ROBERT J. BAKER
CURRICULUM VITAE

Personal:

Born: 8 April 1942, Warren, Arkansas
Married to Laura Kyle Baker, M.D.
Children, April Jeanee and Robert "Bobby" Kyle (deceased)
Grandchildren, Jason Joyner Baker, Faith Padilla

Education:

Arkansas A & M College, Monticello, B.S., 1963
Oklahoma State University, Stillwater, M.S., 1965 (Dr. Bryan P. Glass, Major Advisor)
University of Arizona, Tucson, Ph.D., 1967 (Dr. E. Lendell Cockrum, Major Advisor)
Harvard University, Developmental leave, 1986 (Dr. Rodney L. Honeycutt)

Present Position:

Horn Professor, Department of Biological Sciences (1979 to present); Director, Natural Science Research Laboratory (1976 to present); Curator of Mammals; Curator of Genetic Resource Collection, Museum of Texas Tech University.

Research Interests:

Speciation; Genetic Species Concept; Bateson-Dobzhansky-Muller model; Hybrid Speciation; Consequences of multi-generational exposure to high levels of radiation (at Chernobyl); Chromosomal Evolution, Genome architecture and dynamics, and Genome instability; Systematics; American Leaf-Nosed bats; Contact zones between chromosomal races and phylogroups; Conservation genetics; Genetic mechanisms that drive morphological evolution and adaptation; Alternative gene splicing in tissues (transcriptomics).

Courses Taught:

Freshman Biology for Non-Majors, Mammalogy, Histology, Cytology, General Zoology, Biological Status of Man, Advanced Mammalogy, Field Methods, Collection Management, Systematic Biology, Evolution, plus various research courses.

Administrative Experience:

Associate Director of the Museum, for Research – 1972-1975.
Director, Natural Science Research Laboratory - 1976 to present
Associate Chairperson, Biological Sciences – 1985-1986.

Other Experiences:

Research Associate, M.D. Anderson Hospital and Tumor Institute, Section of Cell Biology, 1967-1972.
Research Associate Carnegie Museum, Pittsburgh, 1975 - 1990.
Research Associate, Museum of Southwestern Biology, Biology Dept., the University of New Mexico, 1988 - Present.
Member, Board of Directors, Nature Conservancy of Texas, 1996-1999.
Member, Board of Directors, Helen Hodges Educational Charitable Trust, 1987-2013
President, Texas Panhandle Retriever Club, 1982-1983.

Other activities:

Faculty Leader, University Horizon Campaign, 1997-2001 (raised over $17 million for Texas Tech University)
Faculty Athletic Representative, June 2001–Nov. 2008
Athletic Council 1997-2001
Advisory Panel for Department of Zoology, Faculty of Resource Science in Technology, 2014

Fellowships and Grants:

N.I.H. predoctoral fellow, June 1965 - May 1967

Texas Tech University Faculty Grant for Research

1967-1968	$ 3,500
1968-1969	$ 3,900
1972-1973	$ 3,000

American Philosophical Society Grant

1968-1969	$ 1,000

National Science Foundation Grants, Principal Investigator of:

GB-8120, 1968-1970	$ 16,700
GB-29132x, 1970-1971	$ 12,000
GB-29132x1, 1970-1972	$ 4,000
GB-41105, 1975-1975	$ 30,000
Supplement	$ 1,600
DEB-76-20580, 1976-1978	$ 50,000
DEB-80-04293, 1980-1982	$ 68,000
DEB-83-00764, 1983-1984	$ 55,000
BSR-86-00646, 1986-1988	$ 130,000
BSR-85-11678, 1986-1987	$ 62,130
BSR-85-11678, 1988-1989 Continuation	$ 69,000
BSR-90-06797	$ 20,000
BSR-90-06797, RUI supplement	$ 10,000
DEB-92-07597, 1992-1995	$ 270,000
DBI-0545040, 2006-2009 (Co- PI)	$ 224,999

Smithsonian Foreign Currency Program work in Tunisia (Co-Principal Investigator)

1972-1973	$ 50,000
1973-1974	$ 50,000

U.S Department of Agriculture

COPI-USDA (work on Atlantic Croaker)

1991-1993 - $114,000; co-PI and PI was Dr. Reynaldo Patino

COPI-USFW Service (work on Canada goose DNA zip codes)

1991-1995 - $80,000

National Parks Systems Grant for $24,000.00 for three years.

This is part of a larger project (approximately $75,000for 3 years) conducted by Texas Tech. Dr. Hugh H. Genoways and I co-directed the mammal survey.

National Geographic Society

$7,520.00 for study on systematics and evolution of moles (Principal Investigator).

Welder Wildlife Foundation Grant

1978-1979	$ 10,600

Ft. Bliss Project, DOD funding for biodiversity studies on Ft. Bliss

1996-1998	$ 550,000

Genetics of the endangered woodstorks

1992-1996	$ 20,000

Advanced Technology Program, (work on ratite management)
1996-1997 $ 169,600

Texas Parks & Wildlife Commission (Co-Principal Investigator)
(swift fox study)
2005-2007 $ 72,175

National Fish & Wildlife Foundation (Co-Principal Investigator)
(swift fox fragmentation study)
2005-2007 $ 45,390

Texas Tech University Office of Research Services Grant (Co-Principal Investigator)
(service contract & software for DNA sequencer)
2008 $ 20,100

Currently funded Research:

Texas State Line Item, (genetic identification of species and cultivars)
2000-2001 - $186,000. This program has been funded for $800,000 over the past eight years prior to the current grant

Texas State Line Item, (work on biological data base)
2000-2001 - $446,000. This research effort has been funded for $892,000 from 1996 to 1999.

