

## SCOTT C. PEDERSEN

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#### **EDUCATION**

1993 Ph.D., University of Nebraska - Lincoln, School of Biological Sciences
 1988 M.A., University of Colorado - Boulder, Department of EPO-Biology
 1984 B.A., University of Colorado - Boulder, Department of EPO-Biology

#### PROFESSIONAL EXPERIENCE

1993+	Research Associate, Division of Zoology, University of Nebraska State Museum - Lincoln
2022	Professor Emeritus, Dept. of Biology & Microbiology, South Dakota State University
2014	Professor, Dept. of Biology & Microbiology & Adjunct, Dept. of Natural Resource Management
2004	Associate Professor, Department of Biology & Microbiology, South Dakota State University
1999	Assistant Professor, Department of Biology & Microbiology, South Dakota State University
'99-16	Curator, Division of Mammals, South Dakota State University
'97-99	University of Washington Burke Museum Research Associate, Division of Mammals.
1997	NIH Research Associate, Department of Orthodontics, University of Washington – Seattle
1994	NIDR Post-Doctoral Fellow, Department of Orthodontics, University of Washington - Seattle
1993	Assistant Professor, American University of the Caribbean - School of Medicine, Montserrat W.I.
'89-93	Technical Advisor: Totten Center for Biosystematic Technology, UNSM Morphometrics Lab
'88-93	Graduate Teaching Assistant: UNL, Human anatomy & General biology
'86-88	Graduate Teaching Assistant: CU-Boulder, Human anatomy
'85-86	University of Colorado Museum Graduate Curatorial Assistant, Zoological Collections

2007+ Research Associate, Division of Zoology, Museum of Texas Tech University – Lubbock

## **SPECIALIZED TEACHING & EXPERTISE**

Gross anatomy, vertebrate evolution & embryology

#### MANUSCRIPTS SUBMITTED OR IN PREPARATION

- Martín-Regalado N et al., Activity patterns in phyllostomid bats. Submitted: Revista Mexicana de Biodiversidad.
- Pedersen SC et al., Bats of Montserrat. Special Publications, Museum of Texas Tech University.
- Pedersen SC, ASM-N-2 Bat Missile America's first 'smart-bomb'. Schiffer Military History Publishers.

## PEER-REVIEWED PAPERS & BOOK CHAPTERS (n = 48)

- 2024 Pedersen SC et al., The scutulum and the pre-auricular aponeurosis in bats. Journal of Morphology, 285: e70006 https://doi.org/10.1002/imor.70006
- 2022 Martín-Regalado N, Pedersen SC, & Lavariega MC. Alopecia in bats. Acta Chiropterologica, 24:209-219.
- Hoffman JD, Kadlubar G, Pedersen SC, Larsen RJ, Larsen PA, Phillips CJ, Kwiecinski GG, and Genoways HH. Predictors of bat species richness within the Caribbean basin. Special Publications, Museum of Texas Tech University, 71:337-377
- 2018 Pedersen SC, Larsen PA, Westra SA, van Norren E, Overman W, Kwiecinksi GG. & Genoways HH. Bats of Sint Eustatius, Caribbean Netherlands. Occasional Papers, Museum of Texas Tech University, 353:1-24.
- 2018 Pedersen SC, Kwiecinski GG, Genoways HH, Larsen RJ, Larsen PA, Phillips CJ, & Baker RJ. Bats of St. Lucia, Lesser Antilles. Special Publications, Museum of Texas Tech University, 69:1-61.
- 2018 Kwiecinski GG, Pedersen SC, Genoways HH, Larsen PA, Larsen RJ, Hoffman JD, Springer F. Phillips CJ, & Baker RJ. Bats of St. Vincent, Lesser Antilles. Special Publications, Museum of Texas Tech University, 68:1-68.
- 2017 Romero V and Pedersen SC. A new abnormality record in bats: a teratological condition or skull trauma due to tooth avulsion in *Noctilio leporinus*? Mammalia, 82:494-499.
- 2017 Larsen RJ, Larsen PA, Phillips C, Genoways H, Kwiecinski G, Pedersen S, Phillips C, & Baker R. Patterns of morphological and molecular evolution in the Antillean tree bat, *Ardops nichollsi* (Chiroptera: Phyllostomidae). Occasional Papers, Museum of Texas Tech University, 345:1-28.
- He W, Pedersen S, Gupta A, Simmons J, & Müller R. Lancet dynamics in greater horseshoe bats, *Rhinolophus ferrumequinum*. PLoS One. 2015;10(4): e0121700

