Michael John Dewey
CURRICULUM VITAE
2021

Contact Information:

Address: 2620 Harvard Street
Fort Collins CO, 80525
Phone: (970)689-3035
E-mail: mjdewey@gmail.com

Education:

2000 (Spring) Jackson Laboratory, Bar Harbor Maine. Cryopreservation of murine germinal and embryonic material.

1973 (Summer) Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. Courses in basic principles and experimental techniques in neurobiology

1968-1973 Ph.D. in Microbiology, University of Pennsylvania, Dr. Fred R. Frankel major professor. DNA metabolism and processing in T4 phage-infected Escherichia coli.

1962-1966 B.S. in Microbiology, University of Wyoming, Laramie, Wyoming.

.

Professional Experience:

2007- Instructor (Molecular and General Genetics), Dept of Biology, Colo State U

2006 Emeritus Professor of Biology (U of So Carolina).

2000-2006 Director; *Peromyscus* Genetic Stock Center (PGSC)

1995 (Spring) Visiting Associate Professor, Department of Physiology, Emory University School of Medicine. Spent the spring and summer studying the physiology and biochemistry of membrane transport proteins in the laboratory of Dr Robt Gunn, Chairman, Dept of Physiology.

1987-1997 Director, Transgenic Mouse Facility, Carolina Institute for Biological Research and Technology, University of South Carolina, Columbia, South Carolina.

1984-2006 Associate Professor, Department of Biology, University of South Carolina, Columbia, South Carolina.

1979-1984 Assistant Professor, Department of Biology, University of South Carolina, Columbia, South Carolina.

1973-1979 Postdoctoral and Research Associate in the laboratory of Dr Beatrice Mintz, Institute for Cancer Research, Philadelphia, Pennsylvania.

Also:

1989 On-site reviewer, NIMH Program Project Advisory Committee

1987-1991 Member, NSF Developmental Biology Review Panel

1985 On-site reviewer for the NIHCHDSpecial Advisory Committee

1979 On-site reviewer for the Cancer Special Program Advisory Committee, NCI

Other

1966-1968 Peace Corps Volunteer; taught biology and biochemistry at the University of San Carlos, Guatemala City.

Language Proficiency:

Spanish (Reading, Writing & Speaking: Moderate ability)

Publications

75. Wiedmeyer CE, Crossland JP, Veres M, **Dewey MJ**, Felder MR, Barlow SC, Vrana PB, Szalai G (2014) Comparative Hematological and Serum Biochemical Values among *Peromyscus* Species and Their Hybrids. JAALAS 53:336-343.

74. Crossland JP, **Dewey MJ**, Barlow SC, Vrana PB, Felder MR, Szalai GJ (2014) *Peromyscus* in research environments. Lab Animal 43:162-166.

73. Kenney-Hunt JP, Lewandowski A, Glenn TC, Glenn JL, Tsyusko OV, O'Neill RJ, Brown J, Ramsdell CM, Nguyen Q, Phan T, Shorter KS, **Dewey MJ**, Szalai G, Vrana PB, Felder MR. (2014) A genetic map of *Peromyscus* with chromosomal assignment of linkage groups. Mammalian Genome 25:160-179.

72 . Vrana P, Shorter K, Szalai G, Felder M, Crossland J, Veres M, **Dewey M**, Dawson W. (2013). *Peromyscus* (Deer Mice) as Developmental Models. WIREs Dev Biol 2013. doi: 10.1002/wdev.132

71. Fernandes PR, Reynolds JL, Segedin-Garrett N,**Dewey MJ** (2010) Use of morphological and genetic techniques in identification of *Peromyscus gossypinus* at Poinsett State Park, South Carolina. Southeastern Naturalist 9(4):757–772.

70. Mlynarski EE, Obergfell C, **Dewey MJ**, O'Neill RJ (2010) A unique late-replicating XY to autosome translocation in *Peromyscus melanophrys*. Chromosome Research 18:179-189.

