

**Texas Christian University  
Curriculum Vitae**

**July, 2023**

**NAME:** Gary W. Ferguson

**DATE AND PLACE OF BIRTH:** April 15, 1941 Cheyenne, Wyoming

**EDUCATIONAL BACKGROUND:**

1963      B.S., Tulane University  
1965      M.S., Texas Tech University  
1969      Ph.D., University of Michigan

**PRESENT RANK:** Professor Emeritus

**YEAR OF APPOINTMENT TO THE UNIVERSITY, AND RANK:**

1974    Assistant Professor

**YEAR OF LAST PROMOTION:** 2007

**TEACHING AND/OR RESEARCH APPOINTMENTS:**

- A. Part time:**            Graduate Teaching Assistant, Texas Tech University, 1963-64  
                         Graduate Research Assistant, Texas Tech University, 1964-65  
                         Graduate Teaching Assistant, University of Michigan, 1965-66
- B. Full-time:**            Assistant Professor, Kansas State University, 1969-74.  
                         Assistant Professor, Texas Christian University, 1974-77  
                         Associate Professor, Texas Christian University, 1977 to 1983  
                         Professor, Texas Christian University, 1983 to 2007  
                         Professor Emeritus, Texas Christian University, 2007 to present

**COURSES TAUGHT:**

Biol. 10514 (5 class periods) Honors biology- second semester

Biol. 30011 (1 class period) Introduction to research in biology  
Biol. 30124 Vertebrate biology  
Biol. 30404 Comparative vertebrate anatomy  
Biol. 30403 (9 class periods) Ecology

Biol. 40300/40310 Teaching in biology  
Biol. 40803 Independent study and writing- undergraduate  
Biol. 40900 Independent study- undergraduate  
Biol. 50303 (1/2 the course) Systematics and Evolution  
Biol. 50903 (1/2 the course) Tropical biology  
Biol. 50923 Herpetology  
Biol. 7900 Independent study- graduate

## RESEARCH FUNDING (Since 1974)

### A. Extramural

National Science Foundation. Evolutionary potential of some life history traits in some lower vertebrates. \$180,000. 1978-1986.(3 grants).

U.S. Department of Interior- Office of Endangered Species. Release Program for Captive-raised Houston Toads. \$18,000. Dr. Hugh Quinn, Houston Zoo, Co-investigator. 1982-1983.

Dallas Zoological Society. Variation of color displays of Malagasy chameleons. \$9,200. 1987--1990. James Murphy, Dallas Zoo, Co-investigator

Nixon Griffis Fund (NY Zoological Society). Effect of varying vitamin-mineral supplementation on the growth, adult size, and reproduction of the panther chameleon \$2,988. 1991-92. co-investigator with R. Hudson, S. Hammack, D. Pernikoff, Fort Worth Zoo.

True Chameleons. Development of proper nutritional and lighting techniques for captive old-world chameleons. 1993- 2007. Total funding \$22,000.

Zoo Med, Inc. Utility of REPTISUN fluorescent lights for UV-B therapy of female panther chameleons: a proposed product test. 1995. 72 light bulbs provided.

Ultraviolet Resources, Inc. Utility of experimental test bulbs for UV-B therapy of female panther chameleons: a proposed test. 1995. 3 light bulbs provided.

Cleveland Metroparks Zoo. Effect of vitamin D nutritional status on behavioral ultraviolet light photoregulation in the panther chameleon *Furcifer pardalis*. 1999. \$2,000.

Eppley Foundation for Research. Natural UVB environments and vitamin D photoregulation in squamate reptiles. 2004. \$16,230

### B. INTRAMURAL (Since 1985)

Texas Christian University Research Fund. Egg-size and substrate moisture effects on hatchling size in the side-blotched lizard. \$2,225. 1985-1986. Funded.

Texas Christian University Research Fund. Endogenous control of reproductive allocation in

the side-blotched lizard. \$1,975. 1986-1987. Funded.

Texas Christian University Research Fund. Genetic basis of differences in egg, clutch and body size in two populations of the lizard *Sceloporus undulatus*. \$2,320. 1989-1990. Funded.

Texas Christian University Research Fund. Variation and Taxonomic Status of the Mt. Kenya three-horned chameleon. 1990-1991. \$2,710. Not funded.

Texas Christian University Research Fund. Growth mechanisms of the panther chameleon *Chamaeleo pardalis*. 1991-1992. \$2,810. Funded at a reduced level.

Texas Christian University Research Fund. Analysis of vitamins A and D in cricket feed and vitamin A in crickets fed to lizards. 1992-1993. \$2,850. Not funded.

Texas Christian University Research Fund. Geographic Variation of social displays of the panther chameleon. 1993-1994. \$3,180. Funded.

Texas Christian University Research Fund. Effect of dietary vitamin D and ultraviolet light on vitamin and mineral content of panther chameleon eggs. 1995-1996. \$2,070. Not funded.

Texas Christian University Research Fund. Vitamin D: source and levels in lizard populations. 1997-1998. \$3,500. Funded.

Texas Christian University Research Fund. Effect of Dietary Vitamin D on the photoregulatory behavior of chameleons. 1998-1999. \$3,500 Funded.

Texas Christian University Research Fund. Vitamin D: source and levels in anolis populations. 1999-2000. \$3,000 Funded.

Texas Christian University Research Fund. Construction of standard curves for assessment of vitamin D photosynthetic potential of various light environments. 2002-2003. \$3,400 Funded.

Texas Christian University Research Fund. Evaluation of UVB environment of captive lizards at the Dallas and Fort Worth zoos. 2004-2005. \$2,400 Funded.

Texas Christian University Research Fund. Restoring vitamin D in monitor lizards: are dietary and UVB sources equivalent? 2005-2006. \$4,000. Funded.

Texas Christian University Emeritus Faculty Research Fund. 2008 Natural UVB environment of the horned lizard *Phrynosoma cornutum*. \$1000. Funded.

Texas Christian University Emeritus Faculty Research Fund. 2010 Natural UVB environment of the horned lizard *Phrynosoma cornutum*. \$1000. Funded.

Texas Christian University Emeritus Faculty Research Fund. 2011. Natural UVB environment of the horned lizard *Phrynosoma cornutum* and sagebrush lizard *Sceloporus*

*graciosus gracilis*. \$1000. Funded.

#### **GRADUATE THESES AND DISSERTATIONS DIRECTED:**

(Since 1973; 21 total MS theses, 3 Ph.D. dissertations at KSU, most recent TCU theses listed below). \* indicates data published in refereed journal.

