

CURRICULUM VITAE

NAME: CARL SEARS LIEB

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DEGREES RECEIVED:

1981	Ph.D.	Biology	University of California, Los Angeles
1973	M.S.	Wildlife and Fisheries Sciences	Texas A&M University
1971	B.S.	Wildlife Science (with honors)	Texas A&M University

CURRENT POSITION:

Professor, Department of Biological Sciences, University of Texas at El Paso, September 2004 – present; Curator of Herpetology, UTEP Biodiversity Collections, 1989-present

POSITIONS HELD:

President, Faculty Senate, University of Texas at El Paso, 2010-2012; Member, University of Texas System Faculty Advisory Council, 2010-2012; Vice-President, Faculty Senate, 2009-2010; Member, Faculty Senate Executive Committee, 2009-2010; Faculty Senate Parliamentarian, 2013-present;

Associate Professor of Biological Sciences, September 1989-August 2004; Adjunct Associate Professor and member of the Graduate Faculty, University of Texas at El Paso, 1988-1989; Adjunct Assistant Professor and member of the Graduate Faculty, University of Texas at El Paso, 1983-1984; 1985-1988; Instructor, University of Texas at El Paso, Summer, 1981, 1983.

Positions held, continued:

Executive Committee Member and UTEP's Institutional Representative, Desert Southwest Cooperative Ecosystem Studies Unit (DSCESU), 2003-present

Director, Ecology and Evolutionary Biology Doctoral Program, UTEP, 2009-2014

Vice-Chair, Institutional Animal Care and Use Committee, UTEP, 2010-2014

Director, Environmental Sciences Program, College of Science, University of Texas at El Paso, 2006-2010

Assistant Chair, Department of Biological Sciences, University of Texas at El Paso, May 1998-2006

Director and Graduate Advisor, Professional M.S. Bioinformatics Program, University of Texas at El Paso, 2001-2003

Director, Indio Mountains Research Station, University of Texas at El Paso, 1991-1997

Coordinator of Introductory Biology Laboratories, Department of Biological Sciences, University of Texas at El Paso, 1990-1992.

Interim Director, Centennial Museum, University of Texas at El Paso, 1989-1990

Associate Curator of Bioresource Collections, Laboratory for Environmental Biology, University of Texas at El Paso, 1987-1989; Assistant Curator, Laboratory for Environmental Biology, University of Texas at El Paso, 1981 - 1984 (on leave September 1984 - May 1985), 1985-1987

Visiting Faculty, Research Associate, Department of Zoology, Brigham Young University, September 1984-May 1985

GRANTS AND OTHER FUNDED ACTIVITIES:

U. S. Environmental Protection Agency: Principal Investigator for "Eco-toxicological impact of agricultural chemicals in the Rio Grande Corridor." Southwest Center for Environmental Research and Policy (base funding from EPA): Co-investigator, R. Case, UTEP and Edwards Aquifer Research and Data Center, Southwest Texas State University. Grant period: June 1992 - Feb 1994, \$93,000.

Funded activities, continued:

National Science Foundation, Projects in Science and the Humanities (NSF, NEH, FIPSE): Faculty Associate for "A Freshman-level, interdisciplinary course in science: Its history and its cultural implications." Co-Principal Investigators: J. R. Bristol (UTEP Biological Sciences), J. A. R. Dick (UTEP English). Grant period August 1992-1995, \$205,000.

Albert P. Sloan Foundation: Co-Principal Investigator (with T. Brady, UTEP), "Professional Master of Science Degree in Bioinformatics." Grant period 2000-01, \$202,93

National Science Foundation: HerpNet project subcontract for UTEP Herpetological Collections. Co-principal investigators, L. Trueb (Univ. Kansas), D. Wake (Univ. California). Grant Period 2003-06, \$32,518.