- 2013 Pedersen SC & Müller R. Noseleaves & nasal emission. 72-91p. in: Bat Evolution, Ecology, & Conservation. Springer Press.
- 2013 Adams RA & Pedersen SC. Co-editors: Bat Evolution, Ecology, & Conservation. Springer Press. 547p
- 2012 Pedersen SC, Popowics TE, Kwiecinski GG, & Knudsen DEB. Sublethal pathology in bats associated with stress and volcanic activity in Montserrat, West Indies. Journal Mammalogy, 93:1380-1392.
- Pedersen SC, Genoways HH, Kwiecinski GG, Larsen PA, & Larsen RJ. Biodiversity, biogeography, and conservation of bats in the Lesser Antilles. Pp. 62-73, 330, in Biodiversité insulaire: la flore, la faune et l'homme dans les Petites Antilles, eds. J.-L. Vernier and M. Burac. France: Schoelchers, Martinique, Direction de l'Environnement, de l'Aménagement et du Logement de Martinique et Université des Antilles et de la Guyane, 335 pp.
- 2012 Pedersen SC & Timm DW. Cephalometry & evolutionary constraint in bats. in: Evolutionary History of Bats: Fossils, Molecules & Morphology. (eds) G. Gunnell & N. Simmons, Cambridge University Press, pp. 470-499.
- Larsen RJ, Larsen PA, Genoways HH, Catzeflis FM, Geluso K, Kwiecinski GG, Pedersen SC, Simal F, & Baker RJ. Evolutionary history of Caribbean Myotis: with evidence of a 3rd L-A endemic. Mammalian Biology, 77:124-134.
- 2011 Larsen PA, Siles L, Pedersen SC, & Kwiecinski GG. A new species of *Micronycteris* from St. Vincent, Lesser Antilles. Mammalian Biology, 76:267-700.
- 2011 Genoways HH, Larsen RJ, Pedersen SC, Kwiecinski GG, & Larsen PA. (2012) Bats of Barbados. Chiroptera Neotropical, 17:963-988.
- 2010 Lindsay KC, Kwiecinski GG, Pedersen SC, Bacle J-P, & Genoways HH. First record of Ardops nichollsi from Antigua, Lesser Antilles. Mammalia, 74:93-95.
- 2010 Genoways HH, Kwiecinski GG, Larsen PA, Pedersen SC, Larsen RJ, Hoffman JD, de Silva M, Phillips CJ, & Baker RJ. Bats of the Grenadines, West Indies & placement of Koopman's line. Chiroptera Neotropical, 16:501-521.
- Pedersen SC, Kwiecinski GG, Larsen PA, Morton MN, Adams RA, Genoways HH, & Swier VJ. Bats of Montserrat Population fluctuation in response to hurricanes & volcanoes, pp. 302-340 in: Island bats: Ecology, Evolution & Conservation. (eds) Fleming & Racey. University of Chicago Press, Chicago. 549 pp.
- 2009 Morton MM & Pedersen SC. Mammals of Montserrat. In: Field guide to the Centre Hills. (ed.) Holiday. West Indies Publ.
- Pedersen SC, Young RP, Morton MN, & Masefield WP. Bats of the Centre Hills & Montserrat. In: A Biodiversity Assessment of the Centre Hills, Montserrat. Durrell Conservation Monograph #1 (ed.) Young. p. 130-138. Durrell Wildlife Conservation Trust.
- 2007 Pedersen SC, Larsen PA, Genoways HH, Morton MN, Lindsay KC, & Cindric J. Bats of Barbuda, Northern Lesser Antilles. Occasional Papers, Museum of Texas Tech University, 271:1-20.
- 2007 Larsen RJ, Boegler KA, Genoways HH, Masefield WP, Kirsch RA, & Pedersen SC. Mist netting bias, species accumulation curves, & rediscovery of two bats in Montserrat. Acta Chiropterologica, 9:423-435.
- Larsen PA, Hoofer SR, Bozeman MC, Pedersen SC, Genoways HH, Phillips CJ, Pumo DE, & Baker RJ. Phylogenetics & phylogeography of *A. jamaicensis* based on cyt-b DNA sequences. Journal Mammalogy, 88:712-727.
