

VITAE

Craig S. Tepper

EDUCATION & PROFESSIONAL EXPERIENCE

Education:

1974-1977 B.A. (6/77) Aquatic Biology
University of California, Santa Barbara

1977-1979 M.S. (12/79) Biology (Zoology)
San Diego State University

1984-1987 Ph.D. (12/87) Biology (Plant Pathology/Molecular Biology)
Utah State University

Ph.D. Dissertation: The identification and characterization of extracellular components of *Colletotrichum lindemuthianum* which display differential elicitor activity in bean.

Professional Employment:

1979-1982 Research Assistant: Studies on gene regulation in *Drosophila melanogaster*. Indiana University

1982-1987 Research Technician: Molecular interactions between plants and microbes. Utah State University

1987-1989 Postdoctoral Fellow: Plant-microbe interactions. Utah State University

1989-1995 Assistant Professor of Biology: Cornell College

1995-1996 Visiting Research Scientist: National Cancer Institute
Bethesda, MD (sabbatical)

1996-2002 Associate Professor of Biology: Cornell College (Chair – 1996-2000)

2002-Present Professor of Biology: Cornell College (Chair - 2007-2010)

2007--2010 Ringer Distinguished Professor of Biology

COLLEGE ACTIVITIES

Teaching:

Topics (BIO 108) - Biotechnology
Foundations: Cell Biology (BIO 141)
Cell & Molecular Biology (BIO 205)
Advanced Molecular Biology (BIO 305)
Developmental Biology (BIO 313)
Genetics (BIO 315)
Biological Problems (BIO/BMB 485)

Current Program Advising:

Biochemistry and Molecular Biology Program Director
Pre-Medical Advisor

College Committee Service:

- Computer Committee (1990-1992)
 - Budget Subcommittee
- Academic Affairs (1992-1994)
 - Academic Standing Subcommittee
- Learning Skills Advisory Committee (1991-1994)
- Committee on Committees (1994-1995)
- Academic Affairs (1996-1999)
 - Academic Programs (Chair 1997-1999)
- Quality of Student Life Ad Hoc Committee (1996-1997)
- Teaching and Learning Ad Hoc Committee (6-block teaching load, 1997-1998)
- English Writing Ad Hoc Committee (changing the ENG 111 requirement, 1998-1999)
- Administration Committee (2000-03)
 - Reappointment, Tenure, and Promotion Subcommittee
- Faculty Development Advisory Committee (2004-2007)
- Chair, Appeals Board (2004-2006)
- Ad Hoc Committee on Curricular Enhancement (2005-2006)
- HHMI Ad Hoc Committee (2005-2009)
- Administration Committee (2006-2009)
 - Reappointment, Tenure and Promotion Subcommittee
- Health Professional Committee (2005-present)
- International and Off Campus Studies Oversight Committee (2010-2016, 2018)
- Academic Affairs (2011-2013)
 - Academic Regulations Subcommittee (Interim Chair 2011-12)
- Dimensions Steering Committee (2007-2011; 2013- present)
- Appeals Board - Alternate (2013-2014)

- Student Life-Chair 2014-2016
- Admissions Committee-Chair 2017-18
- Faculty Council 2017-18

Student Club Advising:

- Rho Zeta Omicron(1999-2014)
- Beta Psi Eta (2014-2017)
- Colleges Against Cancer Living & Learning Community (2006)

Search Committees:

- Learning Skills Director Search (1991)
- Music Faculty Search (1994)
- Biology Faculty Search (1995)
- Biology Faculty Search (1996)
- Media Director Search (1997)
- Chair - Biology Faculty Search (1998)
- Chair - Biology Sabbatical Search (2000)
- English Faculty Search (2001)
- English Faculty Search (2002)
- Economics and Business Search (2004)
- Biology Sabbatical Search (2006)
- Co-Chair BMB Faculty Search (2007-08)
- Anthropology Faculty Search (2008)
- Dean Search Committee (2009-2010)
- Dimensions' Coordinator Search Committee (2009,2016)
- Chair Biology Faculty Search (2009-10)
- President Search Committee (2010)
- Director of Facilities Services (2011)
- Coordinator for International & Off-Campus Studies (2012, 2013 & 2015)
- Biology Faculty Search (2014)
- Anthropology Faculty Search (2015)
- STEM Coordinator (2017)
- BMB Faculty Search (2018)

Additional College Service:

- Cornell Commencement Speaker – 1993 & 2013
- Department of Biology – Chair 1996-2000 & 2007-2010
- Admissions - Numerous Preview Days and Panels
- New Student Orientation
- 50th Alumni Weekend Faculty Lecture (The Search for Immortality) 1997
- Speaker at the opening faculty conference (Illinois College) – Peer Review – 2001

- Homecoming Alumni Talk – 2004 & 2005
- Block Buster Lecture 2006-2014
- Conversations about Teaching Series 11/06
- Global Vistas 3/07 “Marine Biology at Cornell? In February?”
- HHMI Grant 1995, 1999 & 2007
- Goldwater Scholarship Faculty Representative 2006-2013
- Alternative Spring Break – Faculty Advisor 2014, 2015, 2018
- Cornell m Research Institute (CSRI) Faculty Director 2017-present

PROFESSIONAL ACTIVITIES

Ongoing Research Projects:

- Phenotypic Plasticity in the Fire Coral *Millepora*
- Endosymbiosis between *Millepora* and *Symbiodinium*
- Endosymbiosis between intertidal nerite gastropods and *Symbiodinium*
- Species Identification of Burmese Flying Foxes Using Non-Invasive Molecular Techniques