PROFESSIONAL AND HONORARY SOCIETIES:

American Society of Ichthyologists and Herpetologists, 1964-2008
Herpetologists' League, 1963-2009, 2013-present
Society for the Study of Amphibians and Reptiles, 1970-present
Texas Herpetological Society, 1966-1974, 1981-2003, President 1992
Southwestern Association of Naturalists, 1970-2003
Other inactive: Research Society of Sigma Xi, Honor Society of Phi Kappa Phi

CURRENT PROFESSIONAL ACTIVITIES:

Research Associate, 1982-present, Section of Herpetology, Life Sciences Division, Natural History Museum of Los Angeles County [renewed triennially]

Board Member, El Paso Zoological Society 2001-2007

Member, Far West Texas Regional Water Planning Group, 2005-2010; representing rural environment, Alternate Member, 1999-2004

El Paso Collaborative for Academic Excellence, K-12 Science Working Group, 2004, 2006-2007

Instructor for herpetology component, Texas Master Naturalist Program, Texas Parks Wildlife Department, El Paso, 2001-2014

PRESENTATIONS (for previous six years only):

- 2010 Floyd, K. W., and C. S. Lieb. Poster: American Society of Ichthyologists and Herpetologists, Providence, R.I.: "Effects of roads on lizard population demography in southern New Mexico."
- 2011 Floyd, K. W. and C. S. Lieb. Presentation: Annual Meeting, Ecological Association of America, Austin, TX: "How roads affect population demography in two lizard species in the northern Chihuahuan Desert."
- 2012 Floyd, K. W. and C. S. Lieb. Poster: The Wildlife Society, 19th Annual Conference, Portland, OR: "Impact of roads on population demography in two common lizard species in southern New Mexico."
- 2012 Floyd, K. W. and C. S. Lieb. Presentation: Annual Meeting, Ecological Association of America, Portland OR: "Population demography in two lizard species living near roads in the northern Chihuahuan Desert."
- 2013 Gilbert, C., L. Carolina, R. Kirken, C. Lieb. Poster: Joint Meeting of Ichthyologists and Herpetologists (JMIH), Albuquerque, NM: "*In vitro* response of human myoblasts and myocytes to the whole venom of *Crotalus viridis viridis*."
- 2013 Gibson, A., J. Lynn, C. Lieb, and D. Watts. Poster: UTEP Chihuahuan Desert Biodiversity RUE Summer Program, COURI Science Symposium, University of Texas at El Paso: "Survey of Lizard Malaria in Southwestern United States."
- 2013 Navarro, A., S. Vacio, J. Perez-Leon, C. Lieb, and M. Miranda-Arango. Poster: UTEP Chihuahuan Desert Biodiversity RUE Summer Program, COURI Science Symposium, University of Texas at El Paso: "Localization of glycinergic cells in the retina of reptiles from the Chihuahuan Desert."
- 2013 Floyd, K. W. and C. S. Lieb. Poster: The Wildlife Society 20th Annual Conference, Milwaukee, WI: "Impact of roads on survival and abundance of two syntopic lizard species in southern New Mexico"
- 2013 Saucedo, A., C. Lieb, and M. Miranda-Arango, Poster: Annual Biomedical Research Conference for Minority Students (ABRCMS): "Inhibition of glycine transporter activity by the venom from the Chihuahuan Desert Rattlesnakes."
- 2014 Lieb, C. S. Invited presentation, Annual Meeting, Native Plant Society of New Mexico, El Paso, TX: "Plants and Butterflies, El Paso del Norte Region."

Presentations, continued:

- 2014 Floyd, K. W. and C. S. Lieb, Oral Presentation, 99th Ecological Society of America Annual Meeting: "The effects of living near roads on abundance and survival in two lizard species in southern New Mexico."
- 2014 Hughes, D. F., K. Pennington, E. M. Walker, B. De Haro , C. S. Lieb, E. Greenbaum, and A. Khan, Poster: 44th Annual Meeting of the Society for Neuroscience, Washington, D.C.: "Initial cytoarchitectonic characterization of the squamate forebrain: Case studies of the Western Diamondback rattlesnake (*Crotalus atrox*) and two distinct chameleon species (*Trioceros jacksonii*; *Rieppeleon kerstenii*)."

