elevational diversity. For submission to *Global Ecology & Biogeography* (writing: data collection & analyses complete).

BOOK CHAPTERS (peer-reviewed through publisher):

Gaston, K. J., **McCain, C. M.**, and Lyons, S. K. Introduction to Abundance and Distributions. *Foundations of Macroecology* (eds. Brown, J. H. and Smith, F. A.). University of Chicago Press (under contract; estimated print length 3-4 pp.).

McCain, C. M. Introduction to *Geographic ranges of North American terrestrial mammals* (Anderson 1977). *Foundations of Macroecology* (eds. Brown, J. H. and Smith, F. A.). University of Chicago Press (under contract; estimated print length 1-2 pp.).

McCain, C. M. Introduction to *The latitudinal spans of seaweed species and their patterns of overlap* (Pielou 1977). *Foundations of Macroecology* (eds. Brown, J. H. and Smith, F. A.). University of Chicago Press (under contract; est. length 1-2 pp.).

McCain, C. M. Introduction to *On the relationship between abundance and distribution of species* (Brown 1984). *Foundations of Macroecology* (eds. Brown, J. H. and Smith, F. A.). University of Chicago Press (under contract; estimated print length 1-2 pp.).

GRANTS/FUNDING:***National Faculty Funding:***

National Science Foundation (NSF): Division of Environmental Biology, 2010–2013, **C. M. McCain** (sole-PI) “Diversity and climate change: using elevational gradients to uncover processes underlying mammalian species distributions;” **\$482,843**

National Center for Ecological Analysis and Synthesis (NCEAS; NSF-funded) Working Group Grant, 2008–2010, (H. Cornell, S. Harrison & **C. M. McCain**): **\$56,000**

University of Colorado Faculty Funding:

2009—CU Junior Faculty Development Award, 2009, **C. M. McCain** (sole-PI) “Using Mountains to Understand Biodiversity and Climate Change”: **\$5,000**

Post-doctoral Funding:

2007—Mountain Studies Institute Mini-Grant: \$2,500

2005—NCEAS Fellowship, 3rd Year extension: \$45,000

2004—Fulbright Grant: \$125,000 DKK (declined)

2004—NCEAS Fellowship (2 yrs): \$89,000

GRANTS/FUNDING (Cont.):***Graduate Funding:***

1999-2002—Graduate Research Funding: Total \$19,150 [KU Natural History Museum, E. R. Hall Mammalogy Fund Grant, Ida H. Hyde Foundation for Women, Endowment Donation, Tinker Grant, Rudkin Fund Grant, Organization of Tropical Studies]

1998–2002—M. & L. Self Graduate Fellowship (4 years): \$82,400 & tuition/fees

AWARDS/RECOGNITION:

Research Paper selected, reviewed, and recommended by *Faculty of 1000 Biology* (McCain 2009 *Ecology Letters*)

Research highlighted in: *Biogeography*, 4th edition. Sinauer Associates, Inc.

Research highlighted in: *Ecology, Environment and Resource Conservation—an integrated approach*. Anamaya Publishers, New Delhi, India.

Postdoctoral Fellowship: National Center for Ecological Analysis & Synthesis, UCSB (2004–2007)

Fulbright Fellowship: Center for Macroecology, Univ. Denmark, Copenhagen (2004–5; declined)

A.M. Jackson Student Paper Award, American Society of Mammalogists (2000)

M.A. & L. Self Graduate Fellowship: academic and leadership fellowship covering tuition, living expenses, and educational expenses, KU (1998–2002)

Honduran conservation work highlighted in *Women in Natural Resources* (1997) 18:36.