Abstracts and Presentations with Cornell Undergraduates (Tepper Research Lab):

(* Indicates Cornell student author)

- Buman*, D., Moyer*, M, Anderson, A.J. and Tepper, C.S. 1991. Molecular basis of plant defense strategies. Fifth Annual Life Sciences Symposium, Iowa State University.
- Ostovar*, H. and Tepper, C. 1992. Phylogenetic analysis of several species of sunflower (*Helianthus*) using restriction fragment length polymorphisms. ACM Minority Students and Academic Careers Workshop.
- Meyers*, J., Sullivan, P., Anderson, A. and Tepper, C. 1993. Intercellular signaling and plant defense gene activation. Iowa Academy of Science.
- Rashid*, M. and Tepper, C. 1993. Isolation of RNA from Incubated Red Kidney Bean Tissue for Cloning of the Catalase Gene. ACM Minority Students and Academic Careers Workshop.
- Nulsen*, C. and Tepper, C. 1993. Hydrolytic Enzyme Response in *Phaseolus vulgaris*. ACM Minority Students and Academic Careers Workshop.
- Couch*, S., McClary*, K., Nulsen*, C. and Tepper, C. 1994. The Role of H₂O₂ in Plant Defense Gene Activation. Iowa Academy of Science.
- Huynh*, B. and Tepper, C. 1994. Effects of Activated Oxygen Species on Plant Defense Mechanisms. ACM Minority Students and Academic Careers Workshop.
- Freeman*, L. and Tepper, C. 1995. The Search for the Catalase Gene. ACM Minority Students and Academic Careers Workshop.
- Brannan*, J., Craici*, A. Freeman*, L. Johnson*, B. Messer*, J. Stec*, M., Renaud*, S. and Tepper, C. 1997. Controlling the Radicals: The Search for the Plant Enzyme Catalase. Cornell College Student Symposium.
- Freeman*, L. and Tepper, C. 1997. Controlling the Radicals: The Search for the Plant Enzyme Catalase. ACM Minority Students and Academic Careers Workshop.
- Brannan*, J., Christensen*, K., Freeman*, L., Lenarz*, C. and Tepper, C. 1998. The Search for Catalase. Cornell College Student Symposium

- Brannan*, J., Craici*, A., Christensen*, K., Lenarz*, C. and Tepper, C. 1998 The Role of Catalase in Plant Defense. Annual Life Sciences Symposium on Enzymology, Iowa State University
- Brannan*, J. and Tepper, C. 1998. The Role of Catalase in Plant Defense. R.J. McElroy Student/Faculty Research Symposium.
- Christensen*, K. and Tepper, C. 1998 Hydrogen Peroxide, Catalase, and Plant Defense. Argonne Symposium for Undergraduates in Science, Engineering and Mathematics.
- Christensen*, K. and Tepper, C. 1999 Cloning at Cornell. Cornell College Student Symposium
- Rippel*, N. and Tepper, C. 1999 Plants Have Mitochondria?!?! Cornell College Student Symposium.
- Christensen*, K. and Tepper, C. 1999 Hydrogen Peroxide, Catalase, and Plant Defense. R.J. McElroy Student/Faculty Research Symposium.
- Farley*, J. and Tepper, C. 1999 Using Plant Transformation to Understand Plant Defense. ACM Minority Students and Academic Careers Workshop.
- She*, K. and Tepper, C. 1999 The Search for Catalase. ACM Minority Students and Academic Careers Workshop.
- Farley*, J., She*, K., Strovas*, T., Tompkins*, V. and Tepper, C. 2000 Insertion of a putative Catalase cDNA into the Binary Vector pAS 2023. Cornell College Student Symposium.
- Phe*, S. and Tepper, C. 2000. Using Agrobacterium and GUS to Understand Plant Defense. ACM Minority Students and Academic Careers Workshop.
- Farley*, J. and Tepper, C. 2000. Insertion of a Catalase cDNA into Binary Vector pAS 2023. R.J. McElroy Student/Faculty Research Symposium.
- Bertelsen*, M., Bunde*, J., Lindbloom*, J., Lindgren*, J., Reisdorff*, R., Reiter*, J., Schneider*, S., and Tepper, C. 2001. DNA Fingerprint Analysis of Fire Coral in San Salvador, Bahamas. Cornell College Student Symposium.
- Gerber*, A., Phe*, S. and Tepper, C. 2001 The Role of Catalase in Plant Defense. Cornell College Student Symposium.
- Cauley*, M. and Tepper, C. 2001. DNA Fingerprinting of Fire Coral. ACM Minority Students and Academic Careers Workshop.
- Phe*, S., Gerber*, A. and Tepper, C. 2001. Determining the Role of Catalase in Plant Defense. R.J. McElroy Student/Faculty Research Symposium.
- Bertelsen*, M. and Tepper, C. 2001. DNA Fingerprint Analysis of *Millepora* Species. St. Mary's University Undergraduate Research Symposium in Biology.
- Leonard*, J., Cauley*, M., Greenstein, B. and Tepper, C. 2002. Morphometry and Genetics of *Millepora* Collected at San Salvador Island, Bahamas. The Geological Society of America Meetings.
- Bain*, A and Tepper, C. 2002. Understanding Plant Defense. Cornell College Student Symposium.
- Burnight*, E. Cardon, J. and Tepper, C. 2002. Analysis of Cytochrome Oxidase: A New Cell and Molecular Biology Lab. Cornell College Student Symposium.
- Cauley*, M. and Tepper, C. 2002. DNA Fingerprint Analysis of Fire Coral. Cornell College Student Symposium.
- Kuehner*, J., McCollum, S.A., and Tepper, C. 2002. Isolation and Identification of Plasticity Genes in Amphibians. Cornell College Student Symposium.
- Cauley*, M. and Tepper, C. 2002 RAPD DNA Fingerprinting Analysis of Fire Coral. R.J. McElroy Student/Faculty Research Symposium.
- Kuehner*, J. McCollum, S.A. and Tepper, C. 2002. Isolation and Identification of Plasticity