69. Weber JN, Peters MB, Tsyusko OV, Linnen CR, Hagen C, Schable NA, Tuberville TD, Mckee AM, Lance SL, Jones KL, Fisher HS, **Dewey MJ**, Hoekstra HE, Glenn TC. Five hundred microsatellite loci for Peromyscus (2010) Conservation Genetics 11(3):1243-1246.

68. Oriel RC, Wiley CD, **Dewey MJ**, Vrana PB (2008) Adaptive genetic variation, stress, and glucose regulation. Disease Models & Mechanisms. 1:255-263.

67. Weston Glenn JL, Chen C-F, Lewandowski AA, Cheng C-H, Ramsdell CM, Bullard Dillard R, Chen J, **Dewey MJ**, Glenn TC (2008) Expressed sequence tags from Peromyscus testis and placenta tissue: analysis, annotation, and utility for mapping. BMC Genomics 9:300.

66. Ramsdell CM, Lewandowski AA, Weston Glenn JL, Vrana PB, O'Neill RJ, **Dewey MJ**. (2008) Comparative genome mapping of the deer mouse (Peromyscus maniculatus) reveals greater similarity to rat (Rattus norvegicus) than to the lab mouse (Mus musculus). BMC Evolutionary Biology 8:65.

65. Mlynarski EE, Obergfell CJ, Rens W, O'Brien PCM, Ramsdell CM, **Dewey MJ**, O'Neill MJ, O'Neill RJ (2008) Peromyscus maniculatus - Mus musculus chromosome homology map derived from reciprocal cross species chromosome painting". Cytogenetic and Genome Research 121:288-292.

64. Mullen LM, Hirschmann RJ, Prince KL, Glenn TC, **Dewey MJ**, Hoekstra HE (2006) Sixty polymorphic microsatellite markers from Peromyscus sister species P maniculatus and P polionotus. Molecular Ecology Notes 6:36-40.

63. Ramsdell CM, Thames EL, Weston JL, **Dewey MJ** (2006) Development of a deer mouse whole genome radiation hybrid panel and comparative mapping with Mus chromosome 11. Mammalian Genome 17:37-48.

62. Parnell PG, Crossland JP, Beattie RM, **Dewey MJ** (2005) Frequent Harderian gland adenocarcinomas in inbred white-footed mice (Peromyscus leucopus). Comparative Medicine 55:382-386.

61. Lobo-Menendez F, Bowman LH, **Dewey MJ** (2004). Inverted GCG/CGC trinucleotide microsatellites in the 5'-region of Mus IDS mRNA: Recurrent induction of aberrant reverse transcripts. Molecular Biology Reports 31:107-112

60. Manning E, Crossland J, **Dewey MJ**, Van Zant GE (2002) Genetic homozygosity is associated with increased telomere length in mammalian cells. Mammalian Genome 13:234-238.

59. Prince KL, Glenn TC, **Dewey MJ**. (2002). Cross-species amplification among peromyscines of new microsatellite DNA loci from the oldfield mouse (Peromyscus polionotus subgriseus). Molecular Ecology Notes 2:133-136.

58. **Dewey MJ**, Ennis TM, Bowman L (2001) Nucleotide sequence and expression of the mouse Na/H antiporter cDNA and a potential splice variant. Molec Biol Reports 28(2):111-117.

57. Vrana PB, Matteson P, Schmidt JV, Ingram RS, Joyce A, Prince KL, **Dewey MJ**, Tilghman SM (2001) Genomic imprinting of a placental lactogen gene in Peromyscus. Development, Genes & Evolution. 211:523-532.

56. Szalai G, Ceci J, **Dewey M**, Felder M (2001) Identification and expression of cosmids with an allelic variant of class I alcohol dehydrogenase in transgenic mice. Chemico-Biological Interactions 130-132, 481-490.

55. **Dewey MJ**, Dawson WD (2001) Deer mice: "The Drosophila of North American mammalogy".Genesis. 2001 Mar;29(3):105-9.