Alan Landwer. Endogenous control of clutch size in *Uta stansburiana stejnegeri* and incubation temperature effect on *Sceloporus undulatus consobrinus*. 1988.\*

Mary Beth Guenther. Variation and Genetic Basis of color pattern polymorphisms in the desert side-blotched lizard *Uta stansburiana stejnegeri*. 1990.\*

Ken Boykin. Crowding tolerance in hatchlings of two distantly related lizards *Sceloporus undulatus elongatus* and *Eublepharis macularis*. 1992.

Jon Jones. An experimental investigation of the basking behavior and physiology of the Malagasy panther chameleon *Chamaeleo pardalis*. 1995.\*

Steven Tidd. Vegetational changes in the Kirindy Forest area of western Madagascar in relation to habitat of the threatened tortoise *Pyxis planicauda*. 1997.\*

Elliott Carman. Photobiosynthetic opportunity and ability for UV-B generated vitamin D synthesis in free-living reptiles. 1998.\*

Jennifer Fontana. Responses among captive ocelots (*Felis pardalis*) to introduced scent stations. 1999.

Kris Karsten. The effect of dietary Vitamin D on the photoregulatory behavior of the panther chameleon *Chamaeleo pardalis*. 2000.\*

Kelly Rypkema. Responses among captive ocelots to conspecific pheromones. 2000.

Christine Bertz. Use of urinary cortisol to evaluate a stressor in captive okapi (*Okapia johnstoni*). 2004.

Stacey Bucklin. Use of remote sensing equipment to determine deep body temperatures of small lizards. 2006.\*

Andrew Brinker. Natural UVB environments of two free-living snake species. 2006\*.

#### **PRESENTATION OF SCHOLARLY AND CREATIVE ACTIVITIES:**

A. Refereed Publications:

- Ferguson, G.W. 1965. Verification of a population of Ficimia cana in North Central Texas. *Herpetologica* 21:156-157.
- Ferguson, G.W. 1966. Releasers of courtship and territorial behavior in the side blotched lizard Uta stansburiana. *Animal Behavior* 14:89-92.
- Ferguson, G.W. 1966. Effect of follicle stimulating hormone and testosterone propionate on the reproduction of the side blotched lizard. *Copeia* 1966:495-498.
- Ferguson, G.W. 1969. Interracial discrimination in male side blotched lizards Uta stansburiana. *Copeia* 188-189.
- Ferguson, G.W. 1970. Mating behavior of the side blotched lizards of the genus Uta (Sauria Iguanidae). *Animal Behavior* 18:65-72.
- Ferguson, G.W. 1971. Variation and Evolution of the push-up displays of the side blotched lizard Genus Uta (Iguanidae). *Systematic Zoology* 20:79-101.
- Ferguson, G.W. 1971. Observations on the behavior and interactions of two sympatric Sceloporus in Utah. *American Midland Naturalist* 86:190-196.
- Cooper, W.E. and G.W. Ferguson. 1972. Relative effectiveness of progesterone and testosterone on orange spotting in female Collared lizards. *Herpetologica* 28:64.
- Cooper, W.E., and G.W. Ferguson. 1972. Steroids and color change during gravidity in the collared Lizard Crotaphytus collaris. *Gen. and Comp. Endocrinol.* 18:69-72.
- Ferguson, G.W. 1972. Species discrimination by male side blotched lizards Uta stansburiana in Colorado. *American Midland Naturalist* 87:523-524.
- Cooper, W.E. and G.W. Ferguson. 1973. Induction of physiological color change in male Sceloporus occidentalis by epinephrine. *Copeia* 1973:341-342.
- Cooper, W.E. and G.W. Ferguson. 1973. Estrogenic priming of color change induced by progesterone in collared lizards. *Herpetologica* 29:107-110.
- Ferguson, G.W. 1973. Character displacement between the push-up displays of two partially sympatric species of Sceloporus (Sauria:Iguanidae). *Herpetologica* 29:281-284.
- Yedlin, I.N. and G. W. Ferguson. 1973. Variations of aggressiveness of free-living male and female collared lizards Crotaphytus collaris. *Herpetologica* 29:268-275.
- Ashton, R.E., J.T. Collins and G.W. Ferguson. 1974. Reptiles and Amphibians, Leaders Guide (4-H manual). Cooperative extension service, Kansas State University publication no. 4-H 371-1-12.

- Ferguson, G.W. 1976. Color change and reproductive cycling in free-living collared lizards. *Copeia* 1976:491-493.
- Tubbs, A.A., and G.W. Ferguson. 1976. Effects of crowding on display behavior, growth and survival of juvenile spiny lizards (Sceloporus undulatus). *Copeia* 1976:820-823.
- Ferguson, G.W. 1977. Display communication in reptiles: an historical perspective. *American Zoologist* 17:167-176.
- Ferguson, G.W. 1977. Variation and evolution of stereotyped behavior in reptiles, Part II, social displays of reptiles. *In* Gans and Tinkle, (eds). Biology of the Reptilia, Vol. 7, pp 405-457.
- Carpenter, C.C. and G.W. Ferguson. 1977. Variation and Evolution of Stereotyped behavior in Reptiles. Part I. Survey of stereotyped reptilian behavioral patterns. *In* Gans and Tinkle (eds.). Biology of the Reptilia vol. 7, pp. 335-404.
- Ferguson, G.W. and C.H. Bohlen. 1978. Demographic analysis: a technique for studying natural selection of behavioral traits in lizards. *In* N. Greenberg and P. McLean (eds.), Conference on Brain, Behavior and Neurology of Lizards: A colloquium. DHEW Publication No. (ADM) 77-791, pp 227-244. Rockville, Maryland.
- Ferguson, G.W., C.H. Bohlen and H.P. Woolley. 1980. Sceloporus undulatus: comparative life history and regulation of a Kansas population. *Ecology* 61(2):313-322.
- Ferguson, G.W. and T. Brockman. 1980. Geographic differences of growth rate of Sceloporus lizards (Sauria: Iguanidae). *Copeia* 1980:259-264.
- Jones, S.M. and G.W. Ferguson. 1980. The effect of paint marking on mortality in a Texas population of Sceloporus undulatus. *Copeia* 850-854.
- Hughes, J.L., L.C. Fitzpatrick, G.W. Ferguson and T.L. Beiting. 1982. Oxygen consumption and temperature acclimation in the northern prairie swift, Sceloporus undulatus garmani from Kansas. *Comparative Biochemistry and Physiology* 71A: 611-613.
- Ferguson, G.W., K.L. Brown and V.G. Demarco. 1982. Selective basis for the evolution of variable hatchling-egg size in some Iguanid lizards. *Herpetologica* 38:178-188.
- Ferguson, G.W., J.L. Hughes, K.L. Brown. 1983. Food availability and territorial establishment of juvenile Sceloporus undulatus. *In* Lizard Ecology: studies of a model organism. Huey, Pianka, Schoener (eds.) Harvard University Press pp. 134-148.
- Ferguson, G.W. and S.F. Fox. 1984. Annual variation of survival advantage of large juvenile side-blotched lizards, *Uta stansburiana*: its causes and evolutionary significance. *Evolution* 38:342-349.
- Demarco, V.G., R.W. Drenner and G.W. Ferguson. 1985. Maximum prey size of an insectivorous lizard Sceloporus undulatus garmani. *Copeia*. 1077-1079.