- Genes in Amphibians. TriBeta District Convention at Bethel College.
- Lathrop*, M., McCollum, A. and Tepper, C. 2003. Is there a Genetic Component to Phenotypic Plasticity? Cornell College Student Symposium
 - Sjogren*, C., Artemakis*, C. and Tepper, C. 2003. Genetic Analysis of the Nerite Snail Complex using Random Amplified Polymorphic DNA (RAPD). Cornell College Student Symposium
 - Waldrop*, M and Tepper, C. 2003. Taxonomic Classification of Fire Coral by AFLP Analysis. Cornell College Student Symposium.
 - Sjogren*, C., Artemakis*, C. and Tepper, C. 2003. DNA Fingerprinting of the Nerite Snail Complex of San Salvador, Bahamas using Random Amplified Polymorphic DNA (RAPD) Analysis. Journal of the Minnesota Academy of Science. 67:48
 - Lathrop*, M., Kuehner*, J., McCollum, A. and Tepper, C. 2003. Is there a Genetic Component to Phenotypic Plasticity? R.J. McElroy Student/Faculty Research Symposium.
 - Lynch*, E. and Tepper, C. 2004. DNA Fingerprinting of the Oreaster Species Complex of San Salvador, Bahamas Using Amplified Fragment Length Polymorphism (AFLP) Analysis. Cornell College Student Symposium
 - Waldrop*, M. and Tepper, C. 2004. Genetic Analysis of Fire Coral. Cornell College Student Symposium
 - Lynch*, E. and Tepper, C. 2004. A Morphological Analysis of Various Color Morphologies of the Sea Star, *Oreaster reticulatus*. Journal of the Minnesota Academy of Science. 68:30.
 - Waldrop*, M. and Tepper, C. 2004. Reef Distribution and Genetic Analysis of Fire Coral. R.J. McElroy Student/Faculty Research Symposium.
 - Fettkether*, L. Ruter*, B. and Tepper, C. 2005. Isolation of Genes Responsible for Phenotypic Plasticity in the Gray Tree Frog, *Hyla versicolor*. 117th Annual Meeting of the Iowa Academy of Science. p24
 - Ruter*, B. Fettkether*, L. and Tepper, C. 2005. Isolation of Genes Responsible for Phenotypic Plasticity in the Gray Tree Frog, *Hyla versicolor*. Cornell College Student Symposium.
 - Fettkether*, L. Ruter*, B. and Tepper, C. 2005. Isolation of Genes Responsible for Phenotypic Plasticity in the Gray Tree Frog, *Hyla versicolor*. R.J. McElroy Student/Faculty Research Symposium.
 - Bowen*, D. and Tepper, C. 2006. *Millepora*: Speciation or Phenotypic Plasticity? Cornell College Student Symposium
 - Ruter*, B., Kaperick*, H. and Tepper, C. 2006. In Search of Genes responsible for Phenotypic Plasticity in Tadpoles. Cornell College Student Symposium
 - Bowen*, D. and Tepper, C. 2006. *Millepora*: Speciation or Phenotypic Plasticity? R.J. McElroy Student/Faculty Research Symposium.
 - Elledge*, H, Black, R. and Tepper, C. 2007. Decoding the Mystery of Fire Corals of the Bahamas. Cornell College Student Symposium.
 - McCulley*, A., Roth*, M. and Tepper, C. 2007. Mine's Bigger than Yours: Exploring Phenotypic Plasticity in *Hyla versicolor* tadpole tails due to predation. Cornell College Student Symposium..
 - Roth*, M., McCulley*, A. and Tepper, C. 2007. Mine's Bigger than Yours: Exploring Phenotypic Plasticity in *Hyla versicolor* tadpole tails due to predation. R.J. McElroy Student/Faculty Research Symposium.
 - Lehr*, P. Friend*, D. Brachova*, P., Greenstein, B. Black, B. and Tepper, C. 2007. Speciation in the Millepore Complex: What Constitutes a Species? University of Iowa Molecular and Cellular Biology Retreat.