Chernobyl research, DOE.
2001 - $110,000

Sandia National Laboratories
2013 - $18,750. Title: "TCU #387 (NWI) SNL/TTU Bird and Bat Environmental Study for the Experimental Wind Farm."

Texas Department of Transportation
2013 - $67,223. Title: "Endangered Eyeless *Cicurina* (Araneae: Dictynidae): Species Identification with Genetic Applications."

Other small grants & contracts approximately $30,000.

Submitted Grants:

NIH Proposal: Functional Genomic Impacts Caused By the Chernobyl Accident (Co-PI)
9/2008-8/2009 $1,757,798

Field Experiences:

Over thirty months in Neotropics in the following countries: Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Ecuador, Venezuela, Suriname, Peru, Trinidad, Puerto Rico, Jamaica, Cuba, Guadeloupe, Grenada, Dominica, Montserrat. Other collections conducted in the southwestern and southern U. S., Tunisia, England, Malaysia, Chelyabinsk, Russia, Kyrgyz Republic, and twenty weeks at Chernobyl, Ukraine.

Editorial Experiences:

General notes editor for the Journal of Mammalogy, 1972-1973.
Feature articles editor for the Journal of Mammalogy, 1974-1975.
Editor of Occasional Papers and Special Publications of The Museum, Texas Tech University, 1975-1984, 1992-present

Associate Editor: Systematic Zoology, 1980-1982
Managing Editor: Journal of Mammalogy, 1982-1984 and 1992-1993
Journal Editor: Journal of Mammalogy, 1985-1987
Editorial Board Member, Current Mammalogy, 1986-2000
Associate Editor: Journal of Heredity, 1989-1996
Associate Editor: Chromosome Research, 1992-1995
Editorial Board Member: Molecular Phylogenetics and Evolution, 1992-?
Editorial Board Member: Journal of Mammalian Evolution, 1993-2005
Associate Editor: The Wildlife Bulletin, 2003-2005
Editorial Board: Acta Chiropterologica, 2003-present
Associate Editor: The Wildlife Society Bulletin, 2013-present

Society Affiliations:

American Association for the Advancement in Science
American Alliance of Museums
American Genetics Association (Elected Council Member, 1993-1995)
American Society of Mammalogists (Member Board of Directors, 1973-1984, 1986-1992; First Vice-President, 1993-1994; President, 1994-1996; Honorary Member, 2005).
International Mammalian Genome Society
Natural Science Collections Alliance
North American Society for Bat Research
Sigma Xi (President, local chapter 1989)
Society for Preservation of Natural History Collections
Society for the Study of Evolution
Society of Systematic Biologists (Councilor, Class of 1993)
Southwestern Association of Naturalists (President, 1981)
Texas Academy of Science (Elected Fellow 1990)
Texas Association of Museums
Texas Genetics Society (Elected to Board of Directors, 2000; President, 2002)
Texas Society of Mammalogists (President, 1990; Honorary Member, 1997)

Awards:

Sigma Delta Chi Honor for undergraduate teaching, 1970
Paul Whitfield Horn Professor, TTU, 1979
C. Hart Merriam Award from American Society of Mammalogists, 1980
Faculty Research Award, Arts and Sciences, 1980 and 1986
Distinguished Alumnus, University of Arkansas at Monticello, 1981
Texas Tech University President's Award for Excellence in Education, 1987
Barney E. Rushing, Jr. Award for Excellence in Research, 1989
Fellow, Texas Academy of Science, 1990
Achievement Reward for College Scientist (ARCS) Distinguished Scientist, Lubbock Chapter1993
Don Tinkle Award for Research from Southwestern Association of Naturalist, 1993
H. H. T. Jackson Award from American Society of Mammalogists, 1994
John Tanner Memorial Lectureship, Brigham Young University, 1994
George Misch Sutton Lectureship, University of Oklahoma, 1995
Honorary Member, Texas Society of Mammalogists, 1997
Grover E. Murray Education Award for Outstanding Contributions to Higher Education, Texas Tech University, Texas Tech Health Sciences Center, 1998
Joseph Grinnell Award from American Society of Mammalogists, 2000,
Texas Tech University Athletic Department, Recognition of Contribution to total development of student athletics,2000
Distinguished Alumnus, Oklahoma State University, 2001
Award for Excellence in Graduate Education from the TTU Association of Biologists, 2001
Texas Tech University Teaching Academy, 2001
Robert L. Packard Award for Education from Southwestern Association of Naturalist, 2002
Special Achievement Award from the Texas Society of Mammalogists, 2002

Professing Excellence from Texas Tech University, 2002
Department of resident life recognizes commitment to student success, 2002
Barbara H. Bowman Award from the Texas Genetics Society, 2005
Honorary Membership from the American Society of Mammalogists, 2005
Distinguished Texas Scientist Award from the Texas Academy of Sciences, March 2007
Outstanding Faculty Mentor by Phi Beta Kappa, April 2007
Distinguished Service Award from the Texas Genetics Society, April 2007
Sustainability Award from the Ecological Society of America, 2008
Gerrit S. Miller Jr. Award from the North American Bat Symposium Colleagues, Nov. 2009

Individuals that authored research papers based on work they did as undergraduates in the laboratory of Robert J. Baker at Texas Tech University. A list of publications can be provided upon request.