WORKING GROUP COLLABORATIONS:

Vast lands and variable data: systematic analyses to understand the patterns and processes of mammal decline (2010–2011). Organizer: Alex Knut. Australian Center for Ecological Analysis and Synthesis, University of Queensland. (**ACEAS**)

The role of niche conservatism in producing biodiversity gradients (2008–2010). Organizers: Howard Cornell, Susan Harrison and **Christy McCain**. National Center for Ecological Analysis and Synthesis, University of California Santa Barbara (**NCEAS**)

Montane diversity in space and time (2007–2010). Organizers: Catherine Graham, Kenneth Kozak and Carsten Rahbek. National Evolutionary Synthesis Center (**NESCent**)

Perspectives on the Origin and Conservation of Patagonia (2008). Organizers: Jack W. Sites, Jr. and Daniel G. Faith (**NESCent**)

Integrating macroecological pattern and processes across scales (2007–2009). Organizers: Felisa Smith, Kate Lyons and Morgan Ernest. (**NSF Research Coordination Network**)

WORKING GROUP COLLABORATIONS (Cont.):

Synthetic macroecological models of species diversity (2006–2008). Organizers: Nicholas Gotelli, Robert Colwell and Carsten Rahbek. (NCEAS)

Gradients in biodiversity and speciation (2005–2007). Organizers: Gary Mittelbach, Howard Cornell and Douglas Schemske. (NCEAS)

TEACHING EXPERIENCE:

Instructor: **Mammalogy**, Ecology & Evolutionary Biology (EBIO 4760/5760), CU Boulder.

- Fall 2009, 2011
- New Lab Manual Developed: 115 pp.

Instructor: **Field Methods in Zoology and Botany**, Museum and Field Studies (MUSM 4795/5795), cross-listed in Ecology & Evolutionary Biology (EBIO 4795/5795) and Environmental Studies (ENVS 4795), CU Boulder.

- Fall 2008, 2010
- Developed as New Class (2008)

Instructor: **Biogeography: Foundations & Frontiers**, Ecology & Evolutionary Biology, Graduate Seminar (EBIO 6100), Spring 2011

Instructor of **Independent Study**: Richard Parkhill, Undergraduate, Fall 2010; Emma Shubin, Undergraduate, Fall 2011

Guest Lecturer CU:

- Collections Management (Spring 2008, 2010, 2011),
- Conservation Biology (Fall 2009, 2011)
- EBIO Grad Seminar (Fall 2008, 2009, 2010, 2011)
- Introduction to Museum Studies (Fall 2010, 2011)

Guest Lecturer External:

- Diversity Gradients, **Biogeography**, Biology Dept., City College of New York (CUNY, SUNY). November 2006
- ANOVA, **Biostatistics**, University of Kansas (KU). Spring & Fall 2003

Graduate Teaching Assistant (KU 2002–2003), **Biostatistics; Biology Lab** for non-majors and Honors section

CU FTEP/LEAP Workshops:

Fall 2008: Well Argued? Well Written! Workshop, CU Faculty Teaching Excellence Program (**FTEP**), Dr. Elissa Guralnick

Spring 2008: Introductory Leadership Workshop, CU Leadership Education for Advancement and Promotion Program (**LEAP**)

MENTORING EXPERIENCE:*Postdoctoral Associates*

Sarah R. B. King, EBIO & CU Museum 2010–

*Current Graduate Student Committees***Chair:**

Kevin Bracy Knight, PhD EBIO 2011–

Tara Menne, Masters Museum & Field Studies (MFS) 2010–

Tim Szewczyk, Masters EBIO 2011–

Member:

Peter Erb, Masters EBIO 2008–

Joe Mihaljevic, PhD EBIO 2010–

Liesl Peterson-Erb, PhD EBIO 2008–

Evan Thomas, PhD EBIO 2011–

Jennifer Wilkening, PhD EBIO 2009–

Deborah Wagner, Masters MFS 2011–

Amanda Williams, Masters EBIO 2009–

*Past Student Committees**Ecology & Evolutionary Biology*

Carrie Graeff, Masters EBIO 2009-2011 (Committee)

Elizabeth Paulson, Masters EBIO 2009-2010

Sierra Stowell, Masters EBIO 2009-2011 (Committee)

Stower Beals, PhD EBIO Fall 2009

Hayden Gardner, Undergrad Honors EBIO 2010–2011 (Chair)

John Hackemer, Undergrad Honors EBIO 2010–2011 (Chair)

Natalie Alberg, Undergrad Honors EBIO 2008–2009 (Chair/Committee)

Justine Smith, Undergrad Honors EBIO 2009–2010 (Committee)

Museum & Field Studies

Heather Hamilton-Robson, Masters MFS 2008-2011 (Committee)

Jeff McClenahan, Masters MFS 2008–2009 (Committee)