COURSES TAUGHT (UTEP, previous six years only):

BIOL 1306 - Organismal Biology [= Biology II for science majors] 2011-2012, 2014
 BIOL 3321 – Evolutionary Theory 2012, 2013, 2014
 BIOL 4370 – History and Philosophy of Science, 2013, 2014
 BIOL 5322 – Advances in Evolutionary Theory [MA in Teaching-version] 2014
 BIOL 5322 – Advances in Evolutionary Theory [Co-instructor] 2014, 2015
 BIOL 5326 – Advances in Ecological Theory [MA in Teaching version] 2011
 BIOL 6312 – Biodiversity [Co-instructor] 2010
 ESCI 4301 - Environmental Science Senior Seminar [co-instructor] 2007, 2014
 ZOOL 4476 - Fish, Amphibians, and Reptiles 2008, 2010, 2012, 2013, 2015
 BIOL 4192 – Senior Seminar [Secondary Education track], 2009-2014
 BIOL 3192 – Professional Development Seminar [Secondary Education track], 2015
 UNIV 1301 – Seminar in Critical Thinking, 2010

GRADUATE DEGREE THESIS/DISSERTATION COMMITTEE SERVICE (UTEP):

Jackson, Margaret S. "Distribution and Habitat Characteristics of Ranid Frogs in the Greater El Paso Area," completed May 1992 [M.S. Biological Sciences thesis committee chair]

Acosta, Alice. "Comparisons of phosphodiesterase activity in the venoms of different crotalid snakes." completed July 1992 [M.S. Biological Sciences thesis committee member, E.D. Rael, chair]

Harrison, Christopher. "A taxonomic revision of the *Coniophanes piceivittis* Species Group," completed August 1992 [M.S. Biological Sciences thesis committee member; R.G. Webb & J.D. Johnson, co-chairs]

Graduate Degree Thesis Committee Service, continued:

Chumney, Janine A. "Analysis of epigamic displays in *Metadippus chera* (Araneae: Salticidae) and its systematic significance," completed July 1994 [M.S. Biological Sciences thesis committee member, W.P. MacKay, chair]

Theresa McGoldrick. "Effects of fire on four desert plants: *Dasyllirion wheeleri*, *Ferocactus wislizeni*, *Yucca baccata*, and *Yucca torreyi*," completed August 1994 [M.S. Biological Sciences thesis committee member, R.D. Worthington, chair]

Goldberg, Patricia. "Comparative osteology of southwestern Columbiidae," completed April, 1996 [M.S. Biological Sciences thesis committee member, A.H. Harris, chair]

Heimer, Mark. "Effects of lead on the growth rate of crayfish in the El Paso area," completed April, 1996 [M. S. Biological Sciences thesis committee member, W.P. MacKay, chair]

La Duc, Travis. "A taxonomic review of the *Adelphicos quadrivirgatum* (Serpentes: Colubridae)," completed April, 1996 [M.S. Biological Sciences thesis committee co-chair with J.D. Johnson]

Eckerman, Curtis. "Variation, systematics, and infrageneric position of *Heterodon nasicus* (Serpentes: Xenodontidae)," completed August, 1996 [M.S. Biological Sciences thesis committee co-chair with J.D. Johnson]

Bohuslavek, Jan. "Isolation and characterization of a hemorrhagic toxin from the venom of *Vipera ammodytes ammodytes* (European Long-nosed Viper)," completed July, 1996 [M.S. Biological Sciences thesis committee member, E. D. Rael, chair]

Gordon, Deborah. "Incremental tail loss and running speed of *Cnemidophorus inornatus* (Reptilia: Teiidae)," completed December, 1996 [M.S. Biological Sciences thesis committee chair]