Student	Highest Degree to Date	University of Highest Degree	Present Position
Genaro Lopez	Ph.D.	Cornell University	Prof., UT-Brownsville & TX Southmost College
James J. Bull	Ph.D.	Univ. of Utah	Prof., Univ. of Texas at Austin
Robert G. Jordan	Ph.D.	Univ. of Oregon	Prof., U.S. Military Academy W Point, NY, Retired
Brent Davis	M.S.	Texas Tech Univ.	Deceased
Gregory A. Mengden	Ph.D.	Australian Natl. Univ.	Unknown
Stephen L. Williams	Ph.D.	University of Göteborg, Sweden	Prof., Baylor University (Retired)
William B. Wyatt	B.S.	Texas Tech Univ.	Unknown
John C. Patton	Ph.D.	Univ. of Georgia	Research Scientist, Purdue University, Dept. of Forestry & Natural Resources
Michael Arnold	Ph.D.	Australian Natl. Univ.	Prof., Dept. of Genetics, Univ. of Georgia, Athens
Cynthia Dunn	M.D.	Texas Tech Univ.	Private Practice OB/GYN Lubbock, TX
Mark Bayouth	M.D.	UTMB-Galveston	Surgeon, Texas Healthcare Group, Fort Worth, TX
Andrew Simmons	Ph.D.	UT SW Med. Center, Dallas	M.D., Davis Hospital and Med. Center, Layton, UT
Jeremy Hudgeons	M.S.	Texas A&M University	Management Analyst, Federal Housing Administration, Atlanta, GA
Kala Haiduk-Sigler	M.D.	UT-San Antonio	Private practice, pediatrics, Oklahoma City, OK
Erin Paul Reat	M.S.	Purdue University	Quality Assurance Mgr, Bexar County Criminal Investigative Laboratory, San Antonio
Amanda J. Wright	Ph.D.	Harvard	Faculty, University North Texas
Lara E. Wiggins Johnson	M.D.	Baylor Medical School	Faculty, TTU Medical School
Amy Bickham Baird	Ph.D.	UT Austin	Asst. Prof., University of Houston Downtown campus
Chrissy A. Cline Hill	B.S.	Texas Tech Univ.	UNT Physicians Asst student, Bayer HealthCare, Dallas, TX
Genevieve Kendall	B.S.	Texas Tech Univ.	Post-doctoral Scholar, UT Southwestern Medical Center, Los Angeles, CA
Will E. Flannery	B.S.	Texas Tech Univ.	Pursuing MD at Dartmouth

Robert Bull	B.S.	Texas Tech Univ.	Pursuing Degree in Philosophy, Texas Tech University

Masters Theses Directed:

1. Mr. Dale L. Berry. 1969. Karyotypes and chromosomal evolution in West Texas Pocket Gophers (Rodentia: Geomyidae). Present position: Unknown.
2. Dr. Omer J. Reichman. 1970. Ecology and systematics of pocket gophers of the Davis Mountains, Texas. Present position: Prof. Ecology, Evolutionary Marine Biology, University of California, Santa Barbara.
3. Dr. William J. Bleier. 1971. Early embryology of *Macrotus waterhousii californicus*, the California leaf-nosed bat. Present position: Chairman, Dept. of Zoology at North Dakota State University.
4. Mr. Brent Lee Davis. 1973. Morphometrics, cytotaxonomy, and evolution of mainland bats of the genus *Macrotus* Gray. Deceased.
5. Dr. Stephen L. Williams. 1973. Vagility and local movements of pocket gophers (*Thomomys* and *Pappogeomys*) in an area of sympatry. Present position: Retired Prof., Museum Studies, Baylor University.
6. Dr. I. F. Greenbaum. 1975. Evolutionary relationships in the genus *Macrotus* (Chiroptera, Phyllostomatidae) as indicated by biochemical variation. Present position: Professor, Dept. of Biology, Texas A&M University.
7. Dr. John E. Cornely. 1975. Ecological distribution of woodrats in Guadalupe Mountains National Park. Present position: Semi-retired. Executive Director, The Trumpeter Swan Society, and on Board of Directors, National Wildlife Refuge Association, Littleton, CO
8. Dr. Margaret O'Connell. 1975. Coexistence of two species of kangaroo rats (genus Dipodomys) in the Guadalupe Mountains National Park, Texas. Present position: Prof. Biology, Eastern Washington State University.
9. Mr. Edward Pembleton. 1975. Dynamics of a contact cone between two cytotypes of *Geomys bursarius*. Present position: Director of Water Resources Project, National Audubon Society.
10. Dr. John C. Patton. 1976. Evolutionary implications of the G-banded and C-banded karyotypes of Phyllostomatoid bats. Present position: Research Scientist, Purdue University.
11. Ms. Rebecca A. Bass. 1978. Systematics of the Desmodontinae and Phyllonycterinae (Chiroptera: Phyllostomatidae) based on G-band chromosomal homologies. Present position: Unknown.
12. Ms. Laurie Erickson. 1979. Genetics of white-tailed deer of south Texas. Present position: Unknown.
13. Ms. Annette Johnson Carlisle. 1979. Evolutionary implications of G- and C-banded chromosomes of 13 species of Stenodermatine bats. Present position: Housewife, mother, school board member, Amarillo, TX.
14. Dr. Paul Young. 1979. Summer activity patterns of rock squirrels in central Texas. Mr. Young's research and program was directed by Dr. R. L. Packard. However, I am advisor of record due to Dr. Packard's death. Present position: Prairie Ecosystems Research Group, McGregor, IA.
15. Dr. Karen McBee. 1980. Morphometric analysis of three subfamilies of the Phyllostomatidae (Chiroptera): An evaluation of the M-statistic. Present position: Professor, Dept. of Zoology, Oklahoma State University.
16. Dr. Mike Arnold. 1981. Karyotypic megaevolution in species of New World leaf-nosed bats. Present position: Professor, Dept. of Genetics, University of Georgia.
17. Dr. Ben Koop. 1982. Electrophoretic studies of relationships of six species of *Artibeus* (Chiroptera: Phyllostomatidae). Present position: Professor, University of Victoria, Canada.
18. Ms. Cora Clark. 1983. Relationships between *Peromyscus maniculatus oreas* and *P. m. austerus* as indicated by differentially stained chromosomes. Present position: Unknown.