- 2007 Genoways HH, Pedersen SC, Phillips CJ, & Gordon LK. Bats from Anguilla, Northern Lesser Antilles. Occasional Papers, Museum of Texas Tech University, 270:1-12.
- Genoways HH, Pedersen SC, Larsen PA, Kwiecinski GG, & Huebschman JJ. Bats of St. Martin, French West Indies/St. Maarten, Netherlands Antilles. Mastologica Neotropica, 14(2):169-188.
- 2007 Genoways HH, Larsen PA, Pedersen SC, & Huebschman JJ. Bats of Saba, Northern Lesser Antilles. Acta Chiropterologica, 9:91-114.
- 2006 Pedersen SC, Genoways GG, Morton MN, Swier VJ, Larsen PA, Lindsay KC, Adams RA, & Appino JD. Bats of Antigua, Northern Lesser Antilles Occasional Papers, Museum of Texas Tech University, 249:1-18.
- 2006 Larsen PA, Genoways HH, & Pedersen SC. New Records of Bats from Saint Barthélemy (St. Barts), French West Indies. Mammalia, 70:321-325.
- Herring SW & Pedersen SC. Bone strain in infant mammals & the orientation of bone growth. pp. 91-98. In: Biological Mechanisms of Tooth Eruption, Resorption & Movement, ed. Davidovitch Z, et al., Printing House, Bangkok, Thailand,
- 2005 Pedersen SC, Genoways HH, Morton MN, Kwiecinski GG, & Courts SE. Bats from St. Kitts, Northern Lesser Antilles. Caribbean Journal Science, 41:4:744-760.
- Herring SW, Pedersen SC, & Huang X. Ontogeny of bone strain: the zygomatic arch in pigs. Journal Experimental Biology, 208:4509-4521.
- 2004 Carstens BC, Sullivan J, Davalos LM, Larsen PA, & Pedersen SC. Exploring population genetic structure in three species of Lesser Antillean bats. Molecular Ecology, 13:2557-2566.
- 2003 Pedersen SC, Genoways HH, Morton MN, Johnson JW, & Courts SE. Bats of Nevis, Northern Lesser Antilles. Acta Chiropterologica, 5:251-267.
- Adams RA. Pedersen SC, Thibault KM, Jadin J, & Petru B. Calcium as a limiting resource to insectivorous bats? Journal Zoology, London, 260:189-194.
- 2000 Pedersen SC. Skull growth & the acoustical axis of the head in bats. pp.174-213. In: Ontogeny, Functional Ecology & Evolution of bats, Cambridge Univ. Press. (eds) Adams & Pedersen.
- Adams RA & Pedersen SP. Integrating ontogeny into ecological & evolutionary investigations. pp. 1-8.in: Ontogeny, Functional Ecology & Evolution of bats, Cambridge Univ. Press. (eds) Adams & Pedersen.
- 2000 Adams RA & Pedersen SC. Co-editors: Ontogeny, Functional Ecology & Evolution of Bats. Cambridge Univ. Press. 398p
- 1998 Pedersen SC. Morphometric analysis of the chiropteran skull with regard to mode of echolocation. Journal Mammalogy, 79:91-103.
- 1998 Pedersen SC & Anton SC. Bicoronal synostosis in a child from historic Omaha cemetery 25DK10. American Journal Physical Anthropology, 105:369-376.
- 1996 Pedersen SC. Skull growth & the presence of auxiliary fontanels in rhinolophid bats. Zoomorphology, 116:205-212.
- 1996 Pedersen SC, Genoways HH, & Freeman PW. Bats from Montserrat with comments concerning the effects of Hurricane Hugo. Caribbean Journal Science, 32:206-213.
- 1995 Pedersen SC. Cephalometric correlates of echolocation in the Chiroptera II: Fetal development. Journal Morphology, 225:107-123.