Carranza, Christine. "Parasites of lizards in the genus *Cnemidophorus* from western Texas and southern New Mexico," completed December, 1996 [M.S. Biological Sciences thesis committee member, J. R. Bristol, chair]

Maldonado, Jose V. "The taxonomy and biology of southwestern U.S. scolopendrid centipedes (Chilopoda: Scolopendridae)," completed May, 1998 [M.S. Biological Sciences thesis committee member, W.P. MacKay, chair]

Graduate Degree Thesis Committee Service, continued:

De La Riva, Veronica. "Phylogenetic analysis of Brachionidae (Phylum Rotifera) using ribosomal DNA," completed August, 1998 [M.S. Biological Sciences thesis committee member, E. J. Walsh, chair]

Wooldridge, Brian. "DNA analysis for metalloproteinase and Mojave toxin genes in chromosomal DNA of the Mojave Rattlesnake *Crotalus scutulatus scutulatus*," completed May, 1999 [M.S. Biological Sciences thesis committee co-chair with E. D. Rael]

Dominguez, Alvaro G., Jr. "An analysis of rock rattlesnakes (*Crotalus lepidus*) from the northern portion of its range," completed April, 2000 [M.S. Biological Sciences thesis committee member, E.D. Rael and J.D. Johnson, co-chairs]

Lannutti, Dominic I. "Morphological variation in *Salvadora grahamiae* and related taxa (Serpentes: Colubridae)," completed April, 2000 [M.S. Biological Sciences thesis committee chair]

Bartlema, Lauri. "The Holocene fauna of Big Manhole Cave and its paleoclimatic implications," completed May, 2001 [M.S. Biological Sciences thesis committee member, A. H. Harris chair]

Hejazi, Michael. "New technology to remove toxic metal ions using hop biomass: Use of chemical modification and x-ray absorption spectroscopy to determine the mechanism(s) of metal removal," completed November, 2001 [Environmental Sciences and Engineering Ph.D. dissertation, committee member, Gardea-Torresdey, J. chair]

McMillan, M. "Morphological variation in *Crotalus basiliscus* and *Crotalus molossus* (Serpentes: Viperidae) with an evaluation of hybridization," completed December, 2001 [M.S. Biological Sciences. thesis committee chair]

Hotchkin, Paul. "Comparative escape behavior of parthenogenetic and gonochoristic whiptail lizards (Teiidae: *Cnemidophorus*)," completed May 2002 [M.S. Biological Sciences, thesis committee member, J. D. Johnson, chair]

Gutierrez, Raul. "A molecular phylogeny of the family Martyniaceae (order Lamiales) based on the internal transcribed spacer (ITS) region of nuclear ribosomal DNA," completed December, 2002 [M.S. Biological Sciences thesis committee member, C. E. Freeman, chair]

Graduate Degree Thesis Committee Service, continued:

Powell, Randy. “Evolutionary genetics of Mojave toxin among selected rattlesnake species (Squamata, Crotalinae),” completed March, 2003 [Biological Sciences Ph.D. dissertation committee chair]

Nava, Saul. “Microhabitat selection, resource partitioning, and evaporative water loss by dwarf geckos (*Sphaerodactylus*) on Puerto Rico,” completed May, 2004 [M.S. Biological Sciences, thesis committee member, S. Perez, chair]

Mata-Silva, Vicente. “Diet comparison between sympatric lizards of the genus *Aspidoscelis* on Indio Mountains Research Station,” completed Nov 2005 [M.S., Biological Sciences, thesis committee member, J. Johnson, chair]

Holmes, Cindy. “The relationship of parental involvement on science learning,” completed April 2006 [M.A., Teacher Education, thesis committee member, S. Blake, chair]

Oliver, Hector. “Numerical simulations of a hydrocarbon release in the vicinity of a cubical building,” completed May 2006. [Ph.D. in Environmental Science and Engineering, dissertation committee member, W. Li & R. Choudhuri, co-chairs]