- Brush, W.S. and G.W. Ferguson. 1986. Predation on lark sparrow eggs by a Massasauga rattlesnake. *Southwestern Naturalist* 31:260-261.
- Ferguson, G.W. and H.L. Snell. 1986. Endogenous control of egg, hatchling and clutch size of the lizard Sceloporus undulatus garmani. *Herpetologica* 42:185-191.
- Eason, P., G.W. Ferguson and J. Hebrard. 1988. Variation in Chamelco jacksonii: Description of a new subspecies. *Copeia* 1988:580-590.
- Ferguson, G.W., H.L. Snell and A.J. Landwer. 1990 proximate control of variation of clutch, egg, and body size in a West-Texas population of Uta stansburiana. *Herpetologica* 46:227-238.
- Ferguson, G.W. and John Blades (1991). Keeping old-world chameleons in captivity. *Vivarium* 3(2):18-29.
- Ferguson, G.W., Rick Hudson and James Murphy (1991). The quest for the Mt. Kenya Muriyu. *Vivarium* 3(1):18-22;36-38.
- Gehrmann, W.H., G.W. Ferguson, T.W. Odum, D.T. Roberts and W.J. Barcellona. 1991. Early growth and bone mineralization of the lizard Sceloporus occidentalis: Is vitamin D<sub>3</sub> supplementation really necessary? *Zoo Biology* 10:409-416.
- Ferguson, G.W. and L.G. Talent. 1993. Life-history traits of the lizard Sceloporus undulatus from two populations raised in a common laboratory environment. *Oecologia* 93: 88-94.
- Guenther, M.B., G.W. Ferguson, H. L. Snell and H. Snell. 1993. Variation and genetic basis of dorsal color pattern in the desert side-blotched lizard Uta stansburiana stejnegeri. *Journal of Herpetology* 27: 199-205.
- Landwer, A.J. and G.W. Ferguson. 1994. Effects of the incubation environment on the size and incubation time of Sceloporus undulatus consobrinus hatchlings. *Texas J. Science* 46:115-120.
- Grant, B.W., K.L. Brown, G.W. Ferguson and J.W. Gibbons. 1994. Changes in amphibian biodiversity associated with 25 years of pine forest regeneration: implication for biodiversity management In Majumdar, S.K.; Brenner, F.J.; Lovich, J.E.; Schalles, J.F.; and Miller, E.W. *Biological Diversity: problems and challenges*. Pennsylvania Academy of Sciences. Easton, PA.
- Ferguson, G. W. 1994. Old-world chameleons in captivity: growth, maturity and reproduction of panther chameleons (Chamaeleo pardalis) from Madagascar. In J. Murphy, K. Adler, and J.T. Collins (eds). *Captive Management and Conservation and Captive breeding of Reptiles and Amphibians*. Society for the Study of Amphibians and Reptiles, Ithaca, New York. Contributions to Herpetology vol. 11.
- Landwer, A.J. G.W. Ferguson, R. Herber and M. Brewer. 1995. Habitat use of introduced and native anoles along the northern coast of Jamaica. *Texas Journal of Science* 47:45-52.
- Ferguson, G. W. 1996. Taxon Management Account: Chamaeleo pardalis. *Taxon Management*

Accounts Vol 1. American Zoo and Aquarium Association/Lizard Advisory Group, Fort Worth, Texas.

Ferguson, G. W., J.R. Jones, W.H. Gehrman, S.H. Hammack, L.G. Talent, R.D. Hudson, E.S. Dierenfeld, M.P. Fitzpatrick, F.L. Frye, M.F. Holick, T.C. Chen, Z. Lu, T.S. Gross, J.J. Vogel. 1996. Indoor husbandry of the panther chameleon *Chamaeleo (Furcifer) pardalis*: effects of dietary vitamins A and D and ultraviolet irradiation on pathology and life-history traits. *Zoo Biology* 15:279-299.

Jones, J.R., W.H. Gehrman, G.W. Ferguson, F.L. Frye. 1996. Hematology and serum chemistries of captive-raised female panther chameleons (*Chamaeleo pardalis*) with hepatocellular lipidosis. *Bulletin of Association of Reptilian and Amphibian Veterinarians* 6:10-13.

Ferguson, G. W. 1996. Is multigeneration captive propagation of heliophilic chameleons feasible indoors? *Vivarium* 8:41-43.

Carman, E.N., G.W. Ferguson, W.H. Gehrman, T.C. Chen, and M.F. Holick. 2000. Photobiosynthetic opportunity and ability for UV-B generated vitamin D synthesis in free-living house geckos (*Hemidactylus turcicus*) and Texas spiny lizards (*Sceloporus olivaceous*). *Copeia* 2000:245-250.

Cooper W. E., Jr., G.W. Ferguson, and J.H. Habegger. 2001. Response to animal and plant chemicals by several iguanian herbivores and the tuatara *Sphenodon punctatus*. *Journal of Herpetology* 35: 255-263.

Stephen T. Tidd, John E. Pinder III, and G.W. Ferguson. 2001. Deforestation and habitat loss for the Malagasy flat-tailed tortoise from 1963 through 1993. *Chelonian Conservation and Biology* 4: 59-65.

Ellen S. Dierenfeld, Edward B. Norkus, Katheryn Carroll and G. W. Ferguson. 2002. Carotenoids, vitamin A, and vitamin E concentrations during egg development in panther chameleons (*Furcifer pardalis*). *Zoo Biology* 21: 295-303.

Ferguson G.W., W.H. Gehrman, T.C. Chen, E.S. Dierenfeld, M.F. Holick. 2002. Effects of artificial ultraviolet light exposure on reproductive success of the female panther chameleon (*Furcifer pardalis*). *Zoo Biology* 21:525-537.

Landwer, A.J. and G. W. Ferguson. 2002. Long-term structural and habitat use of male individuals of two native and one introduced *Anolis* (Iguanidae) species on the north coast of Jamaica. *Texas J. Science* 54:51-58.