- Squires, L. Lehr*, P., Brachova*, P., Black, B., Tepper, C., Greenstein, B. and Friend*, D 2008. Speciation in the Millepore Complex: What Constitutes a Species? 111th Annual Meeting of the Texas Academy of Science. 117:63-64.
- Lehr*, P. Brachova*, P. Friend*, D. Greenstein, B. Black, B. and Tepper, C. 2008. Speciation in the Millepore Complex: What Constitutes a Species? Cornell College Student Symposium.
- Hay*, C. Reichel*, A. Greenstein, B. Black, B. and Tepper, C. 2009. Speciation in Fire Corals: What constitutes a Species? Cornell College Student Symposium.
- Handke*, C and Tepper, C. 2009 Searching for Genes that Control Phenotypic Plasticity in Amphibians. Cornell College Student Symposium.
- Reichel*, A. Hay*, C. and Tepper, C. 2009. Speciation of *Millepora alcicornis* and *Millepora complanata* R.J. McElroy Student/Faculty Research Symposium.
- Tepper, C. Brachova*, P. Hay*, C. Greenstein, B. and Black, B. 2009 Speciation in the Millepore Complex: What Constitutes a Species? 13th Symposium on the Natural History of the Bahamas. p19.
- Hay*, C. Leopold*, M. Mon*, A. and Tepper, C. 2010. Are Symbionts Better Taxonomists than Scientists? Cornell College Student Symposium.
- Leopold*, M. and Tepper, C. 2010. Are Symbionts Better Taxonomists than Scientists? R.J. McElroy Student/Faculty Research Symposium.
- Gaynor*, S. Mead*, E. and Tepper, C. 2011 Can Symbionts Be Used To Understand Coral Evolution? Cornell College Student Symposium
- Gaynor*, S. Mead*, E. and Tepper, C. 2011 Can Symbionts Be Used To Understand Coral Evolution? 14th Symposium on the Natural History of the Bahamas. p9-10.
- Tepper, C. Gaynor*, S. and Chang, J. 2011. Cryptic Speciation or Intragenomic Variation: Implications for the Millepores (Fire Coral). 14th Symposium on the Natural History of the Bahamas. p20.
- Gaynor*, S. Alleva*, B. and Tepper, C. 2012 Intra-genomic Variation in the Millepores. Cornell College Student Symposium.
- Alleva*, B. Gaynor*, S. and Tepper, C. 2012. Cryptic Species or Intra-genomic Variation? R.J. McElroy Student/Faculty Research Symposium.
- Fischer*, D. Croffitt*, N. and Tepper, C. 2013. Amplification parameters of three microsatellite loci in Queen Conch (*S. gigas*). Cornell College Student Symposium.
- Tepper, C. and Gaynor*, S. 2013. Concerted Evolution or rDNA Genes in the Millepores. 15th Symposium on the Natural History of the Bahamas. p16.
- Fischer*, D. Croffitt*, N. and Tepper, C. 2013. Characterization of Microsatellite Markers for the Queen Conch (*Strombus gigas*). R.J. McElroy Student/Faculty Research Symposium.
- Bou Karim*, Y. Brown*, A. and Tepper, C. 2014. Are Cryptic Millepore Species Prevalent in the Caribbean? Cornell College Student Symposium.
- Brown*, A. and Tepper, C. 2014. Are Cryptic Millepore Species Prevalent in the Caribbean? R.J. McElroy Student/Faculty Research Symposium.
- Reyes*, S. Rueth*, M. and Tepper, C. 2015. An Examination of the Millepore-Symbiodinium Relationship using Quantitative Polymerase Chain Reaction (qPCR). Cornell College Student Symposium.
- Tepper, C. and Christie-Pope, B. 2015. *Millepora*: An Exploration of Symbiosis and Defense. First Joint Natural History and Geology Conference. p28-29.

- Samayoa*, A. and Tepper, C. 2016. Examining the Symbioses between *Millepora* and *Symbiodinium* at Two Thermally Different Locations. Cornell College Student Symposium.
- Santiago-Rivera*, G. Place*, A. Miller*, W. Li, J. and Tepper, C. 2017. Helping Coral Beat the Heat. Cornell College Student Symposium.
- Leimbach*, A and Tepper, C. 2018. Can Coral Beat the Heat? Cornell College Student Symposium.
- Tamo*, M., Anderson*, L and Tepper, C. 2018 Symbiosis in Marine Gastropods: What are Photosynthetic Symbionts Doing in Shell-bearing Snails? Cornell College Student Symposium.
- Ritter*, R., Tepper, C. and Mildenstein, T. 2018. Extracting, Amplifying and Sequencing Pteropodidae DNA from Excrement Samples. Cornell College Student Symposium.
- Castro*, D., Ritter*, R. Tepper C. and Mildenstein T. 2018. Species Identification of Burmese Flying Foxes Using Non-Invasive Molecular Techniques. 4th Southeast Asia Bat Conference.

Cornell College Symposium Abstracts – Sponsoring Faculty Member:

- Kirkpatrick*, B. 2002. A Comprehensive Study on Juvenile and Adult Yellow-eyed Penguins at Papanui Beach in New Zealand. Cornell College Student Symposium.
- Weber*, C. and King, G. 2004. Observations on Microbial CO-Oxidation in Marine Systems: Dynamics of CO Oxidizers. Cornell College Student Symposium.
- Mason*, A. 2005. Dissecting the Replication Protein A-DNA Interface. Cornell College Student Symposium.
- Bilderback*, P. 2006. The Role of the Ubiquitin-Proteasome System in Cell Senescence Cornell College Student Symposium.
- Bowen*, D. 2007. Genetics and Statistics: My Internship at TGen. Cornell College Student Symposium.
- Welder*, J. 2007. Determination of N-acetylcysteine in Hemodialysis Patients using High Performance Liquid Chromatography. Cornell College Student Symposium.
- Walker*, B. 2007. Improving Cancer Detection. Cornell College Student Symposium.
- Kollman*, R. 2007. Endophytic Fungi: PCR Identification of Two Fungal Insecticides Grown within Plants. Cornell College Student Symposium.
- Ward*, K. 2008. Serum Opacity Factor (SOF) Forms Cardioprotective Products from HDL via Rate-Limiting Apo A-I Desorption. Cornell College Student Symposium.
- Pontarelli*, K. 2009 Evaluation of the contribution of a genetic abnormality to Autism. Cornell College Student Symposium.
- Batson*, T. 2009 Mitochondrial DNA Extraction for Formalin-Fixed Human Post-Mortem Liver Tissue. Cornell College Student Symposium.
- Gierach*, K. 2010 Control Mechanisms of ELF4 Expression in CD8⁺ T-cells. Cornell College Student Symposium.
- So*, S-Y 2010 Lighting up the cell: A new way to measure cell membrane potential. Cornell College Student Symposium.
- Witek*, E. 2010. Targeting Oncolytic Adenovirus. Cornell College Student Symposium.
- Lee*, Y. 2011. Does p21^{WAF/Cip1} itself have an Ability Cure Cancer?. Cornell College Student Symposium.