Kamees, Larry. “Seasonal variation in movement and activity patterns of *Crotalus willardi obscurus* in the Animas Mountains, New Mexico,” completed Jul 2006 [M.S., Biological Sciences, thesis committee chair]

Sooksbirsingh, Rudy. “*Modus operandi* of salt separation process in *Tamarix ramosissima* Ledeb. (Salt Cedar),” completed Nov 2006 [Ph.D. in Environmental Science and Engineering, dissertation committee member, R. Chianelli, chair]

Pacheco, José. “Revision of the New World thief ants (Hymenoptera: Formicidae: *Solenopsis*),” completed Apr 2007 [Ph.D. in Biological Sciences, dissertation committee member, R. W. MacKay, chair]

Yousif, Nasser. “Environmental evaluation of Colorado stream sediment chemistry,” completed July 2007 [Ph.D. in Environmental Sciences and Engineering, dissertation committee member, P. Goodell, chair]

Serna, Francisco. “Revision of the ant genus *Procryptocerus* (Hymenoptera: Formicidae: Myrmicinae: Cephalotini),” completed Apr 2009 [Ph.D. in Biological Sciences, dissertation committee member, R. W. MacKay, chair].

Graduate Degree Thesis Committee Service, continued:

Hamden, Lina. “Evolutionary genetics of bdelloid rotifers,” completed Dec 2009 [M.S. in Biological Sciences, thesis committee member, E. A. Walsh, chair]

Anderson, Katie. “Influences of ecological light pollution on advertisement calls of *Spea multiplicata* (Amphibia: Anura: Scaphiropodidae) in rural and urban populations in the northern Chihuahuan Desert and an evaluation of hybrid *S. bombifrons* x *S. multiplicata* calls,” completed Nov 2013 [M.S. in Biological Sciences, thesis committee member, J. D. Johnson, chair]

DeBons, Duran. “Sphingolipid Metabolism in a Reptilian Protozoan, *Entamoeba invadens*,” completed July 2014 [M.S. in Biological Sciences, thesis committee member, S. Das, chair]

Wiseman, Geoffrey. “An Avian Survey Conducted at Five Water Sources Within the Northern Chihuahuan Desert on Indio Mountains Research Station, Texas,” completed July 2014 [M.S. in Biological Sciences, thesis committee member, J. D. Johnson, chair]

Alva, Julia. “Thermal Ecology of *Urosaurus ornatus* (Ornate Tree Lizard), in the northern Chihuahuan Desert on Indio Mountains Research Station, Texas,” completed August 2014 [M.S. in Biological Sciences, thesis committee member, J. D. Johnson, chair]

Joma, A. “Revision of ant genus *Bothropronera* (Insecta: Hymenoptera) from the African continent,” completed November, 2014 [Ph.D. in Ecology and Evolutionary Biology, dissertation committee member, W. P. MacKay, chair]

Floyd, Kevin. “An assessment of the role of roads in population structure and genetic structuring in two species of lizards in the northern Chihuahuan Desert,” completed April 2015 [Ph.D. in Environmental Sciences and Engineering, dissertation committee member, E. A. Walsh and J. Gardea, co-chairs]

Lannutti, Dominic. “Phylogeography of *Crotalus scutulatus*,” completion expected January, 2016 [Ph.D. in Biological Sciences, dissertation committee chair]

WEB-BASED EDUCATIONAL MATERIALS:

Lieb, C. S. Annotated checklist of the fishes of the Rio Grande drainage, Dona Ana, El Paso, and Hudspeth Counties. [last update: 14 Mar 2000]
<http://nasa.utep.edu/chih/chklist/fish/fish.htm>

Web-based educational materials, continued:

Lieb, C. S., R. D. Worthington, and E. W. Anderson. Lichens and plants of the Indio Mountains Research Station of the University of Texas at El Paso. [last update: 14 Mar 2000] <http://www.utep.edu/indio/indioflora.htm>