Ferguson, G.W., W.H. Gehrman, K.B. Karsten, S.H. Hammack, M.McCrae, T.C. Chen, N.P. Lung, M.F. Holick. 2003. Do panther chameleons bask to regulate endogenous vitamin D<sub>3</sub> production? *Physiological and Biochemical Zoology* 76:52-59.

Aucone, B.M., W.H. Gehrman, G.W. Ferguson, T.C. Chen, M.F. Holick. 2003. Comparison of Two Artificial Ultraviolet Light Sources Used for Chuckwalla, *Sauromalus obesus*, Husbandry.



J. Herpetological Medicine and Surgery 13:14-17.

Ferguson, G.W. J.B. Murphy, A. Raselimanana, J. Ramanamanjato. 2004. The Panther Chameleon: Color Variation, Natural History, Conservation, and Captive Management. Krieger publishing Co. Malabar FL.

Karsten K.B. and G.W. Ferguson. 2004 Outdoor enclosure design and technique for studying three-dimensional movement patterns of arboreal lizards. Herpetological Review 35:144-146.

W.H. Gehrman, J.D. Horner, G.W. Ferguson T.C. Chen, M.F. Holick. 2004. A comparison of responses by three broadband radiometers to different ultraviolet-B sources. Zoo Biology 23:355-363.

W.H. Gehrman, D. Jamieson, G.W. Ferguson, J.D. Horner, T.C. Chen, and M.F. Holick. 2004. Responses of the Solarmeter Model 6.2 UVB meter to different light sources. Herpetological Review 35:361-365.

G.W. Ferguson, W. H. Gehrman, K.B. Karsten, A.J. Landwer, E.N. Carman, T.C. Chen, M.F. Holick. 2005. Ultraviolet exposure and vitamin D synthesis in a sun-dwelling and a shade-dwelling species of Anolis: are there adaptations for lower UVB and dietary vitamin D<sub>3</sub> availability in the shade? Physiological and Biochemical Zoology 78:193-200.

Ferguson, G. W., W.H. Gehrman, T.C. Chen, M.F. Holick. 2005. Vitamin D-content of the eggs of the panther chameleon *Furcifer pardalis* : its relationship to UVB exposure/vitamin D-condition of the mother, incubation and hatching success. Journal of Herpetological Medicine and Surgery 15:4-8.

Karsten, K.B., G.W. Ferguson, T.C. Chen, M.F. Holick. 2009. Panther chameleons, *Furcifer pardalis*, behaviorally regulate optimal exposure to UV depending on dietary vitamin D<sub>3</sub> status. Physiological and Biochemical Zoology 82:218-225.

Seaver, Ryan, Gary W. Ferguson, William H. Gehrman, and Michael J. Misamore. 2009. Effects of ultraviolet radiation on gametic function during fertilization in zebra mussels (*Dreissena polymorpha*).Journal of Shellfish Research 28:625–633.

Ferguson, G.W., William H. Gehrman, Brent Peavy, Cathy Painter, Ruston Hartdegen, Tai C. Chen, Michael F. Holick, John E. Pinder III, 2009. Restoring Vitamin D in Monitor Lizards: Exploring the Efficacy of Dietary and UVB Sources Journal of Herpetological Medicine and Surgery 19: 81-88.

Ferguson, G.W.,A.M. Brinker, W. H. Gehrman, S. E. Bucklin, F. M. Baines, S. J. Mackin. 2010. Voluntary Exposure of Some Western-Hemisphere Snake and Lizard Species to Ultraviolet-B (UVB) Radiation in the field: How Much UVB Should a Lizard or Snake Receive in Captivity? Zoo Biology 29:317–334.

Bucklin,Stacey E., Gary W. Ferguson, William H. Gehrman, John E. Pinder. 2010. Use of Remote Laser Sensing Equipment to Measure Surface Temperature and to Predict Deep Body Temperatures of Small Lizards in the Field. Herpetological Review 41:309-312.

Ferguson, G.W., A.J.Kingeter, W.H. Gehrman. 2013. Ultraviolet light exposure and response to dietary vitamin D3 in two Jamaican anoles. *Journal of Herpetology* 47: 524-529.

Ferguson, G.W., W.H. Gehrman, A.M. Brinker, and Glenn C. Kroh. 2014. Daily and seasonal patterns of natural ultraviolet light exposure of the western sagebrush lizard (*Sceloporus graciosus gracilis*) and the dunes sagebrush lizard (*Sceloporus arenicolus*). *Herpetologica* 70: 56-68.

Ferguson, G.W., W. H. Gehrman, A.M. Brinker, G.C. Kroh, D.C. Ruthven III. (2015) Natural UVB exposure of the Texas horned lizard at a north Texas wildlife refuge. *Southwestern Naturalist* 60(2-3):231-239.

Ferguson, G.W., W.H. Gehrman, K.A. Bradley, B. Lawrence, R. Hartdegen, T. Storms, T.C. Chen, M.F. Holick. 2015. Summer and Winter Seasonal Changes in vitamin D status of captive rhinoceros iguanas (*Cyclura cornuta*). *Journal of Herpetological Medicine and Surgery*. 25:128-136.

Ferguson, G.W.D.T. Roberts, R. Hartdegen, W.H. Gehrman, L.A. Mitchell, B. Lawrence. 2019. Seasonal activity and fluctuations of a free-ranging population of the Ratsnake *Pantherophis obsoletus* inhabiting the Dallas Zoo, Texas. *Southwestern Naturalist*. 64 173-179.

Ferguson, G.W., W.H. Gehrman, M. Vaughan, G.C. Kroh, D. Chase, K. Slaets, M.F. Holick. 2021. Is the natural UV zone important for successful captive propagation of the Panther Chameleon: (*Furcifer pardalis*); are different UVB irradiance exposures that generate a similar dose equally successful? *Zoo Biology*. 40:150-159.

Ferguson, G.W., B. Lawrence, R. Hartdegen. (2023). Annual, seasonal, time of day, age, sexual, and gestational variation of Ultraviolet-B exposure of free-living Texas Horned Lizards *Phrynosoma cornutum* in Central Texas: a 10-year study. *Herpetological Review* 54:27-31.

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B. Non-Refereed:

Ferguson, G.W. and C.H. Bohlen. 1973. Regulation of spiny lizard populations. A progress report. *Proceedings of the Third Midwestern Prairie Conference* 69-72.

Ferguson, G.W. and C.H. Bohlen. Density dependent and independent mortality and reproduction in spiny lizard populations (abstract), *HISS News Journal* 1:109.

Ferguson, G.W. and C.H. Bohlen. Regulation of a spiny lizard population. A progress report (abstract). *Herpetological Review* 4:127.