54. Holladay JW, **Dewey MJ**, Michniak BB, Wiltshire H, Halberg DL, Weigl P, Liang Z, Halifax K, Lindup WE, Back DJ (2001) Elevated alpha-1-acid glycoprotein reduces the volume of distribution and systemic clearance of saquinavir. Drug Metab Dispos. 2001 Mar;29(3):299-303.

53. Bartell JG, Fantz DA, Davis T, Kistler MK, **Dewey MJ**, Kistler WS (2000) Elimination of male germ cells in transgenic mice by the diphtheria toxin A chain gene directed by the histone H1t promoter. Biol Reprod 63:409-16.

52. Garden OA, Musk P, Worthington-White DA, **Dewey MJ**, Rich IN (2000) Sequence comparison of the coding region of human sodium/hydrogen exchanger isoform-1 cDNA in peripheral blood mononuclear cells of healthy volunteers and leukemic patients. Cancer Genet & Cytogenet 120:37-43.

51. Rich IN, Brackmann I, Worthington-White D, **Dewey MJ** (1998) Activation of the sodium/hydrogen exchanger via the fibronectin-integrin pathway can stimulate hematopoiesis in the absence of growth factors. J Cell Phys 177:109-122.

50. Holladay JW, **Dewey MJ**, Yoo SD (1998) Kinetic interaction between fluoxetine and impipramine as a function of elevated serum AAG levels. J Pharm Pharmacol 50:419-424.

49. Holladay JW, **Dewey MJ**, Yoo SD (1998) Pharmacokinetics and antidepressant activity of fluoxetine in transgenic mice with elevated AAG levels. Drug Metab and Disposition 26:20-24.

48. Holladay JW, **Dewey MJ**, Yoo SD (1997) Quantitation of fluoxetine and norfluoxetine serum levels by reverse-phase HPLC with UV detection. J Chromatog B 704:259-263.

47. Xie D, Narasimhan P, Zheng Y-W, **Dewey MJ**, Felder MR (1996) Ten kilobases of 5'-flanking region confers proper regulation of the mouse alcohol dehydrogenase-1 (Adh-1) gene in kidney and adrenal of transgenic mice. Gene 181:173-178.

46. Holladay JW, **Dewey MJ**, Yoo SD (1996) Steady-state kinetics of imipramine in transgenic mice with elevated serum AAG levels. Pharmaceutical Res 13:1313-1316.

45. Bartell JG, Davis T, Kremer EJ, **Dewey MJ**, Kistler WS (1996) Expression of the rat testis-specific histone H1t gene in transgenic mice. J Biol Chem 271:4046-4054.

44. Yoo SD, Holladay JW, Fincher TK, Baumann H, **Dewey MJ** (1996) Altered disposition and antidepressant activity of imipramine in transgenic mice with elevated alpha-1-acid glycoprotein. J Pharmcol Exp Ther 276:918-922.

43. Yoo SD, Holladay JW, Fincher TK, **Dewey MJ** (1995) Rapid analysis of trace levels of imipramine and desipramine by reverse-phase HPLC with UV detection. J Chromatog B 668:338-342.

42. Fernandes PR, **Dewey MJ**, (1994) Genetic control of erythrocyte volume regulation: effect of a single gene (rol) on cation metabolism. Am J Physiol 267(Cell Physiol 36):C211-219.

41. Shafer FE, Dropulic B, Ely C, Schaefer CA, Freas D, Beuzard Y, Witkowska HE, Schechter AN, Noguchi CT, **Dewey MJ**, Karlsson S (1994) Locus-control-region-coupled betaS-Antilles- and alpha2-hemoglobin genes select for high alpha2-hemoglobin expression in adult transgenic mice. J Biomed Sci 1:147-153.

40. Wang J, Xiong W, Chang M, Davis T, **Dewey MJ**, Yang Z, Chao J, Chao L (1994)Human tissue killikrein induces hypotension in transgenic mice. Hypertension 23:236-243.