Melissa Reed-Eckert, Masters MFS 2008–2009 (Committee)

Wendy Schultz, Masters MFS 2008–2009 (Committee)

PROFESSIONAL SERVICE:

Associate Editor at *Global Ecology and Biogeography* 2010–2013

International External PhD Reviewer for PhD student at Aarhus University, Department of Biological Science, Spring 2011

PROFESSIONAL SERVICE (Cont.):**Referee of Manuscripts for:**

Annals of Botany, American Naturalist, Diversity and Distributions, Ecography, Ecological Monographs, Ecology, Ecology Letters, Global Ecology and Biogeography, Journal of Biogeography, Journal of Ecology, Journal of Mammalogy, Journal of Tropical Ecology, Oikos, Nature, New Phytologist, Proceedings of the National Academy of Sciences, and Proceedings of the Royal Society: Biological Sciences.

Referee of Proposals for:

National Science Foundation:

External reviewer: 4

Panelist. 2010. *Population & Community Ecology Doctoral Dissertation Improvement Grant*

Panelist. 2012. *Population & Community Ecology Pre-proposals [pending]*

Society Memberships & National Service:

- *American Society of Mammalogists*
Board of Directors, 2011–
Education and Graduate Students Committee 2004–; Chair 2007–2010
Local Committee, UNM, 2007
- *American Association for the Advancement of Science*
- *Ecological Society of America*
- *International Biogeography Society*
- *Society for Conservation Biology*

CU Committee Service:***Department of Ecology & Evolutionary Biology (EBIO)***

Annual Merit Review Committee, 2011–2012

Graduate Committee, 2011–2012

Reappointment PUEC Committee for a lecturer in the Miramontes Arts & Sciences Program (MASP), Fall 2010

Executive Committee, 2009–2010

Ad-hoc Committee on EBIO Voting Procedures, 2008

Museum of Natural History

Collections Committee, Co-Chair 2008–

Annual Merit Review Committee, 2010–2011

Strategic Planning Committee, 2008–2010

SCIENTIFIC OUTREACH:

- 2011:** Mountain Diversity & Climate Change talks (3): Seniors in Biology at Fairview High School, Boulder, CO (Sept.; host: Dr. Paul Strode)
- 2008–present:** Participant and P.I. (2008) for GAMES: Girls at the Museum Exploring Science. An after-school science program at the CU Museum encouraging interest and excitement about science in preadolescent girls—primarily preadolescent girls from low-income, minority backgrounds—by direct interaction with female scientists.
- 2006:** Minority Outreach in the NCEAS program to increase participation by minorities in ecology. Biology Dept., City College of New York, Manhattan (a minority serving institution).
- 2004:** Participation in NCEAS program *Kids Do Ecology*

WORKSHOPS & PROFESSIONAL DEVELOPMENT:

- 2011:** Animal Diversity Web Teaching Workshop, University of Michigan, Dr. Phil Myers
- 2009:** Introduction to Structural Equation Modeling, ESA Workshop, Dr. James Grace
- 2006:** Multivariate Statistics with PRIMER Workshop, NCEAS, Dr. Marti J. Anderson.
- 1999:** Organization of Tropical Studies, Tropical Ecology Course, San José, Costa Rica

COMPUTER PROGRAMS:

- McCain, C. M. 2003. *Mid-Domain Null*. Spatially-constrained diversity simulation program. Publicly available (used by multiple researchers in 10 countries) for download with help files and sample data at <http://spot.colorado.edu/~mccainc/MidDomainNull.htm>.
- McCain, C. M. 2004. Diversity Simulator. General diversity simulation program.
- McCain, C. M. 2005. Sampling Error Simulator. A simulation program to assess various types of sampling error on diversity analyses.
- McCain, C. M. 2008. Rapoport's Rule Tests. A program to assess various methods of testing Rapoport's Rule, including Steven's Method, Midpoint Method, and a new quartile MDE analysis.