Ferguson, G.W. 1972. Ecological survey of the site proposed for burial of radioactive wastes near Lyons, Kansas. Reptile and Amphibian segment. Submitted to the AEC as consulting report.

- Ferguson, G.W. 1972. Terrestrial biology (reptiles and amphibians). In: Munger, et. al., Missouri River environmental inventory: Rulo, Nebraska, to mouth near St. Louis, Missouri. University of Missouri Press, Columbia, Vol. 2, p 290-332.
- Ferguson, G.W. and C.L. Chen. 1973. Steroid hormones, color change, and ovarian cycling in free-living female collared lizards Crotaphytus collaris. American Zoologist 13 (abstract 119).
- Ferguson, G.W. 1975. Relationship between early experience, survival, reproduction and population regulation (abstract). American Phil. Soc. Yrb. 1974.
- Release program for captive raised Houston toads Bufo houstonensis. Progress report work completed through June . Submitted to the U.S. Department of Interior and Fish Wildlife and Service, Office of Endangered Species (4 annual reports 1981-1984).
- Ferguson, G.W. 1984. Iguanas of the world: their behavior, Ecology and Conservation (book review). Herpetological Review 15:80-81.
- Ferguson, G.W. 1985. Their blood runs cold: adventures with reptiles and amphibians (book review). Copeia 1985:269-270.
- Ferguson, G.W. and H.L. Snell. 1988. Captive maintenance and breeding of large quantities of the small iguanids Uta stansburiana and Sceloporus undulatus. In K. Peterson (ed.) 10th and 11th International Herpetological Symposia on Captive Propogation and Husbandry, Proceedings. pp. 86-99. Zoological Consortium, Thurmont, Md.
- Ferguson, G.W. (1989). Hybridization and Speciation in North American Indiginous Bufonids (book review). Texas Books in Review. 9:9.
- Ferguson, G.W. (1989). A field Guide to Reptiles and Amphibians in Texas (book review). Texas Books in Review. 9:9-10.
- Ferguson, G.W. 1991. Ad libitum feeding rates, growth, and survival of captive-hatched chameleons (Chamaeleo paradalis) from Nosy Be Island, Madagascar. Herp. Review 22:124-125.
- Ferguson, G. W. 1993. Old-world chameleons: collecting, captive breeding, and conservation. Proceedings of the 16th International Herpetological Symposium.
- Ferguson, G. W., J. Murphy, A. Raselimanana, J. Ramanamanjato and J. Annis. 1994. The Panther Chameleon. Chameleon Information Network 11: 11-20.
- Ferguson, G. W., J. Murphy, A. Raselimanana, J. Ramanamanjato. (1995). Panther Chameleon. Pp. 5-32. In Care and breeding of Panther, Jackson's, Veiled and Parson's Chameleons. P. Devosjoli and G. Ferguson (eds.) Advanced Vivarium Systems, Santee CA.
- De Vosjoli, P and G. Ferguson. (1995). Care and breeding of panther, Jackson's, veiled and Parson's chameleons. Advanced Vivarium Systems, Santee CA.

Ferguson, G. W., J. R. Jones, W. H. Gehrman, S. H. Hammack, R. Hudson, L.G. Talent, F.L. Frye, E.S. Dierenfelt, M.P. Fitzpatrick, M.F. Holick, T.C. Chen, Z. Lu, J.J. Vogel .1996. Effects of Vitamins A and D and Ultraviolet Irradiation on the Life-history of captive panther chameleons (*Chamaeleo pardalis*). pp. 77-79. In. M.F. Holick (ed.) Biological Effects of Light 1995. Walter de Gruyter and Co., Berlin.

Jones, J.R., G. W. Ferguson, W. H. Gehrman, M. F. Holick, T.C. Chen, Z. Lu. 1996. Vitamin D nutritional status influences voluntary behavioral photoregulation in a lizard. pp. 49-55. In. M.F. Holick and E. G. Jung (eds.) Biological Effects of Light 1995. Walter de Gruyter and Co., Berlin.

Ferguson, G. W. 1997. The future of herpetoculture. Vivarium 8: 9.

Ferguson, G. W., E.N. Carman, W.H. Gehrman, M.F. Holick, T. Chen. (1998). Vitamin D photobiosynthetic opportunity and ability of free-living Texas spiny lizards and house geckos (abstract). Photodermatology Photoimmunology and Photomedicine 14:181.

Ferguson, G.W., W.H. Gehrman, T. Chen, M.F. Holick, M.J. Russell (1998). Ultraviolet light requirements of panther chameleons in captivity (abstract). Photodermatology Photoimmunology and Photomedicine 14:180.

Ferguson, G. W., E.N. Carman, W.H. Gehrman, M.F. Holick, T. Chen. (1999). Photobiosynthesis in lizards: opportunity, ability and behavioral regulation. Pp 103-109. In MF Holick and EG Jung (eds) Biologic Effects of Light 1998: a symposium. Kluwer Academic Publishers. Norwell MA.

Ferguson, G. W., W.H. Gehrman, T. Chen, M.F. Holick, M.J. Russell (1999). Ultraviolet light requirements of panther chameleons in captivity. Pp. 137-140. In MF Holick and EG Jung (eds) Biologic Effects of Light 1998: a symposium. Kluwer Academic Publishers. Norwell MA.

Hunt, A.S., A.W. Ward, and G. W. Ferguson. 2001. Effects of a high calcium diet on gut loading in various ages of crickets (*Achaeta domestica*) and mealworms (*Tenebrio molitor*). Proceedings of the fourth conference on zoo and wildlife nutrition. 4:94-99.

Ferguson, G.W., W.H. Gehrman, S.H. Hammack, J.R. Jones, K.B. Karsten, M.F. Holick, T.C. Chen. 2001. Effect of dietary vitamin D on voluntary light exposure for the Malagasy panther chameleon *Furcifer pardalis*. (abstract). Photodermatology, photoimmunology and photomedicine. 17:141.

Ferguson, G.W., W.H. Gehrman, S.H. Hammack, T.C. Chen, M.F. Holick. 2002. Effects of dietary vitamin D and UVB irradiance on voluntary exposure to ultraviolet light, growth, and survival of the panther chameleon *Furcifer pardalis*. Pp. 193-204. In M.F. Holick and E.G. Jung eds, Biologic Effects of Light 2001. Kluwer, Boston.

Klaphake, E. 2003. Chameleons and vitamin A: a roundtable (A.L. Abate, R. Coke, G. Ferguson, D. Reaville, panelists). Journal of Herpetological Medicine and Surgery 13 (2):23-31.