Lieb, C. S. Barking Frog, *Eleutherodactylus augusti*. [last update: 6 Jul 2000] <http://nasa.utep.edu/chih/theland/amphbians/hylactorphryneaug.htm>

Lieb, C. S., R. G. Webb, and J. D. Johnson. Checklist of amphibians and reptiles of the El Paso-Juarez border region. [last update: 17 Oct 2000] <http://nasa.utep.edu/chih/chklist/herps/herps.htm>

Lieb, C. S. Checklist of the Chihuahuan Desert butterflies (Lepidoptera) of the El Paso/Ciudad Juarez Region [last update: April 2001] <http://nasa.utep.edu/chcklist/butterfly/butterfly.htm>

Lieb, C. S., and R. Powell. Tiger Salamander, *Ambystoma tigrinum*. [last update: 8 Oct 2001] <http://nasa.utep.edu/chih/theland/amphbians/ambystig.htm>

PUBLICATIONS:

- 1971 Dixon, J. R., C. S. Lieb, and C. A. Ketchersid. A new lizard of the genus *Cnemidophorus* from Queretaro, Mexico. *Herpetologica* 27:344-54.
- 1971 Lieb, C. S. A study of the variaton in *Elaphe obsoleta* of Texas. *Texas Acad. Sci. (Coll. Acad.)* 26(1):3-6.
- 1972 Dixon, J. R., C. A. Ketchersid, and C. S. Lieb. The herpetofauna of Queretaro, Mexico, with remarks on taxonomic problems. *Southwestern Nat.* 16:225-37.
- 1972 Dixon, J. R., C. A. Ketchersid, and C. S. Lieb. A new species of *Sceloporus* (*undulatus* group) from Mexico. *Proc. Biol. Soc. Washington* 84:307-12.
- 1972 Dixon, J. R. and C. S. Lieb. A new night snake from Mexico (Serpentes, Colubridae). *Los Angeles Co. Mus. Contr. Sci.* (358):1-7.
- 1973 Clark, D. R., Jr. and C. S. Lieb. Notes on reproduction in the night snake (*Hypsiglena torquata*). *Southwestern Nat.* 18:248-52.
- 1974 Schmidly, D. J., F. S. Hendricks, and C. S. Lieb. Noteworthy additions to the bat fauna of the San Carlos Mountains, Tamaulipas. *Texas J. Sci.* 25:87-88.

Publications (cont.):

- 1980 Buth, D. G., G. C. Gorman, and C. S. Lieb. Genetic divergence between *Anolis carolinensis* and its Cuban progenitor, *Anolis porcatius*. J. Herpetology 14:279-84.
- 1981 Buth, D. G., R. W. Murphy, C. S. Lieb, and M. M. Miyamoto. Creatine kinases of amphibians and reptiles. Isozyme Bull. 14:55.
- 1983 Lieb, C. S., D. G. Buth, and G. C. Gorman. Genetic differentiation in *Anolis sagrei*: a comparison of Cuban and introduced Florida populations. J. Herpetol. 17:90-94.
- 1983 Lieb, C. S. and V. J. Roessling, Jr. Distributional records for amphibians and reptiles from central and southern Texas. Herpetological Review 14(2):54.
- 1984 Gorman, G. C., C. S. Lieb, and R. H. Harwood. The relationships of *Anolis gadovi*: Albumin immunological evidence. Caribbean J. Sci. 20(3-4):145-152.
- 1985 Lieb, C. S. Systematics and distribution of the skinks allied to *Eumeces tetragrammus* (Sauria: Scincidae). Los Angeles County Museum Contr. Sci. (358):1-19.
- 1985 Buth, D. G., R. W. Murphy, M. M. Miyamoto, and C. S. Lieb. Creatine kinases of amphibians and reptiles: Evolutionary and systematic aspects of gene expression. Copeia 1985 (2):279-284.
- 1985 Lieb, C. S. (Review of) Snakes of Texas, by Alan Tennant. Southwestern Nat. 30(4):621-22.
- 1986 Lieb, C. S. Featured institution: Laboratory for Environmental Biology, University of Texas at El Paso. Association of Systematics Collections Newsletter 14(5):49-51.
- 1986 Lieb, C. S. (Foreward), In: Vermersch, T. and R. Kunz, Snakes of south-central Texas. Eakin Press, Austin. 137 p.
- 1988 Lieb, C. S. Systematic status of the Neotropical snakes *Dendrophidion dendrophis* and *D. nuchalis* (Colubridae). Herpetologica 44(2):162-175.
- 1990 Lieb, C. S. *Eumeces tetragrammus*. Catalogue of American Amphibians and Reptiles 492:1-4.