19. Dr. Kimberlyn Nelson. 1984. Genetic interacting between hybridizing cytotypes of the white-footed mouse, (*Peromyscus leucopus*). Present position: Penn State University.
20. Dr. Hae Kyung Lee. 1985. Chromosomal evolution in the pocket gopher, *Cratogeomys castanops* (Rodentia Geomyidae). Present Position: Unknown.
21. Mr. Albert Kumirai. 1989. Phylogenetic relationships in the bat genus *Rousettus* (Chiroptera: Pteropidae) as indicated by gel electrophoresis. Present position: Director, Natural History Museum of Zimbabwe.
22. Mr. Kevin L. Bowers. 1992. A menu-driven software package for managing specimen data in biological research collections. Present Position: Sr. Analytical Technologist, Dow Chemical, Freeport, Texas.
23. Dr. Mary Maltbie. 1992. DNA fingerprints as a measure of genetic similarity in endangered species. Present position: Lab Manager, Therion International.
24. Mr. Shelly Witte. 1993. Cellular DNA variation within individuals of the white-footed mouse: absence of hybrid breakdown. Present Position: Field Service Engineer, Applied Biosystems, Austin.
25. Ms. Susan Carron Cain. 1995. Development of genetic markers to identify cultivars and populations of upland cotton *Gossiypium hirsutum*. Present position: Unknown.
26. Mr. Sergio Tiranti. 1996. Cytogenetics of some mammal species from central Argentina. Present position: Professor, Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa, Argentina.
27. Mr. Ted Jolley. 1997. (co-advised with R. D. Bradley) Evolution of the 12s rRNA gene in pocket gophers (Genus *Geomys*). Present position: Dentist, Little Rock, AR.
28. Ms. April Bates. 1997. (co-advised with R. R. Monk). Collection and curation of herptiles in museum collections. Present position: Unknown.
29. Ms. Ellen Roots McBride. 1998. Distribution and Characterization of Microsatellites in the Emu Genome (*Dromaius novaehollandiae*). Present Position: Endangered Species Biologist for Fish & Wildlife Services, Citrus Heights, CA.
30. Ms. Britney Hager Snyder. 1998. (co-advised with R. R. Monk) A Policy Guideline for Loaning the Non-Renewable Resource of Frozen Tissues in Museums. Present position: Dallas Zoo.
31. Dr. Cole Matson. 1999. Characterization of the mitochondrial DNA control region of *Clethrionomys*, and its use as a genotoxicological marker. Present position: Assistant Professor of Environmental Science, Baylor University.
32. Mr. Oleksiy Knyazhnitskiy. 1999. (co-advised with R. R. Monk) Assignment of global information system coordinates to classical museum localities for relational database analyses. Present Position: Unknown.
33. Ms. Nicole Lewis-Rogers. 2000. Molecular Systematics of the Bat Genera *Noctilio*, *Mormoops*, and *Pteronotus* Based on Cytochrome *b* and *RAG2* Gene Sequences. Present position: Associate Instructor, University of Utah.
34. Ms. Raegan D. King. 2000. (co-advised with R. R. Monk) Data Management in Recent Mammal Collections. Present position: Waco Mammoth Site, Waco, TX.
35. Ms. Emma Mae Pamela Dawson. 2001. Collections Documentation: Creating a Relational Database for the National Museum of Belize. Present position: Unknown
36. Ms. Amy Halter Aragon. 2001. Standards for Management of the Recent Mammal and Bird Collections at Texas Tech University. Present position: Lab Coordinator, Lone Star College, CyFair, Cypress, TX.
37. Mr. Mark B. O'Neill. 2001. Cytochrome-*b* Variation in Shrews: Application in Systematics and Conservation. Present Position: Researcher, Lexicon Pharmaceuticals, Houston.
38. Ms. Mariko Kageyama. 2003. Master of Museum Science. Re-evaluation of museum voucher specimens in the modern biological research. Present position: Unknown
39. Ms. Yelena Dunina-Barkovskaya. 2003. Population genetics of rodents living in the Chornobyl environment based on mitochondrial and nuclear gene sequences. Present position: Professor, Richland College.