Klaphake, E. 2003. Ultraviolet light and reptiles, amphibians: a roundtable. (E. Adkins, T. Diggers, Gary Ferguson, William Gehrman, Z. Gyimesi, E. May, M. Ogle, T. Owens, panelists).

Journal of Herpetological Medicine and Surgery 13 (4):27-36.

Gehrmann, W.H. and G.W. Ferguson. 2005. Replacing fluorescent lamps. Bull. Chicago Herp. Soc. 40:85-86.

Ferguson, G.W. J. B. Murphy, A. Raselimanana, J. Ramanamanjato. (2007). Panther Chameleon (*Chamaeleo pardalis*): Natural History, Captive Management and Breeding. Chapter in Captive Care of Veiled, Jackson's Panther, and Parson's Chameleon, Bowtie Press.

Ferguson, G., K. Kalish, S. McKeown. (2007) Chameleons: care and breeding of Jackson's, Panther, Veiled and Parson's. Advanced Vivarium Systems. Irvine Ca.

Ferguson, G., W. Gehrmann, B. Peavy, C. Painter, R. Hartdegen, T. Chen, M. Holick, J. Pinder 2007. Restoring Vitamin D in Monitor Lizards: are dietary and UVB sources equivalent? Biawak 1:92-94.

Lindgren, J., W.H. Gehrmann, G.W. Ferguson, and J.E. Pinder 2008. Measuring effective vitamin D3-producing ultraviolet B radiation Using Solartech's Solarmeter 6.4 Handheld, UVB Radiometer. Bulletin of the Chicago Herpetological Society 43:57-62.

Fitzgerald L.A., Allen T., Chan L.M., Chopp J., Dixon J.R., Ferguson G., Gluesenkamp A., Hibbitts T.J., Hill D., Hill M.T., Howard R., Leavitt D.J., Miles, D.B., Painter C.W., Pifer E., Ryberg W.A., Sears M., Snell H.L. 2012. The Research Program on *Sceloporus arenicolus*: Integration of findings, gaps in knowledge, and priorities for conservation-oriented research. Report to Center of Excellence in Hazardous Materials Management (CEHMM), Carlsbad, NM.

Ferguson, G. W., A. M. Brinker, W.H. Gehrmann. 2015. *Coluber Flagellum* [= *Masticophis flagellum*] (coachwhip). Ultraviolet (UVB) exposure. Herpetological Review 46:639-640.

## **PAPERS PRESENTED, PARTICIPATION ON PANELS ETC. (SINCE 1985)**

### **A. Papers presented and panels**

Ferguson, G.W. and H.L. Snell. 1985. Endogenous control of egg, hatchling and clutch size in Sceloporus undulatus. Society for the study of Reptiles and Amphibians. Tampa, Florida.

Ferguson, G.W. 1985. Problems in organizing national meetings. SSAR. Tampa, Florida.

Chameleons I have known. American Society of Ichthyologists and Herpetologists. Ann Arbor, Michigan. 1988.

Factors Influencing seasonal variation in clutch and offspring size in Uta stansburiana. American Society of Ichthyologists and Herpetologists. Ann Arbor, Michigan. 1988.

Effects of incubation temperature on the size of Sceloporus undulatus hatchlings (with Allan

Landwer). ASIH Ann Arbor, Mich. 1988.

Graduate theses in Herpetology at TCU. Texas Herpetological Society. Nacogdoches, Texas 1988.

Panel member. Symposium and workshop on the Herpetology of the Galapagos Island: Conservation and research, Darwin Research Station. Santa Cruz. Galapagos Islands. 1988

Chameleons: captive maintenance and Breeding, chairman of panel discussion. Oklahoma Herpetological Society and North Texas Herpetological Society. Oklahoma City. 1989.

Ferguson, G. W., W. H. Gehrmann, S. H. Hammack, L.G. Talent, F.L. Frye, R. D. Hudson, E. S. Dierenfeld. Effects of experimental manipulation of dietary Vitamin A, Dietary vitamin D, and ultraviolet A irradiation on growth, survival, pathology, and reproduction of the Malagasy panther chameleon (*Chamaeleo pardalis*). poster presented. Joint annual meeting of the Herpetologists League and the Society for the Study of Amphibians and Reptiles. Athens Georgia. August, 1994.

Ferguson, G. W. session chaired. Reproductive Biology. Joint annual meeting of the Herpetologists League and the Society for the Study of Amphibians and Reptiles. Athens Georgia. August, 1994.

Ferguson, G.W., J. Murphy, Achille Raselimanana and Jean-Baptiste Ramanamanjato. Geographic variation of display colors of the panther chameleon: a progress report. 20th annual meeting of the International Herpetological Symposium. San Antonio, Texas. June 1996.

Stephen Tidd, John Pinder and Gary Ferguson. Long-term changes of habitat of the Malagasy Tortoise *Pyxis planicauda*. 20th annual meeting of the International Herpetological Symposium. San Antonio, Texas. June 1996.

Gary Ferguson, session chairman, 20th annual meeting of the International Herpetological Symposium. San Antonio, Texas. June 1996.

Jones, J. R., Ferguson, G.W., Gehrmann, W.H., Holick, M.F., Chen T. C., Lu, Z. Vitamin D nutritional status influences voluntary behavioral photoregulation in a lizard. 39th annual meeting of the Society for the Study of Reptiles and Amphibians, Lawrence, Kansas. August 1996.

Ferguson, G. W., W. H. Gehrmann, S. H. Hammack, L.G. Talent, F.L. Frye, R. D. Hudson, E. S. Dierenfeld. Effects of dietary Vitamins A and D and ultraviolet irradiation on the life-history of captive panther chameleons. Poster presented. 39th annual meeting of the Society for the Study of Reptiles and Amphibians, Lawrence, Kansas. August 1996.

Carman, E.N., G.W. Ferguson, W.H. Gehrmann, M.F. Holick, T. Chen. (1998). Vitamin D photobiosynthetic opportunity and ability of free-living Texas spiny lizards and house geckos: a preliminary study. Paper presented at the joint annual meeting of the American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles, Herpetologist's League, American Elasmobranch Society, Canadian Association of Herpetology. Guelph, Ontario. July 1998.

Gary W. Ferguson. Effect of dietary vitamin D on voluntary UV light exposure for the Malagasy panther chameleon *Furcifer pardalis*. Presented at the Biologic Effects of Light Symposium in Boston Massachusetts, June 2001.

Gary W. Ferguson. Calcium and Vitamin D-related problems in Captive Reptiles: a General Review. Lincoln Park Zoo. Workshop on Vitamin D. April 27-28, 2003. Presented talk and participated in workshop discussion. Proceedings to be presented to American Zoo Association for distribution to member institutions.