- Klauer*, N. 2011 Spreading Depression, a Model of Migraine, May Trigger Demyelination via TNF- alpha ROS Production. Cornell College Student Symposium.
- Schultz*, A. 2011. Methods of Obtaining Prosthetic Length and Alignment and their Effectiveness. Cornell College Student Symposium.
- Johnson*, A. et al. 2012. Phosphorylation of the $\alpha 7$ Subunit of the Ubiquitin Proteasome System: A Possible Mechanism for Decreased Proteasome Activity in Human Heart Failure. Cornell College Student Symposium
- Davis*, M. et al. 2012. A Mouse Diversity Panel Approach Improves Understanding of Clinical DB289-Related Renal Toxicity. Cornell College Student Symposium.
- Zabner*, D. et al. 2012. The Role of PLZF and Cullin-3 in NKT cells. Cornell College Student Symposium.
- Alieva*, A. 2012 Mission for Vision in Uzbekistan. Cornell College Student Symposium.
- Smebak*, L. Thomas, V. Ryan, K. Shuldiner, A and Maitland, M. 2013. Development of Angiopoietin2 as a Biomarker for Pulmonary Hypertension. Cornell College Student Symposium.
- Fischer*, D. and Spies, M. 2014. RAD52 truncations may provide insight into a more holistic structure of RAD52, a potential cancer drug target. Cornell College Student Symposium.
- Penalva*, A. 2015. Identification of Novel Interacting Partners of Tumor Suppressing Kinase LATS1. Cornell College Student Symposium.
- Kohl*, A. 2015. What Do You Do When Life Gives You Lemons? Cornell College Student Symposium.
- Calhoun*, S. 2016. Active vs. Nutritional Vitamin D Supplementation for Patients with Stage IIIB to IV Chronic Kidney Disease and its effect on Inflammatory Protein Response and Risk of Cardiovascular Disease. Cornell College Student Symposium.
- Ralston*, C and Herrera, J. 2017. Operation Walk: The Story of the Honduran People. Cornell College Student Symposium.
- Ginell*, G. Amarasinghe, G. Basler, C. Keefe L. and Leung D. 2017. Structural Studies of Ebola Viral Homolog Encoded by Microbats. College Student Symposium.
- Davis*, J. 2018. Vascular Correlates of Depression. Cornell College Student Symposium.

Publications:

(* Indicates Cornell student author)

- Tepper, C.S., Richmond, R.C., Terry, A. and Senior, A. 1982. Studies of esterase 6 in *Drosophila melanogaster*. XI. Modification of esterase 6 activity by unlinked genes. Genetical Research 40:109-125.
- Mane, S.D., Tepper, C.S. and Richmond, R.C. 1983. Purification and characterization of esterase 6, a polymorphic carboxylesterase of *Drosophila melanogaster*. Biochemical Genetics 21:1019-1040.
- Richmond, R.C. and Tepper, C.S. 1983. Genetic and hormonal regulation of esterase 6 in male *Drosophila melanogaster*. Current Topics in Biological and Medical Research. 9:91-106.
- Tepper, C.S., Terry, A.L., Holmes, J.E. and Richmond, R.C. 1984. Studies of esterase 6 in *Drosophila melanogaster*. XIV. Variation of esterase 6 levels controlled by unlinked genes in natural populations. Genetical Research 43:181-190.
- Stein, S.P., Tepper, C.S., Able, N.D. and Richmond, R.C. 1984. Studies of esterase 6 in *Drosophila melanogaster*. XVII. Synthesis occurs in the male reproductive tract (anterior ejaculatory duct) and is modulated by juvenile hormone. Insect Biochemistry 14:527-532.

- Tepper, C.S. and Anderson, A.J. 1984. The genetic basis of plant-pathogen interaction. *Phytopathology*. 74:1143-1145.
- Tepper, C.S. and Anderson, A.J. 1986. Two cultivars of bean display a differential response to extracellular components from *Colletotrichum lindemuthianum*. *Physiological and Molecular Plant Pathology* 29:411-420.
- Anderson, A.J., Habibzadedah-Tari, P. and Tepper, C.S. 1988. Molecular studies on the role of a root surface agglutinin in adherence and colonization by *Pseudomonas putida*. *Applied and Environmental Microbiology* 54:375-380.
- Tepper, C.S., Albert, F.G. and Anderson, A.J. 1989. Differential mRNA production in three cultivars of bean in response to elicitors from *Colletotrichum lindemuthianum*. *Physiological and Molecular Plant Pathology*. 34:85-98.
- Tepper, C.S. and Anderson, A.J. 1990. Interactions between pectic fragments and extracellular components from the fungal pathogen *Colletotrichum lindemuthianum*. *Physiological and Molecular Plant Pathology*. 36:147-158.
- Anderson, A.J., Rogers, K., Tepper, C.S., Blee, K. and Cardon, J. 1991. Timing of molecular events following elicitor treatment of plant cells. *Physiological and Molecular Plant Pathology*. 38:1-13.
- Squiers*, L., Hay*, C., Gorbach*, D., Friend*, D. Black, B., Greenstein, B., Strychar, K. and Tepper, C. 2011. Cryptic speciation: A mismatch between genetics and morphology in *Millepora*. *Proceedings of the 13th Symposium on the Natural History of the Bahamas*. 8-19.
- Tepper, C., Squiers*, L. Hay*, C. Gorbach*, D., Friend*, D. Black, B., Greenstein, B., Strychar, K. 2012. Cryptic Species: A Mismatch between Genetics and Morphology in *Millepora*. *Marine Sciences*. 2(5):57-65.
- Gaynor*, S., Hay*, C. and Tepper, C. 2013. Cryptic Species or Intragenomic Variation: Implications for the Millepores. *Proceedings of the 14th Symposium on the Natural History of the Bahamas*. 14: 13-25.
- Tepper, CS and Gaynor*, SC. 2015. Ribosomal internal transcribed spacer (ITS) DNA variation in *Millepora*. *Journal Marine Science Research & Development*. 5: 177-182.
- Samayoa*, A., Reyes*, S., Bou Karim*, Y., Roge-Jones*, L. Rueth*, M. and Tepper, C. 2017. Patterns of millepore-*Symbiodinium* associations at two Caribbean locations: San Salvador, The Bahamas and South Water Cay, Belize. *Proceedings of the 1st Joint Symposium on the Natural History and Geology of The Bahamas* 1: 59-70.