39. Robinson ML, Holmgren A, **Dewey MJ** (1993) Genetic control of ocular morphogenesis: defective lens development associated with ocular anomalies in C57BL/6 mice. Expl Eye Res 56:7-16.

38. Miskimins R, Knapp L, **Dewey MJ**, Zhang X (1992) Cell and tissue specific expression of a heterologous gene under control of the myelin basic protein gene promoter in transgenic mice. Devel Brain Res 65:217-221.

37. Mackiewicz A, Pos A, Van der Stelt M, Yap SH, Kapcinska M, Laciak M, **Dewey MJ**,Berger FG, Baumann H, Kushner I, van Dijk W (1991) Regulation of glycosylation of acute phase proteins by cytokines. In: Affinity electrophoresis: Principles and Applications. Breborowicz, J. and Mackiewicz, A. (eds.) CRC Press, Inc., pp 135-153.

36. Mackiewicz A, **Dewey MJ**, Berger FG, Baumann H (1991) Acute phase mediated change in glycosylation of rat a1-acid protein in transgenic mice. Glycobiology 1:265-269.

35. Fortuna MB, **Dewey MJ**, Furmanski P (1990) Enhanced lung colonization and tumorigenicity of fused cells isolated from primary MCA tumors. Cancer Letters 55:109-114.

34. **Dewey MJ**, Rheaume C, Berger FG, Baumann H (1990) Inducible and tissue-specific expression of rat alpha-1-acid glycoprotein in transgenic mice. J Immunol 144:4392-4398.

33. Fortuna MB, **Dewey MJ**, Furmanski P (1989) Cell fusion in tumor development and progression: occurrence of cell fusion in primary MCA-induced tumorigenesis. Int J Cancer 44:731-737.

32. Lutz SE, Hilbish TJ, **Dewey MJ** (1989) Genetic control of juvenile growth rate in mice: variation between a congenic strain and its background strain. J Hered 80:264-267.

31. Behringer RR, **Dewey MJ** (1989) Cellular site and mode of Fv-2 gene action. II. Conditional protection of Fv-2ss cells by admixture with Fv-2rr ones. Exptl Hematol 17:330-334.

30. Platt THK, **Dewey MJ** (1989) Recombinational hot spots influence the organization and evolution of Y chromosomal repeated sequences in the genus Mus. Genet Res 53:87-93.

29. Schaefer CA, **Dewey MJ** (1989) Single locus (rol) control of extreme resistance to red cell osmotic lysis: intrinsic mode of gene action. Genetics 121:353-358.

28. LoCascio NJ, LoCascio JA III, **Dewey MJ** (1987) Cellular competition in the development of ocular tissues in allophenic mice. Devel Biol 124:291-294.

27. Behringer RR, LoCascio NJ, **Dewey MJ** (1987) Erythroid cell fusion in the early phase of Friend virus leukemogenesis. J Natl Cancer Inst 79:601-604.

26. Platt T, **Dewey MJ** (1987) Multiple forms of male specific simple repetitive sequences in the genus Mus. J Mol Evol 25:201-206.

25. Nallaseth FS, **Dewey MJ** (1986) Moderately repeated mouse Y chromosomal sequence families present distinct types of organization and evolutionary change. Nucleic Acids Res 14:5295-5307.

24. Eldridge PW, **Dewey MJ** (1986) Genotype limited effects on platelet kinetics in Friend virus infected allophenic mice. Exptl Hematology 14:380-385.

23. Behringer RR, **Dewey MJ** (1985) Cellular site and mode of Fv-2 gene action. Cell 40:444-447.

22. Norman NK, **Dewey MJ** (1985) Genetic control of red cell osmotic fragility. J Hered 76:31-35.

21. Behringer RR, Eldridge PW, **Dewey MJ**(1984) Stable genotypic composition of blood in allophenic mice derived from congenic C57BL/6 strains. Devel Biol 101:251-256.