Ferguson G.W., A. Kingeter, W.H. Gehrman. Natural UVB exposure and UVB/Vitamin D photoregulation in *Anolis sagrei* and *A. lineotopus*. Poster presented at the 2005 Joint Meeting of Ichthyologists and Herpetologists, July 2005. Tampa, Florida.

Ferguson, G.W., W.H. Gehrman, K.B. Karsten, A.J. Landwer, E.N. Carman, T.C. Chen, M. F. Holick. Ultraviolet exposure and vitamin D synthesis in a sun-dwelling and a shade-dwelling species of *Anolis*. Talk presented at the 2005 Joint Herpetological Meeting, July 2005. Tampa, Florida.

Bucklin, S.E.; G.W. Ferguson; W.H. Gehrman. Use of remote laser sensing equipment to determine deep body temperatures of small lizards. Presented Joint Herpetological meetings, July 2006. New Orleans, LA.

#### B. Invited symposia presentation and/or participation

Harvard and Smithsonian Conference on Lizard displays. Panel discussant, Barro Colorado Island, Panama, 1972.

Demographic Analysis, a tool for the study of Natural Selection of Behavioral Traits, invited speaker, Conference on Reptilian Brain, Behavior and Evolution, National Institute of Mental Health and the Smithsonian Institution, Front Royal, Virginia, 1975.

Display Communication in Reptiles: an Historical Perspective, Invited Speaker, Communication and display behavior in reptiles. Symposium sponsored by the American Society of Zoologists. New Orleans, 1976.

The role of food competition in territorial establishment of juvenile *Sceloporus undulatus*, invited speaker, Lizard ecology: studies of a model organism, symposium sponsored by American Society of Zoologists, Seattle, 1981.

Selective basis for the evolution of variable egg-hatchling size in some iguanid lizards, invited speaker, Reptilian Reproduction Symposium sponsored by the Society for the study of Reptiles and Amphibians, Memphis, Tennessee, 1981.

Chairman and Organizer, workshop entitled Funding Opportunities in Herpetology, panel discussion entitled Research Opportunities in Zoos, sponsored by Society for the Study of Reptiles and Amphibians, Raleigh, North Carolina, 1982.

Panel Member (invited) Conservation of Galapagos Herpetofauna. Santa Cruz Island, Galapagos, Ecuador. 1988.

Long term indoor maintenance of old world chameleons in captivity, invited speaker, 7th International Symposium on Reptilian Reproduction, Dallas, Texas 1984.

Chairman and organizer. Symposium on the herps and habitats of Texas. Texas Herpetological Society, Houston, Texas

Captive maintenance and breeding of large colonies of the small iguanid lizards Uta stansburiana and Sceloporus undulatus. 9th International Symposium on Reptilian Reproduction, San Antonio, Texas.

Invited banquet speaker- Northern California Herpetological Society- Feb. 1991. Davis, California. Adventures with Chameleons.

Captive management of lizards of the Family Chamaeleonidae in a laboratory. A symposium of captive management and conservation of reptiles and amphibians. Society for the study of Reptiles and Amphibians. Penn State Univ. 1991.

Zoo Research: Expanding your horizons by maximizing your resources. Cooperative Research between Texas Christian University, Fort Worth Zoo, Dallas Zoo on Malagasy chameleons. Dallas 26 April 1992. Symposium sponsored by the Dallas Zoo.

Malagasy chameleons: capture, captive breeding and conservation. 15th International Symposium on Reptilian Reproduction. St. Louis, Mo. 1992.

Ferguson, G.W. Researching the nutritional and lighting needs of the panther chameleon. Invited speaker. North Texas Herpetological Society Annual Symposium. Arlington, TX April, 1995 .

Ferguson, G.W. Researching the nutritional and lighting needs of the panther chameleon. Invited speaker. 19th annual International Herpetological Symposium. Denver, CO June, 1995.

Ferguson, G.W. Vitamin D nutritional status influences voluntary behavioral photoregulation in a lizard. Invited speaker. Symposium on the Biological Effects of Light. Atlanta, GA, October, 1995.

Ferguson, G. W., W. H. Gehrman, S. H. Hammack, L.G. Talent, F.L. Frye, R. D. Hudson, E. S. Dierenfeld. Effects of dietary Vitamins A and D and ultraviolet irradiation on the life-history of captive panther chameleons. Invited poster presented. Symposium on the Biological Effects of Light. Atlanta, GA. October, 1995.

Ferguson, G.W. E.N. Carman, W.H. Gehrman, T. Chen, M.F. Holick. Vitamin D photobiosynthetic opportunity and ability of free-living Texas spiny lizards and house geckos. Symposium on the Biologic Effects of Light. Basil Switzerland. November, 1998.

Ferguson, G. W., W.H. Gehrman, T. Chen, M.F. Holick, M.J. Russell. Ultraviolet light



requirements of panther chameleons in captivity (poster). Symposium on the Biologic Effects of Light. Basil Switzerland. November 1998.

Gary W. Ferguson, W. Gehrman, S. Hammack, J. Jones, K. Karsten, M. Holick, T. Chen. Dietary vitamin D and voluntary UV light exposure for the Malagasy panther chameleon *Furcifer pardalis*. Presented by invitation at the SSAR and HL sponsored symposium, Herpetological Research in Zoos in Indianapolis Indiana, July 2001.

Vitamin D workshop. Sponsored by the Lincoln Park Zoo, Chicago. 2003.

James B. Murphy and G. W. Ferguson. Chameleons: biology and captive management. 28<sup>th</sup> annual meeting. International Herpetological Symposium. Daytona Beach Florida. August 2004.

Gary W. Ferguson. Panther chameleon husbandry and the discovery of UVB-vitamin D photoregulation. Herpetological Symposium. Fort Worth Zoo. October 2004.

Ferguson, G.W., A.M. Brinker, W. H. Gehrman, S. E. Bucklin, F. M. Baines, S. J. Mackin. Ultraviolet-B (UVB) Exposure Guidelines for Diurnal/Crepuscular Snakes and Lizards Based on Field Surveys. Invited presentation at the annual Taxon Advisory Group (AZA) meetings, March 2009. Baltimore.

Ferguson, G.W., A.M. Brinker, W. H. Gehrman, S. E. Bucklin, F. M. Baines, S. J. Mackin. Ultraviolet-B (UVB) Exposure Guidelines for Diurnal/Crepuscular Snakes and Lizards Based on Field Surveys. Presented at the annual Nutritional Advisory Group (AZA) meetings, October 2009. Tulsa

Ferguson, G. W. Field Observations on the Activity, UV-exposure and Temperature Environments of the Texas Horned Lizard *Phrynosoma cornutum* : Implications for Captive Maintenance and Management. Invited presentation at the 34<sup>th</sup> Annual International Herpetological Symposium. July 2011. Fort Worth, Texas.