Edited Proceedings Volume

Proceedings of the 14th Symposium on the Natural History of the Bahamas. 2013. Edited by R. Shaklee and C. Tepper Gerace Research Centre, San Salvador, Bahamas.

Grant Funding for my Cornell Research Program:

(* Indicates Cornell student author)

- Tepper, C.S. (1990-1991). Molecular events in plant stress responses. Cornell College Faculty Development Grant (Student/Faculty Research). \$4,000.
- Tepper, C.S. and Christiansen, P. (1991-1992). Phylogenetic analysis of several species of sunflower (*Helianthus*) using RFLPs. Cornell College Faculty Development Grant (Student/Faculty Research). \$3,000.

- Tepper, C.S. (1992-1993). In-situ hybridization utilizing non-radioactive tags. Cornell College Faculty Development Grant (Student/Faculty Research). \$3,000.
- Ostovar*, H. and Tepper, C. (1992). Phylogenetic analysis of several prairie species of sunflower (*Helianthus*) using RFLP. ACM Minority Fellowship Program. (Student/Faculty Research) \$5,200.
- Tepper, C.S. (1992-1993). Molecular basis of plant defense strategies. Iowa Science Foundation. \$4,991.
- Tepper, C.S. (1992-1995). Molecular basis of plant defense strategies. NRI Competitive Grants/United States Department of Agriculture. \$49,539.
- Nulsen*, C. and Tepper, C. (1993). Hydrolytic enzyme response in *Phaseolus vulgaris*. ACM Minority Fellowship Program. (Student/Faculty Research). \$4,500.
- Rashid*, M. and Tepper, C. (1993). Cloning of DNA sequences encoding superoxide dismutase in *Phaseolus vulgaris*. ACM Minority Fellowship Program. (Student/Faculty Research). \$4,500.
- Tepper, C.S. (1993-1994). A Genetic Characterization of Race-Cultivar Specificity. Cornell College Faculty Development Grant (Student/Faculty Research). \$2,691.
- Tepper, C.S. (1994-1995). Is Hydrogen Peroxide the Answer to a Plant's Problems? Cornell College Faculty Development Grant (Student/Faculty Research). \$3,000.
- Huynh*, B. and Tepper, C. (1994). The Effects of Hydrogen Peroxide on *Phaseolus vulgaris* and Initiation of Defense. ACM Minority Fellowship Program. (Student/Faculty Research). \$4,500.
- McDermott, R. and Tepper, C.S. (1994) Giving Students the Tools: Active Learning in High School Science. The Greater Cedar Rapids Foundation. \$500.
- Christiansen, P.A. and Tepper, C.S. (1994-1995). A Molecular Analysis of Native Iowa Prairie Plants. Iowa Department of Transportation- Living Roadway Trust Fund. \$8,786.
- Freeman*, L. and Tepper, C.S. (1995). The Role of Catalase in Plant Defense ACM Minority Fellowship Program. (Student/ Faculty Research). \$4,500.
- Tepper, C.S. and Christiansen, P. (1995-1996). Utilizing Classical Plant Taxonomy and Molecular Biology to Rebuild Iowa's Prairies. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
- Freeman,* L. and Tepper, C.S. (1997). The Role of H₂O₂ in Plant Defense. ACM Minority Fellowship Program. (Student/Faculty Research). \$5,000.
- Brannan*, J. and Tepper, C. (1997-98). The Role of Catalase in Plant Defense. Iowa College Foundation/R.J. McElroy Student/Faculty Research Program \$2,000.
- Tepper, C. (1997-1998) Controlling the Radicals: The Search for Catalase. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
- She*, K. and Tepper, C. (1998). Can Catalase Modulate Plant Defense? ACM Minority Fellowship Program. (Student/Faculty Research) \$4,500.
- Christensen*, K. and Tepper, C. (1998-99). Hydrogen Peroxide, Catalase, and Plant Defense. Iowa College Foundation/R.J. McElroy Student/Faculty Research Program \$2,000.
- Tepper, C. (1998-1999) Is Catalase the Modulator for Plant Defense? Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
- Farley*, J. and Tepper, C. (1999-2000) Using Plant Transformation to Understand Plant Defense. Iowa College Foundation/R.J. McElroy Student/Faculty Research Program \$2,000
- Farley*, J. and Tepper, C. (1999) Developing a Plant Transformation System to Understand the Role of Catalase in Defense. ACM Minority Fellowship Program. (Student/Faculty