20. VanZant G, Eldridge PW, Behringer RR, **Dewey MJ** (1983) Genetic control of hematopoietic kinetics revealed by analyses of allophenic mice and stem cell suicide. Cell 35:639-649.

19. Nallaseth FS, Lawther RP, Stallcup MR, **Dewey MJ** (1983) Isolation of recombinant bacteriophage containing male-specific mouse DNA. Molec Gen Genet 190:80-84.

18. Palmer J, **Dewey MJ** (1983) Allophenic mice produced from embryos aggregated with antibody. Experientia 39:196-198.

17. **Dewey MJ**, Maxson SC (1982) Audiogenic seizure susceptibility of C57BL/6¬®DBA/2 allophenic mice. Brain Res 246:154-156.

16. **Dewey MJ**, Eldridge PW (1982) Friend viral pathogenesis in DBA/2 ¬® C57BL/6 allophenic mice. Exp Hematol 10:723-731.

15. **Dewey MJ**, Brown JL, Nallaseth FS (1982) Genetic differences in red cell osmotic fragility: analysis in allophenic mice. Blood 59:986-989.

14. Pellicer A, Wagner EF, Kareh AE, **Dewey MJ**, Reuser AJ, Silverstein S, Axel R, Mintz B (1980) Transformation of teratocarcinoma cells with the thymidine kinase gene from Herpes Simplex. Proc Natl Acad Sci(USA) 77:2098-2102.

13. **Dewey MJ**, Mintz B (1980) Teratocarcinoma cells as agents for producing mutant mice. In: "Differentiation and Neoplasia." Third International Conference on Differentiation (R.G. McKinnell, ed.). Springer-Verlag, New York, pp. 275-282.

12. Watanabe T, **Dewey MJ**, Mintz B (1978) Teratocarinoma cells as vehicles for introducing specific mutant mitochondrial genes into mice. Proc Nat Acad Sci(USA) 75:5113-5117.

11. **Dewey MJ**, Mintz B (1978) Genetic control of cell-type-specific levels of mouse b-galactosidase. Devel Biol 66:560-563.

10. **Dewey MJ**, Mintz B (1978) Direct visualization, by b-galactosidase histochemistry, of differentiated normal cells derived from malignant teratocarcinoma in allophenic mice. Devel Biol 66:550-559.

9. **Dewey MJ**, Filler RS, Mintz B (1978) Protein patterns of developmentally totipotent mouse teratocarcinoma cells and normal early embryo cells. Devel Biol 64:171-182.

8. **Dewey MJ**, Martin DW Jr, Martin GR, Mintz B (1977) Mosaic mice with teratocarcinoma-derived mutant cells deficient in hypoxanthine phosphoribosyltransferase. Proc Nat Acad Sci(USA) 74:5564-5568.

7. **Dewey MJ**, Gearhart JD, Mintz B (1977) Cell surface antigens of totipotent mouse teratocarcinoma cells grown in vivo. Their relation to embryo, adult, and tumor antigens. Devel Biol 55:359-374.

6. **Dewey MJ**, Gervais AG, Mintz B (1976) Brain and ganglion development from two genotypic classes of cells in allophenic mice. Devel Biol 50:68-81.

5. Majumbdar C, **Dewey MJ**, Frankel FR (1976) Altered properties of deoxyribonucleic acid polymerase 1 isolated from the membrane of bacterophase T4-infected Escherichia coli. J Bacteriol 127:341-347.

4. **Dewey MJ**, Frankel FR (1975) Two suppressor loci for gene 49 mutations of bacteriophage T4 11. DNA and capsid maturation. Virology 68:402-417.

3. **Dewey MJ**, Frankel FR (1975) Two suppressor loci for gene 49 mutations of bacteriophage T4 1. Genetic properties and DNA synthesis. Virology 68:387-401.

2. **Dewey MJ**, Wiberg JS, Frankel FR (1974) Genetic control of whisker antigen of bacteriophase T4D. J Mol Biol 84:625-634.