- 1993 Pedersen SC. Skull Growth in cannibalistic Tiger salamanders, Ambystoma tigrinum. Southwest Naturalist, 38:316-324.
- 1993 Pedersen SC. Cephalometric correlates of echolocation in the Chiroptera. Journal Morphology, 218:85-98.
- Fenton MB, Audet D, Dunning DC, Long J, Merriman CB, Pearl D, Syme DM, Adkins B, Pedersen SC, & Wohlgenant T. Activity patterns & roost selection by *Noctilio albiventris* in Costa Rica. Journal Mammalogy, 74:607-613.
- 1991 Pedersen SC. Dental morphology of the cannibal morph in the Tiger salamander, Ambystoma tigrinum. Amphibia-Reptilia, 12:1-14.

### ARTICLES, BOOK CHAPTERS, & ARTWORK FOR THE GENERAL PUBLIC (n = 10)

- Fenton MB & Rydell J. The official insignia for the United States Navy Torpedo Squadron 27 (Original artwork, Figure 12:19). In: A miscellany of bats. Pelagic Publishing, Exeter, England.
- 2013 Pedersen SC. Volcanoes & Fruit Bats Fear & loafing in Montserrat. Pp. 167-180. in: Into the Night: Tales of nocturnal wildlife expeditions (ed) R. Adams. University of Colorado Press, 206 pp.
- 2004 Pedersen SC, Tigner J, & Smith A. Living with bats. South Dakota Conservation Digest, 71:10-15.
- 2003 Phelps BJ, Wogen EC, & Pedersen SC. Dead Silence. Skeptic, 10:2:15-16.
- 2003 Pedersen SC. Earth Wind, & Fire, the Story of the Fruit bats of Montserrat. Natural History 112:20-24.
- 2003 Pedersen SC & Morton MN. Field Guide: Bats of the Northern Lesser Antilles.
- 1998 Pedersen SC & Glover J. Bats in City Parks. Washington Park Arboretum Bulletin, 60:3:10-12
- 1998 Pedersen SC, Bats in military service: USAF, RAF & Commonwealth Air Forces. Bat Research 38:59-68.
- 1996 Pedersen SC & Siegfried D. Bats in military service: United States Naval & USMC aviation. Bat Research 37:42-48.
- 1994 Adams RA & Pedersen SC. Development on the wing. Natural History 103:1:49-54.

#### **REPORTS TO STATE AGENCIES**

- Lindsay et al., Bat roosts of Antigua, Barbuda, and Redonda their status and conservation. United Nations Environment Programme (UNEP) and the Global Environmental Facility (GEF).
- 2004 Kiesow et al., South Dakota Bat Management Plan South Dakota Game, Fish, and Parks.
- 2001 Pedersen et al., Bat survey of Brookings County, South Dakota. South Dakota Game, Fish, and Parks.
- 1997 Pedersen & Glover, Technical Report: Biodiversity analysis: Bats in the Washington Park Arboretum, Seattle.

#### **CONSULTING - TECHNICAL ADVISOR**

- 2024 IBRD-IDA World Bank. Bat conservation and remediation on St. Vincent.
- 2021+ Meridian Construction Co. Ltd., Montserrat, BWI
- 1997+ Montserrat National Trust, Montserrat, BWI
- 1997+ Ministry of Agriculture, Department of Forestry, Montserrat, BWI
- 2019 SD Utilities Commission, Wind power siting guidelines and migratory animals in South Dakota.
- 2019 Invasive Species Specialist Group, Dept of Forestry, Government of St. Lucia
- '13-15 Bat Conservation Trust London UK
- '10-12 Uriel Wind Inc., South Dakota
- '05-09 Durrell Wildlife Conservation Trust Jersey UK
- '05-09 Darwin Initiative London UK
- 2004 BBC Natural History Unit
- '00-22 Co-Chair of the South Dakota Bat Working Group
- 1999 Technical Advisor to Herrera Consulting Firm Tacoma, WA.
- '97-02 Bats Northwest NPO Seattle WA