- Research) \$4,750.
- Tepper, C. (1999-2000) The Development of a Plant Transformation System in Order to Understand Plant Defense. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
 - Gerber*, A., Phe*, S. and Tepper, C. (2000-2001). Detection of Catalase Expression in Bean Tissue Using Non-Radioactive in situ Hybridization. Iowa College Foundation/R.J. McElroy student/Faculty Research Program-\$2,000.
 - Phe* S. and Tepper, C. (2000). Using Agrobacterium to Understand Plant Defense. ACM Minority Fellowship Program. (Student/Faculty Research) \$4,750
 - Tepper, C. (2000-2001) Detection of Catalase Expression in Bean Tissue using Non-Radioactive in situ Hybridization. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
 - Tepper, C. and Greenstein, B. (2000-2001) Discrimination between Species of the Hydrozoan *Millepora* using Morphologic and Genetic Analyses. Cornell College Faculty Development Grant. \$1,500.
 - Cauley*, M., Bain*, A. and Tepper, C. (2001-2002) DNA Fingerprint Analysis of Fire Coral. Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$2,000.
 - Cauley*, M. and Tepper, C. (2001) DNA Fingerprinting of the *Millepora* genus of Fire Coral. ACM Minority Fellowship Program. (Student/Faculty Research) \$4,750
 - Bertelsen*, M. and Tepper, C. (2001) Hydrozoan *Millepora* Species Discrimination Comparing Somatic Cell Fingerprint Analysis with on-site Gamete RAPD and AFLP Analysis. Beta Beta Beta Research Foundation. \$550
 - Tepper, C. (2001-02). Determining the Copy Number of the Cytochrome Oxidase Gene in the Mitochondria of Plants: A New Cell and Molecular Biology Lab. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,000.
 - Kuehner*, J. McCollum, A., and Tepper, C. (2001-02) Isolation and Identification of Plasticity Genes in Amphibians. Beta Beta Beta Research Foundation. \$900.
 - Tepper, C. (2002-2003) Campbell R. McConnell Fellowship (sabbatical leave). \$8,000.
 - Tepper, C. (2002-2003) Taxonomic Classification of Fire Coral by RAPD Analysis. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,500
 - Lathrop*, M. and Tepper, C. (2002-2003) The Genetics of Phenotype Plasticity in Amphibians. Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$1,750.
 - Sjogren*, C. and Tepper, C. (2002-03) DNA Fingerprinting of Nerite Snails in the Bahamas. Beta Beta Beta Research Foundation. \$300
 - Tepper, C. (2003-2004) Is there a Genetic Component to Phenotypic Plasticity? Cornell College Faculty Development Grant (Student/Faculty Research) \$3,500
 - Waldrop*, M. and Tepper, C. (2003-04) Hybridization in Fire Coral. Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$1,700.
 - Lynch*, E. and Tepper, C. (2003-04) AFLP Analysis of the *Oreaster* species complex of San Salvador, Bahamas. Beta Beta Beta Research Foundation. \$500
 - Tepper, C. (2004-2005) A Genetic Analysis of Fire Coral Using DNA Fingerprints. Cornell College Faculty Development Grant (Student/Faculty Research) \$3,500
 - Fettkether*, L. and Tepper, C. (2004-05) Isolation and Characterization of Plasticity Genes in Amphibians. Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$1,750.
 - Tepper, C. 2004 LI-COR Biosciences Genomics Match Fund Program-4300S Sequencer. \$25,000.

- Tepper, C (2005-2006) DNA Sequence Analysis of Genes that Control Phenotypic Plasticity in the Gray Tree Frog, *Hyla versicolor*. Cornell College Faculty Development Grant (Student/Faculty Research) \$4,000
- Tepper, C. (2005-06) *Millepora complanata* and *Millepora alcicornis*: Speciation or Phenotypic Plasticity? Cornell College Faculty Development Grant. \$1,500.
- Bowen*, D and Tepper, C. (2005-06) *Millepora*: Speciation or Phenotypic Plasticity? Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$1,930.
- Tepper, C. (2006) *Millepora complanata* and *Millepora alcicornis*: Speciation or Phenotypic Plasticity? Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Roth*, M. and Tepper, C. (2006-07) Isolation of Genes Responsible for Phenotypic plasticity in Amphibians. Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$2,000.
- Tepper, C. (2006) The Nature-Nurture Controversy: The Role Environment Plays in the Expression of Genotype and Phenotype. Cornell College Student/Faculty Dimensions Grant. \$4,000.
- Tepper, C. (2007) Speciation in the Millepore Complex: Exactly What Constitutes a Species? Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Tepper, C. (2008) What does it mean to be a species? An examination of genetic, morphological and environmental factors in the speciation of the hydrozoan coral, *Millepora*. Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Reichel*, A. and Tepper, C. (2008-09) What Constitutes a Species? Iowa College Foundation/R.J. McElroy Student/Faculty Research Program. \$2,000.
- Brachova*, P. and Tepper, C. (2009) Genetic Analysis of the *Millepora-Symbiodinium* Symbiosis. Gerace Research Centre Student Grants Program. \$1,700.
- Tepper, C. (2009) Are Endosymbionts Better Taxonomists than Scientists? Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Leopold*, M and Tepper, C. (2009-10) Are Endosymbionts Better Taxonomists than Scientists? Iowa College Foundation/R.J. McElroy student/Faculty Research Program. \$1,750.
- Tepper, C. (2010) Searching for Symbiont Specificity in Fire Coral. Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Gaynor*, S. and Tepper, C. (2011) Determining the Reliability of using ITS Regions to Understand the Phylogenetic Relationship of the Hydrozoan *Millepora*.. Gerace Research Centre Student Grants Program. \$1,700.
- Tepper, C. (2011) Exploring Concerted Evolution in the Millepore Corals. Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Alleva*, B. and Tepper, C. (2011-12) Concerted Evolution: Fact or Fiction. Iowa College Foundation/R.J. McElroy Student/Faculty Research Program. \$2,000.
- Tepper, C. (2012) Determination of Queen Conch Parentage Using Microsatellites. Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Fischer*, D. and Tepper, C. (2012-13) Parentage Assignment in Queen Conch. Iowa College Foundation/R.J. McElroy Student/Faculty Research Program. \$2,000.
- Tepper, C. (2013) Are Cryptic Millepore Species Prevalent in the Caribbean? Cornell College Faculty Development Grant (Student/Faculty Research) \$4500.
- Tepper, C. and Brown*, A. (2013-14). Are Cryptic Millepore Species Ubiquitous in the Caribbean? Iowa College Foundation/R.J. McElroy Student/Faculty Research Program.