1. Majumbar C, **Dewey MJ**, Frankel FR (1972) Bacteriophage-directed association of DNA polymerase with the host membrane: A dispensable function. Virology 49:134-144.

Other Activities

US Patent: Alpha-1-Acid Glycoprotein Transgenic Mice (Pat#: 5,648,597) **Dewey MJ**, Berger FG, Baumann H.

Funding History:

PAST ACTIVE SUPPORT:

1. American Cancer Society. Grace R Reagin Memorial Grant for Cancer Research, #MV-105, "Malignancy in Allophenic Mice"; **MJ Dewey**, PI; $130,000/2 years; 1/1/81 to 12/31/82.

2. Epilepsy Foundation of America. **MJ Dewey**, PI; "Audiogenic Seizures in Allophenic Mice"; $12,000 for one year; 3/15/82 to 3/14/83.

3. ACS; "Malignancy in Allophenic Mice" (MV105); $142,000/2 yrs; 1-1-83 to 12-31-84; **MJ Dewey**, PI

4. NIH; "Structure and Function of the Y Chromosome" (1 R01HD 17523-01A1); $183,109/3 yrs; 9-1-84 to 8-31-87; **MJ Dewey**, PI

5. NSF; "Cell Interactions in the Development of Allophenic Mice" (PCM-8316312); $125,000/2yrs; 9-1-84 to 8-31-86; **MJ Dewey**, PI

6. NIH; "Cell Fusion and the Generation of Tumor Diversity" (1ROI CA-43174); $267,134/3 yr; 8-1-86 to 7-31-89; P Furmanski, PI; **MJ Dewey**, CoPI (CoPI Share $93,000).

7. NSF; "Equipment Grant for Micromanipulation" (DMB-8500478); $33,000; 12-1-85 to 4-1-87; **MJ Dewey**, PI, R Showman, L Bowman, S Kistler, CoPIs

8. March of Dimes; "Genetic Control of Eye Development" (1-1057); $50,000/2yrs.; 7-1-87 to 6-30-89; **MJ Dewey** PI

9. American Heart Association (S.C. Affiliate); "Genetic Control of Erythrocyte Structure"; $24,000/2yr.; 7-1-88 to 6-30-90; **MJ Dewey**, PI

10. USC Venture Fund "Murine models of sickle cell disease"; $13,000/1 yr.; 7-1-90 to 4-30-92; **MJ Dewey**, PI

11. BRSG (USC); "Genetic Control of Lens Function."; $5000; 1-1-92 to 9-1-93; **MJ Dewey**, PI

12. Research and Productive Scholarship; "Cloning the Na/H exchanger"; $2000; 1-1-93 to 12-31-93; **MJ Dewey**, PI

13. Research and Productive Scholarship; "Post-transcriptional regulation of the Na/H exchanger"; $5000; 1-1-96 to 12-31-96; **MJ Dewey**, PI

14. South Carolina Cancer Center; "Does altered Na/H exchanger function contribute to cancer development?"; $13,570; 7-1-96 to 4-1-98; **MJ Dewey**, PI; S Berger, CoPI.

15. South Carolina Cancer Center; "The role of the Na/H exchanger in normal and leukemic cell adhesion and proliferation."; $13,400; 7-1-97 to 6-30-98; Rich I, PI; Dewey MJ, CoPI.

16. Hoffman La Roche, “Effect of serum alpha-1-acid glycoprotein levels on the disposition of HIV protease inhibitors: An in vivo evaluation in transgenic mice.” $10,000; 6-1-98 to 12-31-99; **MJ Dewey**, B Michniak, JW Holladay, CoPIs.

17. NIH NIAAA, “Alcohol metabolism genes in transgenic mice.” $790,000; 4-1-98 to 3-31-00; MR Felder; PI; **MJ Dewey**,CoPI. (CoPI share: $10,000/yr)

18. USDA; “Novel recipients for spermatogonial transfer;” $50,000; 10-1-98 to 9-30-00; **MJ Dewey**, **PI**, WS Kistler, CoPI.