40. Mr. Rene Fonseca. 2004. Morphological differentiation among three species of Phyllostomid bats: Implication to the role of the Andes in speciation and South American mammalian biodiversity. Deceased.
41. Ms. Holly Bjorum. 2005. MA Interdisciplinary Studies. Present position: unknown.
42. Mr. Peter Larsen. 2005. Biogeography of *Artibeus jamaicensis*: with an emphasis on the origin of Antillean populations. Present Position: Postdoctoral Fellow, Duke University.
43. Mr. Adam Brown. 2006. Effects of Low Dose Ionizing Radiation on Transcriptional Expression of DNA Repair and Reactive Oxygen Species Scavenging Genes: Studies at Chornobyl. Present position: Greehey Children's Cancer Research Institute at the University of Texas Health Science Center at San Antonio.
44. Ms. Tamara Enriquez. 2007. Catalog of the Invertebrate Type Collection of the Museum of Texas Tech University: Barcodes, Digital Imagery, and Database Web Access. Present position: living in Bloomington, IN.
45. Mr. Juan Pablo Carrera. 2007. Relational Database for Ecuadorian Mammals Deposited in Natural History Museums Around the World. Present position: PhD candidate at Texas Tech University.
46. Mr. Faisal Bin Ali Anwarali Khan. 2008. MS in Zoology. Diversification of Old World Bats in Malaysia: An Evolutionary and Phylozoogeographic Hypothesis Tested Through the Genetic Species Concept. Present position: Senior Lecturer in Department of Zoology, Universiti Malaysia Sarawak, Malaysia.
47. Ms. Maria Raquel Marchán-Rivadeneira. 2008. MS in Biology. Morphological Analysis of the Subgenus *Artibeus* (Chiroptera: Phyllostomidae). Current Position: PhD student of TTU and visiting Scholar at Michigan State University
48. Mr. Miguel Pinto. 2009. MS in Biology. Genetic diversity of the common vampire bat *Desmodus rotundus* in Ecuador: Testing cross-Andean gene flow. Present Position: American Museum Natural History and City University of New York.

Ph. D. Dissertations Directed:

1. Dr. J. Hoyt Bowers. 1973. Evolutionary and genetic studies of selected populations of deer mice (*Peromyscus maniculatus*) and black-eared mice (*P. melanotis*). Present Position: Professor, Wayland Baptist University, Biological Sciences Dept.
2. Dr. Jerry W. Warner. 1973. Cytogenetics of the plains woodrat (*Neotoma micropus*). Present Position: Professor Emeritus, Northern Kentucky University.
3. Dr. V. Rick McDaniel. 1973. Aspects and evolutionary implications of the brain anatomy of American leaf-nosed bats (Chiroptera: Phyllostomatidae). Deceased
4. Dr. William J. Bleier. 1975. Fine structure of the early embryology and the corpus luteum of the California leaf-nosed bat. Present Position: Chairman, Dept. of Zoology, North Dakota State University.
5. Dr. John Bickham. 1976. Chromosomal banding and phylogenetic relationships of vespertilionid bats. Present Position: Battelle Memorial Institute, Houston, TX.
6. Dr. Ira F. Greenbaum. 1978. Evolutionary genetics and speciation of the tent-making bat, *Uroderma* (Chiroptera: Phyllostomatidae). Present Position: Professor, Dept. Biology, Texas A&M University.
7. Dr. Terry L. Yates. 1978. The systematics and evolution of North American moles (Insectivora: Talpidae). Present Position: Vice President for Research, University of New Mexico. Past NSF Systematics Program Director. Deceased.
8. Dr. Rodney L. Honeycutt. 1981. Molecular evolution in New World leaf-nosed bats of the family Phyllostomidae: with comments on the superfamily Noctilionidae. Present Position: Professor, Biology Dept., Pepperdine University, Malibu, CA.
9. Dr. Margaret A. O'Connell. 1982. Population ecology of small mammals from northern Venezuela. Present Position: Professor, Eastern Washington University, Cheney, WA
10. Dr. Mike Haiduk. 1983. Evolution in the family (Pteropodidae: Chiroptera: Megachiroptera), as indicated by chromosomal and immunoelectrophoretic analyses. Present Position: Professor, Lamar University, Beaumont, Texas.
11. Dr. Fred B. Stangl, Jr. 1984. Dynamics of chromosomal variation between chromosomally characterized races of *Peromyscus leucopus* (Rodentia: cricetidae).

Present Position: Retired; formerly Professor, Midwestern State University, Wichita Falls, Texas.