INVITED SEMINARS:

- McCain, C. M. February 2012. Rocky Mountain mammals & climate change. Rocky Mountain National Park. Host: Jeff Connor & Judy Visty [pending]
- McCain, C. M. April 2012. University of Michigan. Host: EEB Graduate students. [pending]
- McCain, C. M. and S. R. B. King. June 2011. Small mammal decline in North America: processes, hypothesis and evidence. Organized Symposium (Alex Knut, James Cook University, Australia): *Small mammal population decline; are patterns of change global or parochial?* Joint meeting of the Australian Mammal Society and the American Society of Mammalogists, Portland, OR.
- McCain, C. M. March 2011. Using mountains to understand biodiversity and climate change. Aarhus University, Denmark. Host: Jens-Christian Svenning

INVITED SEMINARS (Cont.):

- McCain, C. M. Feb. 2011. Using mountains to understand biodiversity and climate change. University of Nevada, Reno. Host: Marjorie Matocq.
- McCain, C. M. 2010. Using mountains to understand biodiversity and climate change. Department of Biology, Colorado State University, Fort Collins, CO. Host: Amy Angert.
- McCain, C. M. 2010. Using mountains to understand biodiversity and climate change. Department of Biology, Northern Colorado University, Greeley, CO. Host: Rick Adams.
- McCain, C. M. 2009. Mountains as natural experiments in biodiversity. Mountain Studies Institute and the Department of Biology, Fort Lewis College, CO. Host: Koren Nydick.
- McCain, C. M. 2009. Vertebrate range sizes indicate that mountains may be “higher” in the tropics. Ecology & Evolution Department, Stony Brook NY. Host: John J. Wiens.
- McCain, C. M. 2007. Using mountains as natural experiments to understand drivers of vertebrate biodiversity. Dept. of Biology, California State University, San Bernardino. Host: David Polcyn.
- McCain, C. M. 2007. Using mountains as natural experiments to understand drivers of vertebrate biodiversity. Dept. of Ecology and Evolutionary Biology & Colorado University Museum, University of Colorado, Boulder. Hosts: Robert Guralnick & Deane Bowers.
- McCain, C. M. 2007. Understanding general principles of communities using elevation. Dept. of Biology, Loyola Marymount University, Los Angeles. Host: Martin Ramirez.
- McCain, C. M. 2006. Using mountains across the globe as natural experiments to understand drivers of biodiversity. Biology Dept., City College of New York (CUNY, SUNY), Manhattan. Host: Robert P. Anderson.
- McCain, C. M. 2006. Lessons from mountains: understanding biodiversity. Brown-Smith Lab, Biology Dept., University of New Mexico, Albuquerque. Host: Felisa Smith.
- McCain, C. M. 2006. Could temperature and water availability drive elevational diversity? A global case study for bats. Kenagy Lab, Biology Dept., University of Washington, Seattle. Host: Corey Welch.
- McCain, C. M. 2006. Testing diversity theory using elevational gradients. Biology & Wildlife Dept., University of Alaska Fairbanks. Host: Mark Lindberg.
- McCain, C. M. 2005. Testing biodiversity theory using elevational gradients. Biology Dept., University of California, San Diego. Host: Walter Jetz.
- McCain, C. M. 2005. Testing biodiversity theory using elevational gradients. Biology Dept., Humboldt State University, Arcata, California. Host: Eric Jules.
- McCain, C. M. 2004. Latitudinal and elevational gradients in diversity of small mammals: patterns, models and causes. Wildlife Biology Dept., Humboldt State University, Arcata, California. Host: Graduate students.
- McCain, C. M. 2000. North American desert rodents: test of the bounded range model of species richness. **Plenary session**, Amer. Society of Mammalogists, Durham, NH.

CONFERENCE PRESENTATIONS:

- McCain, C. M. June 2011. Global climate-change models and mammalian diversity on mountains. Organized Symposium (Robert Anderson, **Christy McCain**): *New ecological and evolutionary perspectives in mammalian biogeography*. Joint meeting of

CONFERENCE PRESENTATIONS (Cont.):