## **INVITED SYMPOSIUM TALKS & INVITED LECTURES**

- The scutulum in *Rhinolophus* sesamoid and/or meniscus? Int'l Congress of Vertebrate Morphology, Cairns, Australia.
- 2014 Non-linear model of the nasopharynx in rhinolophid bats. School of Physics, Shandong University, Jinan
- 2010 Biodiversity, Biogeography & Conservation of bats. DIREN & UAG, Martinique, Lesser Antilles
- 2009 Morphological constraints on the evolution of rhinolophid skulls. School of Physics, Shandong University, Jinan
- 2009 Bats of MNI-Biodiversity issues in the Centre Hills Montserrat. Durrell Conservation (UK) MALHE, MNI
- 2007 Cephalometry and packaging of the head in bats SVP Evolution History of Bats, Austin TX.
- 2007 Bat survey efforts in the Lesser Antilles. University of the West Indies Barbados.
- 2007 Bat biodiversity in the Lesser Antilles. TTU Departmental Evolution Seminar.
- 2004 Fruit bats of MNI-Population fluctuation in response to hurricanes & volcanoes: ATBC, Miami, FL
- 2004 Bat Biology & Behavior SD Pest Control (PCO) Recertification Courses (04, 06-07, 09) Brookings SD
- 2003 Current status of fruit bat populations on EUX Environmental awareness group St. Eustatius, WI
- 2003 Biogeographic patterns in the Lesser Antilles Environmental awareness group Antigua, WI
- 2002 Blown in, blown off, and blown up the bats of Montserrat SDSU 2002 Hansen Lecture Series
- 2002 Biogeographic patterns in the Lesser Antilles Environmental awareness group St. Eustatius, WI
- 1999 Craniofacial growth and the acoustic axis of the head in bats. Dept. Biology, University of Cincinnati.
- 1998 Bat Biology and Behavior Washington State DOH Rabies Prevention and Control Workshop.
- 1997 Skull growth and the acoustical axis of the head in bats Dept. Anatomy, NEO College of Medicine.

#### **EXTERNAL GRANTS & AWARDS**

- 2019 National Geographic NGS-58300T. "Exploration of the nocturnal behavior of migratory animals aloft" (PI J Krauel)
- 2017 Project development: Bat Conservation education on SKB via Community Participation and Research, United Nations Development Programme (UNDP) and the Caribbean Youth Environment Network (CYEN).
- 2016 Research & Travel award III: National NSF-China & School of Physics, Shandong University, Jinan (PI Rolf Mueller)
- 2014 Research & Travel award II: National NSF-China & School of Physics, Shandong University, Jinan (PI Rolf Mueller)
- 2013 Educational Fellow in the Life Sciences 2013. National Academies NorthStar Institute (HHMI)
- URIEL Wind Inc. Effect of wind farm development on bat migration Eastern SD. 2010
- 2010 2010-2014: USFWS - Occupancy & Artificial Roost Selection in South Dakota (Support to S. Lewis)
- 2009 Travel award: National NSF-China (Project 10774092: via PI Rolf Mueller)
- 2009 Research & Travel award I: Ministry of Education, P.R. China (Projects 985 & 211: PI Rolf Mueller)
- 2005 Durrell Wildlife - Centre Hills Biodiversity Project - Montserrat BWI
- 2002 SD Non-Game Wildlife Conservation Program - Bats (Support to B. Bales)
- 2000 2000-2001: SD GF&P - Wildlife Diversity Grants Program II (Support to V. Swier)
- Individual National Research Service Award (NIDR Post-Doctoral Fellowship) 1995