12. Dr. Mazin B. Qumsiyeh. 1986. Chromosomal evolution in the rodent family Gerbillidae. Present Position: Professor, Bethlehem and Birzeit Universities, Palestine.
13. Dr. Craig S. Hood. 1986. Phylogenetic relationships of the Old World nectar-feeding bats (Pteropodidae: Macroglossinae) based on features of the female reproductive tract. Present position: Professor & Dept. Chairman, Department of Biology, Loyola University, New Orleans, Louisiana.
14. Dr. David C. Kerridge. 1987. Population polymorphism, cladistical congruences and specific recognition of some of *Oryzomys* based upon electrophoretic analyses. Retired. Last position: Senior Biologist, Malaspina College, British Columbia, Canada.
15. Dr. Ronald A. Van Den Bussche. 1989. Systematic study of the genera of the New World leaf-nosed bat family Phyllostomidae: Cladistical analysis of site variation in the ribosomal DNA cistron. Sloan Fellow 1990-1992. Present Position: Associate Dean & Professor, Dean of Arts & Sciences Office, Dept. Zoology, Oklahoma State University.
16. Dr. Meredith J. Hamilton. 1989. Intragenomic movement and concerted evolution in satellite DNA in peromyscine rodents: evidence from *in situ* hybridization. Present position: Assoc. Prof. Zoology, Oklahoma State University
17. Dr. Alec Knight. 1991. Co-directed with Dr. Llewellyn D. Densmore, III. Molecular systematics of the *Agkistrodon* complex. Present position: living in Alpine, TX.
18. Dr. Robert D. Bradley. 1991. Factors that effect chromosomal evolution: repetitive DNA in conservative versus rapidly evolving karyotypes. Present Position: Professor of Biological Sciences, Texas Tech University.
19. Dr. Calvin A. Porter. 1992. Genome organization in squamate reptiles: ribosomal genes and other repetitive sequences. Present Position: Associate Professor of Biology, Xavier University of Louisiana.
20. Dr. Jonathan L. Longmire. 1993. Distribution and organization of repetitive DNA sequences on human chromosome-16. Present Position: Senior Advisor, Defense Threat Reduction Agency, Advanced Systems and Concepts Office, Washington, DC
21. Dr. Joaquin Arroyo-Cabrales. 1994. Taphonomy and Paleoecology of San Josecito Cave, Nuevo Leon, Mexico. Present Position: Senior Scientist, Laboratorio de Arqueozoologia, Instituto Nacional de Antropologia e Historia, Mexico.
22. Dr. Cheryl A. Schmidt. 1995. Geographic Variation of Peromyscus leucopus: Microsatellite Variation at Regional and Local Levels. Present Position: Business Area Mgr – Natural Resources, Engineering-Environmental Management, Inc., Newell, SD.
23. Dr. James Andrew DeWoody. 1997. Molecular evolution in *Microtus* from Chernobyl, Ukraine. Present Position: Professor, Dept. of Forestry & Natural Resources, Purdue University.
24. Dr. Mary Maltbie. 1997. Repetitive DNA in Genome Organization of Phyllostomid Bats: Test of a Molecular Model for Chromosomal Evolution. Present Position: Lab Manager, Therion International.
25. Dr. Richard Monk. 1997. Automated Data Management in Systematic Collections. Present position: Owner, Smart Computer Systems
26. Dr. James Cathey. 1997. Using Microsatellite DNA to Assess Genetic Stocks of Canada Geese in the Central Flyway. Present position: Assoc. Dept. Head and Program Leader, Wildlife and Fisheries Extension Unit, Texas AgriLife Extension Service, Texas A&M University.
27. Dr. Burhan Ghariebeh. 1997. Systematics, Distribution, and Zoogeography of the Mammals of Tunisia. Present position: Research Asst. Professor, Stem Cell Research, Children's Hospital, University of Pittsburgh.
28. Dr. Kateryna Dmytrivna Makova. 1999. Microsatellite Evolution in Mice (*Apodemus*): Origin of Alleles, Multiple Paternity, and Mutation Rate at Chernobyl. Present position: Assoc. Prof., Biology Dept., Penn State University.
29. Dr. Anton Nekrutenko. 1999. Development of Species and Genome Specific Genetic Markers by Representational Difference Analysis: Application in Systematic and

Evolutionary Research. Present position: Galaxy Team, Assoc. Professor, Biochemistry & Molecular Biology Dept., Penn State University.

30. Dr. Kelly Allen. 2000. Areographic Fragmentation Analysis of Texas Mammal Distributions: A Fractal Analysis. Present position: Asst. Professor, Tulsa Community College.
31. Dr. Brenda E. Rodgers. 2000. Cytogenetic Effects of Exposure to Chornobyl Radiation. Present position: Asst. Professor, Department of Biological Sciences, Texas Tech University.
32. Dr. Jeffrey K. Wickliffe. 2002. Molecular genetic consequences of exposure to ionizing radiation: studies at Chornobyl. Present position: Asst. Professor, Department of Global Environmental Health Sciences, Tulane University School of Public Health and Tropical Medicine, New Orleans, Louisiana.
33. Dr. Federico G. Hoffmann. 2002. Molecular systematics of Neotropical bats of the genera *Carollia*, *Glossophaga*, *Tonatia*, and *Uroderma*. Present position: Assistant Professor, Mississippi State University.
34. Dr. Deidre A. Parish. 2003. Genome Organization, Mobile DNA and Chromosomal Evolution in Mammals. Present position: Frisco ISD, Asst. Principal, Liberty High School, Frisco, TX.
35. Dr. Adam Fuller. 2004. Conservation genetics of the endangered Gila Trout and the threatened Arkansas River Shriner. Present position: Research Molecular Geneticist, USDA, Stuttgart National Aquaculture Research Center, Arkansas.
36. Dr. Emma Mae Pamela Dawson. 2005. Predicted Species Richness in the Chihuahuan Desert: A GIS Analysis of Spatial and Ecological Data. Present position: Unknown.
37. Dr. Norma Salcedo. 2007. Speciation in Andean rivers: morphological and genetic divergence in the catfish genus *Chaetostoma* (Teleostei: Siluriformes). Present position: Adjunct Faculty, College of Charleston, SC.
38. Dr. Sergio Solari. 2007. Systematics of Neotropical opossums (*Monodelphis* and *Marmosa*: Didelphidae): Congruence between molecular phylogenies and analyses of morphological characters. Present position: Asst. Professor, Instituto de Biologia, Universidad de Antiquia, Medellin, Colombia.
39. Dr. Vicki J. Swier. 2008. Chromosomal Evolution in *Sigmodon*: the Use of Chromosome Painting, Telomere Repeats, and Fluorescent G-Bands to Elucidate the Mechanisms of Chromosomal Repatterning and Karyotypic Conservation in the Cotton Rats. Present position: Postdoctoral Associate, Department of Biomedical Sciences, Creighton University.
40. Dr. Heather N. Meeks. 2009. The Biological Effects of Ionizing Radiation Exposure. Present Position: Defense Threat Reduction Agency, Virginia.
41. Dr. Hugo Mantilla-Meluk. 2010. Analyzing evolutionary and biodiversity trends among phyllostomid bats through the synthesis of ecological and phylogenetic data. Present Position: Universidad Nacional Colombia
42. Dr. Peter A. Larsen. 2010. Speciation dynamics of the fruit-eating bats (genus *Artibeus*). Present Position: Postdoctoral Associate, Duke University
43. Dr. Roxanne J. Larsen. 2011. Biogeography and diversification of Lesser Antillean Chiroptera. Present Position: Postdoctoral Associate, Duke University.
44. Dr. Faisal Ali Bin Anwarali Khan. 2013. Diversification of old world bats in Southeast Asia: Speciation and phylogeographical studies. Present Position: Senior lecturer in Department of Zoology, Universiti Malaysia Sarawak, Malaysia.
45. Dr. Molly M. McDonough. 2013. Molecular systematics and phylogeography of the genus *Gerbiliscus* (Mammalia: Rodentia) in sub-Saharan Africa. Present Position: Peter Buck Postdoctoral Fellow, Smithsonian Institution.