- the Australian Mammal Society and the American Society of Mammalogists (ASM), Portland, OR.
- Bracy Knight, K. and McCain, C. M. 2011. Elevational Rapoport's rule: montane small mammals challenge its consistency. ASM, Portland, OR.
- Gardner, H. T. and McCain, C. M. 2011. The relationship between species diversity and environmental productivity: a study of small mammals in the Front Range of Colorado. ASM, Portland, OR.
- Hackemer, J. M. and McCain, C. M. 2011. The effect of reproductive status on movement patterns in *Peromyscus* species. ASM, Portland, OR.
- King, S. R. B and McCain, C. M. 2011. Differences in capture of harvest mice (*Reithrodontomys*) using Sherman and pitfall traps. ASM, Portland, OR.
- Parkhill, R. V. and McCain, C. M. 2011. The relationship of rodents and burying beetles in the Front Range of Colorado. ASM, Portland, OR.
- McCain, C. M. and Colwell, R. K. 2010. Montane vertebrates in a warming climate: Changes in precipitation amplify extinction risks. ASM. University of Wyoming, Laramie.
- McCain, C. M. and Colwell, R. K. 2010. Montane vertebrates in a warming climate: Changes in precipitation amplify extinction risks. Annual Meeting of the Ecological Society of America (ESA).
- McCain, C. M. 2009. Climate change on mountains. Annual Meeting of the Guild of Rocky Mountain Ecologists and Evolutionary Biologists (GREEBs). CU Mountain Research Station, Colorado.
- McCain, C. M. 2009. Janzen revisited: Are mountain passes physiologically higher in the tropics? International Conference of the International Biogeography Society. Merida, Mexico.
- McCain, C. M. 2008. Janzen revisited: Are mountain passes higher in the tropics? GREEBs. CU Mountain Research Station, Colorado.
- McCain, C. M. 2008. Testing Janzen's hypothesis "Are mountain passes higher in the tropics?" with vertebrates. ASM. South Dakota State University, Brookings.
- McCain, C. M. 2007. Testing Janzen's hypothesis "Are mountain passes higher in the tropics?" with vertebrates. Brown-Smith-Wolf Lab, Dept. of Biology, University of New Mexico.
- McCain, C. M. 2007. Global meta-analysis of elevational diversity of reptiles and amphibians. ESA. San Jose, CA.
- McCain, C. M. 2007. Are bats flying rats or furry birds? A global elevational comparison among birds, bats & rats. ASM. University of New Mexico, Albuquerque.
- McCain, C. M. 2006. Global meta-analysis of elevational diversity of birds. ESA, Memphis, TN.
- McCain, C. M. 2006. Area and spatial constraint cannot drive elevational diversity of mammals. ASM, University of Massachusetts, Amherst.
- Weksler, M., McCain, C. M., and Timm, R.M. 2006. Phylogenetic position of *Sigmodontomys aphantus* (Cricetidae: Sigmodontinae), an enigmatic rat from transandean forests. ASM, University of Massachusetts, Amherst.
- McCain, C. M. 2005. Elevational gradients in bat diversity: Is declining diversity the norm? ESA, Montreal, Canada.
- McCain, C. M. 2005. Elevational gradients in bat diversity: Is declining diversity the norm? ASM, Southwest Missouri State, Missouri.

CONFERENCE PRESENTATIONS (Cont.):

- McCain, C. M. 2004. Elevational gradients in small mammal diversity: mid-elevational peaks and effects of climate, latitude, and area. ESA, Portland, Oregon.
- McCain, C. M. 2004. Elevational range size-abundance patterns of Costa Rican rodents. ASM, Arcata, California.
- McCain, C. M. 2004. Ecological gradients in diversity of small mammals: patterns and models. National Center for Ecological Analysis and Synthesis, UCSB.
- McCain, C. M. 2003. Ecological gradients in diversity and abundance: a search for patterns and processes in small mammal communities. Dissertation defense: EEB Dept. Seminar Series. The University of Kansas, Lawrence, Kansas.
- McCain, C. M. 2003. Species richness patterns of small mammals along an elevational gradient in Costa Rica. ESA, Savannah, Georgia.
- McCain, C. M. 2003. A review of elevational gradients in species richness of small mammals: ubiquitous mid-elevational peaks. ASM, Lubbock, Texas.
- McCain, C. M. 2002. Elevational species richness transects: Do replicates matter? ASM, Lake Charles, Louisiana.
- McCain, C. M. 2001. Do elevational diversity patterns of small mammals show the mid-domain effect? ASM, Missoula, Montana.
- McCain, C. M. 2001. Elevational patterns of small mammals in Costa Rica. Natural History Museum and Biodiversity Research Center, The University of Kansas, KS.