\$2,000.

- Tepper, C. (2014) Millepore Phylogeny and Endosymbiont Specificity. Cornell College Faculty Development Grant (Student/Faculty Research) \$5500.
- Tepper, C. (2015). Diversity and Community Structure of Millepore-Dinoflagellate Symbiosis in Caribbean Reefs. Cornell Institute for Summer Research. \$7,000.
- Tepper, C. (2016) Patterns of millepore-*Symbiodinium* associations at two Caribbean locations: San Salvador, The Bahamas and South Water Cay, Belize. Campbell-McConnell Fellowship. Cornell College \$7,000.
- Tepper, C. (2016) Patterns of millepore-*Symbiodinium* associations at two Caribbean locations: San Salvador, The Bahamas and South Water Cay, Belize. Cornell Institute for Summer Research. \$11,200.
- Tepper, C. (2017) Symbiosis in two marine invertebrates. Cornell Institute for Summer Research. \$10,600.
- Tepper, C. (2018) Photosymbiosis in a marine shell-bearing snail: Is there an advantage? Cornell Institute for Summer Research. \$11,500.

Cornell College Honor Thesis

- Senior Honors Thesis in Biochemistry & Molecular Biology 2004. Carolyn Weber – Observations on Marine Microbial CO-Oxidation: CO Dynamics and Enrichment of CO-Oxidizers associated with Macroalgae. Chair of Honors Committee
- Senior Honors Thesis in Biochemistry & Molecular Biology 2005 Aaron Mason. Replication Protein A-DNA Interactions: Dissecting the DNA-Protein Interface. Chair of Honors Committee
- Senior Honors Thesis in Biochemistry & Molecular Biology 2012 Megan Dibbern Spreading Depression Preferentially Increases Oxidative Stress in Microglia and Astrocytes: Implications for Chronification of Migraine.

Selected Professional Activities:

- Presenter, five SIG lectures (1990, 1992, 1993, 1998, 2003 and 2008)
- Invited Speaker - “Strategies for Student Research” Associated Colleges of the Midwest Curriculum Workshops for Minority Concerns. Macalester College (1993)
- Moderator and Faculty Facilitator, Minority Students and Academic Careers Workshop. (1993-2001)
- Conference Organizer Minority Students and Academic Careers Workshop at Cornell College (1994 and 1999)
- Invited Speaker – Assessing Variability in Prairie Species using RFLPs. Ecotype Mini Conference. 1995
- Invited Seminar – Strategies in Plant Defense. National Cancer Institute. (1995)
- Invited Seminar – Stimulation of Transcription by Ultrabithorax. National Cancer Institute (1996)
- Invited Seminar – Teaching Biology at a Liberal Arts College. Iowa State University (1998)

- Invited Seminar – Teaching Biology at a Liberal Arts College. The University of Iowa (2000)
- Invited Seminar - Teaching Science at a Liberal Arts College. Molecular & Cellular Biology Program, University of Iowa. (2007)
- Conference Organizer - Molecular & Cellular Biology Program, University of Iowa and Cornell College Joint Retreat. (2007)
- Adjunct Professor - The Graduate Biology Program, Department of Physical and Life Sciences, Texas A & M University-Corpus Christi. – 2007-2011
- Attended the 11th International Coral Reef Symposium – Fort Lauderdale, FL July 2008.
- Presented a research talk at the 13th Symposium on the Natural History of the Bahamas – San Salvador, Bahamas June 2009
- Conference Co-Chair 14th Symposium on the Natural History of the Bahamas – San Salvador, Bahamas June 2011
- Editor of the Proceedings of the 14th Symposium on the Natural History of the Bahamas 2011-2012.
- Presented a research talk at the 14th Symposium on the Natural History of the Bahamas – San Salvador, Bahamas June 2011
- Research Review Committee – Gerace Research Centre, San Salvador, Bahamas. 2011-present.
- Invited Seminar-Can Coral Adapt to Increasing Sea Surface Temperatures? University of Northern Iowa. (November 2017).
- Invited Seminar- Symbioses in marine invertebrates: What are photosynthetic symbionts doing in shell-bearing gastropods? Roger Williams University (March 2018)
-

SELECTED COMMUNITY SERVICE

- Judge, Eastern Iowa Science and Engineering Fair. Cedar Rapids, IA (1990- present)
- High School Science Outreach – Using DNA for Forensic Analysis. (1993-present)
- Duke University Talent Identification Program Keynote Speaker – Heroes in Biology (1997 & 2001)
- College for Kids – DNA: It’s in your Genes. (2000-2001)
- Board of Directors – Planned Parenthood East Central Iowa (1999-2005)