Current graduate students:

Cibele G. Sotero-Caio, Ph.D.
Matias Feijoo, Ph.D. Universidad de la República Montevideo,Uruguay, Co-chair Enrique Lessa
Hai Minh Howard Michael Huynh, Ph.D.

M. Raquel Marchán-Rivadeneira, Ph.D., Co-chair Richard Strauss
Julie A. Parlos, Ph.D.
Lizette K. Siles-Mendoza, Ph.D.

Postdoctoral affiliates:

1. Karen McBee, 1986-87. Ph.D. from Texas A&M University. Present position: Assoc. Professor, Biology, Zoology, Oklahoma State University, Stillwater, Oklahoma.
2. Laura Janecek, 1991-1992, Ph.D. from University of New Mexico. Present position: Program Coordinator, Savannah River Ecology Lab.
3. Ron A. Van Den Bussche, 1992-1995, Ph. D. from Texas Tech University. Present position: Associate Dean & Professor, Arts & Sciences Dean's Office, Oklahoma State University.
4. Meredith J. Hamilton, 1994-1995, Ph. D. from Texas Tech University. Present position: Associate Professor of Zoology, Oklahoma State University.
5. Ann E.M. Baker, 1995-1996, Ph.D. from Stony Brook University. Present position: unknown.
6. John C. Patton, 1996-1997, Ph.D. from University of Georgia. Present position: Research Scientist, Dept. of Forestry & Wildlife, Purdue University.
7. Calvin A. Porter, 1998-2001, Ph.D. from Texas Tech University. Present position, Assistant Professor, Xavier College in New Orleans.
8. Brenda E. Rodgers, 2000-2001, Ph.D. from Texas Tech University. Present position: Assistant Professor, Texas Tech University.
9. Steven R. Hoofer, 2002-2007, Ph.D. from Oklahoma State University. Present position: Sedgwick County Regional Forensic Science Center, Wichita, KS.
10. Caleb D. Phillips, 2009-Current, Ph.D. from Purdue.

Symposium Papers Presented:

1. Mammals of the Guadalupe Mountains, Texas, (with Hugh H. Genoways as Senior Author). Presented at Symposium entitled "Biological Investigation into the Guadalupe Mountain National Park," Texas.
2. Zoogeographic affinities of the bats of the Antilles (with Hugh H. Genoways, Co-Author). Presented at the Philadelphia Academy of Sciences Leidy Symposium honoring Mr. James Bond.
3. Cytosystematics of South American Bats. Presented at the University of Pittsburgh at Symposium on South American Mammals.
4. Collections of cell lines suspended by freezing. Presented at the Third International Theriological Congress in Helsinki, Finland.
5. Curatorial Procedures for vital tissue collections. Presented at the Philadelphia Academy of Sciences in May, 1983 at the annual meeting of the Association of Systematic Collections.
6. Speciation by monobrachial centric fusions (with John Bickham as co-author). Presented at the Fourth International Theriological Congress. Edmonton Alberta, Canada.
7. DNA in Conservation Genetics of endangered species. Symposium on Endangered Species. Texas Range Society Austin, 1991.
8. DNA zipcodes, taxon markers and Conservation genetics. Plenary address (July 1993 in Sydney, Australia) at the 6th International Theriological Congress.
9. DNA and conservation of woodstorks. Woodstork Conference in Savannah, GA, October 1993.
10. The Biological Significance of Chornobyl. George Misch Sutton lecture at University of Oklahoma. Sam Noble Museum 1997.
11. Bioinformatics: An integrated program for academics, resource managers, and the public. Presented in England. September 1998.
12. Keynote address at the 25th Anniversary of the Guadalupe Mountains National Park Symposium, Carlsbad, NM. April 22-25 1998.
13. On the Utility of Heteroplasmy in Genotoxic Studies: An Example from Chernobyl., Slavutych, Ukraine. The Annual Conference of the International Chornobyl Center entitled "1998: International Cooperation for Chornobyl." October 10-20 1998.