## **SOUTH DAKOTA STATE UNIVERSITY - AWARDS & GRANTS**

- Honors College Graduation acknowledgements (33):
  - 2013 (7), 2014 (4), 2015 (3), 2016 (5), 2017 (2), 2018 (2), 2019 (5), 2020 (4), 2021 (2), and 2022 (2).
- 2020 Honors College - Teacher of the Year Award (awarded prev. in 2014)
- 2015 Outstanding Teacher Award – Alpha-Lambda-Delta Honor Society (awarded previously in 2012)
- 2014 Honors College - Teacher of the Year Award
- 2013 F. O. Butler Teaching Award - Highest honor for teaching at SDSU
- 2012 Outstanding Teacher Award - Alpha-Lambda-Delta Honor Society
- 2011 TRIO Teaching Award (Title IV HEA, 1965) - Wintrode Success Center
- '10-22 Honorary member - Golden Key Honor Society
- Provost's New Ideas Fund in support of hosting the annual meeting of the American Society of Mammalogists 2008
- 2007 Griffiths Trust - Research Support Fund
- 2006 Nelson Research Support Fund
- 2006 Bentley Trust - Research Support Fund
- 2005 Webster Excellence in Teaching Award - Phi-Kappa-Phi Honor Society
- 2005 Provost's New Ideas Fund (Research tools, awarded previously in 1999, 2001, 2002)
- '04-22 Honorary member – Alpha-Lambda-Delta Honor Society

# **SOUTH DAKOTA STATE UNIVERSITY - SERVICE**

- '18-22 Academic Affairs Committee - Faculty Awards
- 2018 Cameo appearance in a promotional video - SDSU
- '17-19 Higher Learning Commission Re-Accreditation Committee
- Cameo appearance in a promotional video SDSU 2017
- '15-22 2015-2022: Campus Planning & Design Committee (Chair F18-S19)
- 2015 Cameo appearance in a promotional video - SDSU
- Academic Affairs Committee University Internship/Learning Experience Committee '15-16
- '13-17 Academic Affairs Committee
- '12-14 Faculty Senate - Task force on Classroom Design
- Faculty Senate Task force on Academic Quality & Rigor Faculty Senate Ag-Bio College Senator '12-14
- '11-17
- SD Thriving magazine (Ag-Bio) Promotion of Pre-Pro Program (article/video) 2009
- 2008 Co-Host Annual Meeting of the American Society of Mammalogists
- 2007 Host Committee for the SDAS meetings
- '06-10 Advisor to the Ultimate Frisbee Club at SDSU
- '06-15 Harding Lectureship Committee
- '05-08 Advisor to the Pre-Professional Club at SDSU
- '01-14 Departmental Scholarship Committee
- '01-18 Departmental Graduate Committee (Chair F01-S02)
- '00-09 Advisor to the Sigma Phi Epsilon fraternity
- '99-01 Departmental Assessment Committee

## COMMUNITY SERVICE & PRESENTATIONS FOR THE GENERAL PUBLIC (Audiences 20+)

- 2021 COVID-19: Bats on Trial. Science at the Pub & Science Visions Institute – Brookings, SD
- 2019 Bats in the SDSU arboretum. - Brookings, SD
- 2010 Bats in the Military — Invited lecture - 265th RRC (Army Airborne), Cedar Rapids, IA
- 2010 Bats 101. Science at the Pub & Science Visions Institute - Brookings, SD
- 2009 SDPB Dakota Midday Interview - SD Bats
- 2009 SDPB Science Café presentation – SD Bats (Aberdeen)

2009 University Center: Osher Lifelong Learning Institute (OLLI) presentation (Sioux Falls SD) '07-09 Brookings Bats and their Behavior - Science Visions Institute - Brookings, SD 2006 Bats of Montserrat BWI: 20 years in the Belham Valley. Downtown Kiwanis Club, Brookings SD 2006 Bats of Montserrat and SDSU students in the Caribbean. Golden K Kiwanis Club, Brookings SD 2005 Fruit bats of MNI-Population fluctuation in response to hurricanes & volcanoes. Phi-Kappa-Phi Society 2005 Bat Biology & Behavior - Nebraska Humane Society - Omaha NE. 2002 Bat Biology & Behavior – Nebraska Humane Society – Omaha NE. 2001 Sublethal pathology in Montserrat's bats- Rotary Club of Montserrat, BWI '99-22 Public relations & nuisance bat extractions from private residences (Brookings SD) '99-06 Public relations re: bats at the Washington Pavilion - "Spooky Science Night", Sioux Falls SD Bats of Montserrat BWI: 20 years in the Belham Valley. Environmental Lecture Series - REI-Coop, Seattle. 1998 '97-99 Seattle - Weekly night nature-walks & ad hoc lectures in the Seattle City Parks, Bat-education slideshows for K-12 '88-99 Public relations & nuisance bat extractions from private residences (Lincoln NE & Seattle WA)