Publications (cont.):

- 1990 Lawson, R. and C. S. Lieb. Variation and hybridization in *Elaphe bairdi* (Serpentes: Colubridae). J. Herpetol. 24(3):280-292.
- 1991 Lieb, C. S. *Dendrophidion nuchale*. Catalogue of American Amphibians and Reptiles 520.1-.2.
- 1991 Lieb, C. S. *Dendrophidion paucicarinatum*. Catalogue of American Amphibians and Reptiles 521.1-.2
- 1991 Lieb, C. S. *Dendrophidion vinitor*. Catalogue of American Amphibians and Reptiles 522.1-.2.
- 1992 Lieb, C. S. Introduction. Pp. 1-7 in, Vermersch, T. G. Lizards and Turtles of South-Central Texas. Eakin Press, Austin, xiv + 170p.
- 1992 Huang, S. Y., J. C. Perez, E. D. Rael, C. Lieb, M. Martinez, and S. A. Smith. Variation in the antigenic characteristics of venom from the Mojave Rattlesnake (*Crotalus scutulatus scutulatus*). Toxicon 30(4):387-396.
- 1992 Lieb, C. S. Herpetology at the University of Texas at El Paso. Herpetol. Rev. 23(2):33-34.
- 1992 Anaya, M., E. D. Rael, C. S. Lieb, J. C. Perez, and R. J. Salo. Antibody detection of venom protein variation within a population of the rattlesnake *Crotalus v. viridis*. J. Herpetol. 26(4):473-482.
- 1993 Rael, E. D., C. S. Lieb, N. Maddux, A. Varela-Ramirez, and J. Perez. Hemorrhagic and Mojave toxins in the venoms of the offspring of two Mojave rattlesnakes (*Crotalus scutulatus scutulatus*). Comp. Biochem. Physiol. 106B(3):595-600.
- 1993 Lieb, C. S. [solicited review of] Herpetofauna Mexicana by Oscar Flores-Villela. Copeia 1993(4):1188-89.
- 1994 Acosta, A., E. D. Rael, N. Maddux, and C. S. Lieb. Detection of alkaline phosphatase in venom by blotting methods. Toxicon 32(2):227-231.
- 1995 Lieb, C. S. Preliminary key to the anole lizards of Mexico. Pp. 146-157, in Flores, O, F. Mendoza, and G. González, (eds.). Recopilación de claves para determinacion de anfibios y reptiles de Mexico. Publ. Espec. Museo Zoología, Univ. Nac. Aut. México (10):1-285.

Publications (cont.):