14. The Significance of the Chornobyl Disaster to the Fauna and Society of Ukraine. Distinguished Seminar Presentation at Sam Houston State University. October 18-19, 2001
15. Standing on the Shoulders of Others. Banquet Keynote at the Texas Genetic Society. April 2005.
16. Chromosomal evolution and speciation: the genetic species concept. Mammalian Chromosomes: Milestones in Understanding and Application. CRES Symposium. San Diego, CA. 11 November 2006.
17. Genetics, Genetics Species Concept, Wildlife Diversity, and Policy. Texas Biodiversity Symposium. Houston, TX, January 2008.
18. Species messy at all levels. American Society of Mammalogists, Fair Banks, Alaska - June 2009
19. Operational species criteria and problems with species lists. International Mammalogical Congress, Buenos Aries, Argentina – August 2009
20. Collection of mammals and Genetic Resources Collection. University and Museums Collections, Berkeley, California – September 2009
21. Power of Genetic Data in Understanding Speciation in Bats. North American Symposium on Bat Research, Portland, Oregon – November 2009
22. Allopatric, Ecological, Hybrid, etc. Speciation in bats: How do their wing prints differ? International Bat Research Conference (IRBC). Prague, Czech Republic – August 2010
23. Speciation dynamics in bats. North American Society of Bat Research (NASBR). Denver, Colorado October 2010
24. Insights into speciation of mammals. Smithsonian, Natural History Museum. Washington, D.C. November 2010
25. Databases critical to making wise decisions in response to a crisis**.** Bioterrorism & Complex Systems Workshop: One health Initiative, Missouri University, April 2011
26. Significance of Knowing Mammalian Reservoir Species. Scientific and Technological Barriers To Global Real Time Risk Assessment of Vector-borne Infections**:** The Banbury Center, Cold Spring Harbor Laboratory, September 2011
27. What have we learned from the Chernobyl disaster? Women's Club. October 2011
28. Who is the *Thyroptera* in Ecuador on the western side of the Andes. 1er. Congreso Ecuatoriano de Mastozoología/ XXXV Jornadas Nacionales de Biología – Sociedad Ecuatoriana de Biología. Pontificia Universidad Católica del Ecuador, Quito, Ecuador. November 2011
29. Speciation in mammals, the Genetic Species Concept and importance of subspecies. Harvard Seminar. February 2012
30. Genetics and the resolution of evolutionary questions concerning bats. University of Texas at Arlington. March 2012
31. Tests for alteration of the mtDNA genome in bank voles that are progeny of lineages with multigenerational exposure at Chernobyl. Chicago. July 2013
32. Multi-generational exposure to the Chernobyl environment in bank voles alters the mitochondrial genome. Biological Threat Research Laboratory Dedication, Tour & Symposium. January 2014.

Description of Taxa:

Species Level:
Uroderma bilobatum davisi (Baker and McDaniel, 1972)
Chiroderma improvisum (Baker and Genoways, 1976)
Eptesicus guadalupensis (Genoways and Baker, 1975)
Geomys knoxjonesi (Baker and Genoways, 1975)
Rhogeessa genowaysi (Baker, 1984)
Rhogeessa hussoni (Genoways and Baker, 1996)
Carollia sowelli (Baker, Solari and Hoffmann, 2002)
Notiosorex cockrumi (Baker et al., 2002)

Lophostoma aequatorialis (Fonseca et al., 2004)
Oryzomys andersoni (Brooks et al., 2004)
Carollia benkeithi (Solari and Baker, 2006)
Anoura cadenai (Mantilla and Baker, 2006)
Micronycteris giovanniae (Fonseca et al., 2007)
Eumops wilsoni (Baker et al., 2009)
Anoura carishina (Mantilla and Baker, 2010)
Artibeus aequatorialis (Larsen et al., 2010)
Rhogeessa bickhami (Baird et al., 2012)
Rhogeessa menchuae (Baird et al., 2012)
Micronycteris yatesi (Siles et al., 2013)

Genus level:
Hsunycteris (Parlos et al., 2014)

Subgenus level:
Leuconycteris (Porter et al., 2007)
Schizonycteris (Porter et al., 2007)

Tribe level:
Hsunycterini (Parlos et al., 2014)

Petronyms

Glossophaga commissarisi bakeri (Webster and Handley, a nectar feeding bat from the Amazon Basin)
Lophostoma saurophila bakeri (Williams and Willig, an omnivorous Phyllostomid bat from Middle America)
Geomys texsensis bakeri (Bickham et al., a pocket gopher from Central Texas)
Reithrodontomys bakeri (Bradley et al, 2004, a harvest mouse from central Mexico)
Parichoronyssus bakeri (Morales-Malacara, J. B. and R. Guerrero 2007, a parasitic mite from the genus *Phyllostomus* in Pakitza, National Park Manu, Madre de Dios, Peru).
Uroderma bakeri (Mantilla-Meluk 2014, a phyllostomid from the Colombian- Venezuelan Andean Piedmont)