#### PROFESSIONAL MEMBERSHIPS

1987+ North American Society for Bat Research
1984+ American Society of Mammalogists
11-20 Human Anatomy and Physiology Society
193-98 Society for the Study of Mammalian Evolution
191-04 Society for the Study of Evolution
184-20 Society for Integrative & Comparative Biology

#### FIELD EXPERIENCE - Census and/or collection of bats

Montserrat (1993-94, 1997-98, 2000-02, 2004-09, 2011, 2019).

Antigua (2000, 2003); Barbados (2007-08); Barbuda (2003); Belize (2013); Grenada (1989); Grenadines (2006); Guanacaste, Costa Rica (1992); Nevis (2001); Saba (2002-03); St. Barthélemy (2004); St. Christopher (2001); St. Eustatius (2002-04, 2009); St. Lucia (2007-09); St. Maarten (2002-04); St. Vincent (1989, 2005-06); & Trinidad (1989)

China, Shandong Province (2009, 2014, 2016); Vietnam, Phong Nha (2009).

Germany and Austria transect, collection of small mammals (1985) with R. Sage, UC-Berkeley.

Colorado, Orient mine, Colorado (1988), Inactive-mine project, Colorado Division of Wildlife (1992)

South Dakota, Moody County (2010); SDSU Oak Lake Field Station (2000)

Texas, Seguin (Development of monitoring technology re: National Geographic NGS-58300T; 2021)

Washington, Seattle: Discovery, Greenlake, & Carkeek City Parks (1997-99)

Wyoming, Fort Laramie National Historic site (1988-92)

RESEARCH INTERESTS: My graduate work focused on craniofacial morphogenesis in vertebrates. Of particular interest are the gross anatomical shifts imposed on facial development by the effects of spatial constraint among the various subcomponents of the skull. I have studied changes in skull shape in cannibalistic salamander larvae and the perinatal development of the skull in bats. I re-tooled my technical skills via an Individual National Research Service Award (NIDR Post-Doc Fellowship) to evaluate developmental changes in the histology/kinematics of the hyoid apparatus during swallowing, mastication and vocalization using miniature pigs as an animal model.

At SDSU (1999-2022), my research efforts strayed temporarily from craniofacial evolution to those associated with island biogeography/biodiversity in the Lesser Antilles, focusing on the British Crown Colony of Montserrat. In 1995, the island entered a period during which it was severely damaged by hurricanes and volcanic eruptions. I took advantage of this extraordinary opportunity to document how bats have evolved in such disturbance-mediated environments and how natural disasters have effected such high levels of endemism in this archipelago. In support of this, I conducted five-week field-courses throughout the northern Lesser Antilles (2000-08). These included both SDSU graduate and undergraduate students wherein they (1) took advantage of learning about and becoming sensitive to other cultures, and (2) became actively involved in an ongoing research program - cogently analyzing and presenting the results of their work in a variety of venues. Their efforts have resulted in 17 publications, many of which bear their names. Four of those went on to pursue doctoral degrees at other Universities, each concerning some aspect of bat biology and genetics.

RESEARCH PLANS UPON RETIREMENT—I am processing a large backlog of biodiversity data collected during the last three decades. I have also returned to my investigations into the evolution and systematics of the extraordinary acoustic system in bats. Wherein, mastication and echolocation have worked at cross-purposes during the evolution of the skull. In support of this, my colleagues in China and Virginia Tech and I collected a tremendous amount of data (2009, 2014, 2016), whose breadth and depth has resulted in four publications at this time (Pedersen & Timm 2012, Pedersen & Müller 2013, He et al. 2015, Pedersen et al. (2024 *submitted*). I will also continue working with my wife (Jennifer Krauel) in her continuing research regarding high altitude migration patterns in both insect and bats.