- 1995 Lieb, C. S. Key to *Eumeces* in Mexico. Pp. 161-164, in Flores, O, F. Mendoza, and G. González, (eds.). Recopilación de claves para determinacion de anfibios y reptiles de Mexico. Publ. Espec. Museo Zoología, Univ. Nac. Aut. México (10):1-285.
- 1996 Lieb, C. S., R. Lazarowitz, J. D. Johnson, and L. F. Mayberry. Laboratory manual for introductory biology. Kendall/Hunt Publishing Co., Dubuque, 142p.
- 1996 Lieb, C. S., R. D. Worthington, and E. W. Anderson. Flora of the Indio Mountains Research Station of the University of Texas at El Paso. Pp. 96-103, in 1996 Symposium Proceedings, "The Chihuahuan Desert and its many ecosystems." Native Plant Soc. Texas, El Paso, Texas.
- 1996 Lieb, C. S. *Dendrophidion percarinatum*. Catalogue of American Amphibians and Reptiles. 636:1-2.
- 1997 Rael, E.D., J. V. Rivas, T. Chen, N. Maddux, E. Huizar, and C. S. Lieb. Differences in fibrinolysis and complement inactivation by venom from different northern blacktail rattlesnakes (*Crotalus molossus molossus*). Toxicon 35(4):505-513
- 1999 Lieb, C.S., D. G. Buth, and M. M. Miyamoto. Superoxide dismutase expression in the lizard genus *Anolis*: Systematic significance of a silenced gene. Biochem. Syst. Ecol. 27(2):201-211.
1999. Lieb, C. S., J. W. Sites, Jr. and J. W. Archie. 1999. The use of isozymes in systematic studies of turtles: preliminary data for Australian chelids. Biochem. Syst. Ecol. 27(2):157-183.
1999. Allchin, D., E. Anthony, J. Bristol, A. Dean, D. Hall, and C. Lieb. History of Science -- with labs. Science and Education 8:619-32.
- 2001 Lieb, C. S. The anole lizards of México: A taxonomic overview. Pp. 53-64, in Johnson, J. D., R. G. Webb, and O. Flores-Villela (Eds.). Mesoamerican Herpetology: Systematics, Natural History, and Conservation. Univ. Texas El Paso Centennial Mus. Spec. Publ. (1):1-200.
- 2001 Wooldridge, B. J., G. Pineda, J. J. Banuela-Ornelas, R.K. Dagda, S.E. Gasanov, E. D. Rael, and C. S. Lieb. Mojave rattlesnakes (*Crotalus scutulatus scutulatus*) lacking the acidic subunit DNA sequence lack Mojave toxin in their venom. Comp. Biochem. Physiol., Part B. 130:169-179.

Publications (cont.):

- 2002 Lieb, C. S., J. D. Johnson, L. F. Mayberry, and R. Lazarowitz. Laboratory manual for introductory biology, second edition. Kendall/Hunt Publishing Co., Dubuque.
- 2003 Powell, R. L., and C. S. Lieb. Natural History Notes: *Hyla arenicolor*: Toxic skin secretions. Herpetol. Rev. 34(3):230.
- 2004 Powell, R. L., C. S. Lieb, and E. D. Rael. Identification of a neurotoxic component in the Tiger Rattlesnake, *Crotalus tigris*. J. Herpetol. 38(1):149-152.
- 2006 Lazarowitz, R., and C. Lieb. Formative assessment pre-test to identify college students prior knowledge, misconceptions, and learning difficulties in biology. International J. Sci. Math Education 4(4):741-762.
- 2007 Jurado, J. D., E. D. Rael, C. S. Lieb, E. Nakayasu, W. K. Hayes, S. P. Bush, and J. C. Ross. Complement inactivating proteins and intraspecies venom variation in *Crotalus oreganus helleri* Toxicon 49:339-350.
- 2008 Powell, R. L., C. S. Lieb, and E. D. Rael. Geographic distribution of Mojave toxin and Mojave toxin subunits among selected *Crotalus* species. Pp. 537-550, in W. K. Hayes, K. R. Beaman, M. D. Cardwell, and S. P. Bush. (eds.) The Biology of Rattlesnakes, Loma Linda Univ. Press, Loma Linda, CA.
- 2008 Powell, R. L. and C. S. Lieb. Perspective on venom evolution in *Crotalus*. Pp. 551-556, in W. K. Hayes, K. R. Beaman, M. D. Cardwell, and S. P. Bush. (eds.) The Biology of Rattlesnakes, Loma Linda Univ. Press, Loma Linda, CA.
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