Ferguson, G.W., W.H. Gehrman, G.C. Kroh. 2012. Preliminary field observations on the activity and UV-exposure of the the sagebrush lizard *Sceloporus graciosus* and sand-dune sagebrush lizard *Sceloporus arenicolus*. First Research Workshop for *Sceloporus arenicolus*. Sponsored by Texas A and M University. Invited presentation 23 January 2012.

Ferguson, G.W. and W.H. Gehrman. 2016. Thermoregulation and UV/vitamin D photoregulation in reptiles: current knowledge and future directions. Invited presentation at the 2016 International Herpetological Symposium. July 2016. St. Louis, Missouri.

Ferguson, G.W. W.H. Gehrman, M.F. Holick. 2019. Exploring the Relationship between Ultraviolet Radiation, Vitamin D, Behavior and Health in Squamate Reptiles: why won't my chameleon eggs hatch? Keynote speaker at the First international Conference, Advancing Herpetological Husbandry. Rodeo, New Mexico USA.

Ferguson, G.W. W.H. Gehrman, M.F. Holick. 2020. Exploring the Relationship between Ultraviolet Radiation, Vitamin D, Behavior and Health in Squamate Reptiles: why won't my

chameleon eggs hatch? Invited speaker at the Annual Sales Meeting. ZooMed, Inc. San Luis Obispo, CA.

Invited seminar speaker at an additional 20 universities, zoos and societies from 1985 through 2009.

#### **EDITORSHIP, CONSULTATNSHIPS, AND APPLIED PROFESSIONAL ACTIVITIES:**

Consultant, Atomic Energy Commission concerning ecological impact of radioactive mwaste disposal.

Grant proposal referee, National Science Foundation, Psychobiology Division, Division of Ecology and Systematics, Population and Physiological Ecology Division. National Geographic Society.

Manuscript referee for the journals: Animal Behavior, Bulletin of the Association of Reptile and Amphibian Veterinarians, Copeia, Ecology, Evolution, Herpetologica, Herpetological Review, Journal of Herpetology, Proceedings of the U.S. National Museum, Ecological Monographs, Ecology, Science, Journal of Herpetology, Southwestern Naturalists, Texas Journal of Science, Zoo Biology.

Editorial Board, Journal of Herpetology, Copeia, Advanced Vivarium Systems, Association of Amphibian and Amphibian Veterinarians.

Member, Time and Place Committee, American Society of Ichthyologists and Herpetologists, Chairman, Local Committee 60th Annual Meeting held at TCU in 1980.

Society for the Study of Reptiles and Amphibians: Zoo Liason Committee, Kennedy Student Prize Committee, President (nominee).

Texas Herpetological Society. Vice President (1983), President (1984-85).

American Society of Zoologists, member of local committee.

Board of Councilors, Herpetologist's League.

Board of Governors, American Society of Ichthyologists and Herpetologists.

American Association of Zoos and Aquariums, advisory board Lizard Advisory Group.

National Geographic Society and British Broadcasting Corporation, Technical consultant for nature films production.

North Texas Herpetological Society, Advisory Board.

Business Consultant, True Chameleons.

**ACADEMIC ADVISING ACTIVITIES:**

Biology Major - non premeds about a dozen each semester  
Biology Major - premeds (occasional temporary service on premed committee increases advising load to about 50 per semester)

**DEPARTMENTAL SERVICE:**

Committee on Graduate Studies (1977-1980, Chairman, 78-80, 1990 - 1998, Chairman, 1996-98).  
Committee on tenure and promotion (1975-79).  
Faculty Recruitment Search Committee (1976-78).  
Ph.D. Proposal Committee, Chairman (1981).  
Departmental Advisory Committee (1983-1998; 1999 Chairman 1996).  
Departmental Representative to Monday on Campus.  
Seminar Committee.

**COLLEGE SERVICE:**

Premedical Committee (1975-1983; 1991, Acting Chairman (1979; 1982; 1991).  
Member, Environmental Science Faculty (1974-2007).  
AddRan Advisory Committee (1980-82),  
Environmental Science Committee (2002-2007).

**UNIVERSITY SERVICE:**

Traffic Regulation and Appeals (1975-78)  
Committee Chairman (1976-78)  
Research Committee (1985 to 1990), Chairman (1987 to 1988)  
University Committee on Animal Facilities (1997-2002).

**COMMUNITY ACTIVITY DIRECTLY RELATED TO PROFESSIONAL SKILLS:**

Tours of herpetology laboratory to groups from Alice Carlson Elementary School, the Museum of Science and History, TCU Nursery School, Bluebirds, Eastland Elementary School, Advisory Board, North Texas Herpetological Society. Lectures to Fort Worth Nature Center and refuge, Fort Worth Academy, Audubon Society on reptiles and amphibians. Nationwide consultation on chameleon husbandry. Judge- International Science Fair, Fort Worth (1998)

**MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:**

Texas Herpetological Society, President 1985  
American Institute of Biological Science  
Ecological Society of America  
American Society of Ichthyologists and Herpetologists, Board of governors, Time and Place Committee  
Society for the Study of Reptiles and Amphibians

Society for the Study of Evolution  
Herpetologists League, Board of Councilors  
Sigma Xi  
Southwestern Association of Naturalists  
Chicago Herpetological Society

**PROFESSIONAL RELATED HONORS AND AWARDS:**

NSF Predoctoral trainee (1965)  
NIH Predoctoral Fellow (1964-66)  
Naval Medical Research Institute Fellow (1962)  
Smithsonian Institution Postdoctoral Fellow (alternate) (1974)  
Nominee, President-elect, Society for the Study of Reptiles and Amphibians (1976)  
Summer Research Fellow, Savannah River Ecology Laboratory (1977)  
President Texas Herpetological Society (1985)  
Invited Banquet Speaker - Northern California Herpetological Society  
Mortar Board Preferred Professor (1993-94, 2003)  
Deans research award, TCU (2006)  
Keynote speaker, Advancing Herpetological Husbandry (2019), Zoo Med, Inc., (January 2020)

**OTHER PROFESSIONALLY RELATED ACTIVITIES NOT INCLUDED IN ANY OF ABOVE CATEGORIES:**

Ancillary Faculty, North Texas State University - served on Ph.D. committees for 5 students.

I regularly attended annual meetings of the American Society of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles-Herpetologist's League through 2015.