19. Venture Fund (USC); “Functional relationship between the Na/H exchanger and iduronate sulfatase.” $10,500; 7-1-98 to 4-1-00; **MJ Dewey** , PI.

20. NIH; “Mouse models for the study of longevity genes” $1,520,000; 4-1-99 to 3-31-04; GE Van Zant, PI; **MJ Dewey**, CoPI. (CoPI share: $180,000; 4-1-00 to 3-31-03).

21. NSF; "A genetic stock center for *Peromyscus*" $348,000; 9-15-99 to 2-29-02. **MJ Dewey** , PI, Dawson WD, CoPI. (Originally awarded to Wallace Dawson, Director of the *Peromyscus* Genetic Stock Center until Jan 1, 2000 when he retired and was replace by **Dewey**).

22. NIH; "*Peromyscus* laboratory animal models for biomedical research" $443,000; 7-1-99 to 6-30-02. **MJ Dewey** , **PI**, Dawson WD, CoPI. (Originally awarded to Wallace Dawson, Director of the *Peromyscus* Genetic Stock Center until Jan 1, 2000 when he retired and was replace by **Dewey)**

23. NSF; "PeroBase: a biological database for *Peromyscus*" $373,000; 9-1-98 to 8-31-01; Rose J, PI; Dawson WD, CoPI; **MJ Dewey.** (**Dewey** included as CoPI in the summer of 2001).

24. Aventis (Rhone) Pharmaceuticals, "Influence of elevated serum alpha-1-acid glycoprotein levels on the pharmacokinetic disposition, and antitumor and antihematopoietic activity of docetaxel (taxotere). $40,000; **Dewey MJ**, Holladay JW, Desai PB, CoPIs.

25. NSF: DBI-0130348 "A Genetic Stock Center for *Peromyscus*"; Direct Costs $315,000; 02-01-02 to 01-31-05; **Dewey MJ**, **PI**; Dawson WD, CoPI

26. USCRF/NCRR/NIH EPSCoR/BRIN Collaborative Research Program "The *Peromyscus* genome project: Development of a core research group" $70,000, 6-1-03 to 8-31-04. **Dewey MJ**, **PI**; Glenn TC, Bullard-Dillard R (Claflin U), Co PIs

27. NIH(NCRR): P40-RR14279 "*Peromyscus* Laboratory Models for Biomedical Research" Direct Costs: $372,000; 07-01-02 to 3-31-06; **Dewey MJ**, **PI**; Glen T, Dawson WD, CoPIs

RECENT ACTIVE SUPPORT
(Transferred to Drs MR Felder, PI, and G Szalai, CoPI on Dewey retirement in 2006).

28. NSF: DBI-0444165 "A Genetic Stock Center for *Peromyscus*"; Direct Costs $315,000; 05-01-05 to 04-30-08; **Dewey MJ**, **PI**

29. NIH(NCRR) P40-RR14279; "Peromyscus laboratory animal models for biomedical research" $450,000 direct costs; 4-1-06 to 3-31-09. **Dewey MJ** , **PI**; O'Neill R (U Conn), Hoekstra H (Harvard), CoPIs.

30. NIH; R01GM069601 "Development of *Peromyscus* Genomics" $1,200,000 direct costs; 8-1-04 to 7-31-08. **Dewey MJ**, **PI**; Glenn TC (SREL), Bullard-Dillard R (Claflin U), CoPIs.

Also:
1. NIH (NHGRI) "*Peromyscus* BAC library proposal". **Dewey MJ**, Glenn TC (proposers). NIHGR has produced a *P maniculatus rufinus* BAC library(http://bacpac.chori.org/library.php?id=280).

2. NIH (NHGRI) "White paper proposal for sequencing the genome of *Peromyscus*" O'Neill R (UConn), Szalai G (PGSC), Gibbs R (Baylor), Weinstock G (Baylor), Vrana P (UCI), Glenn J (PGSC), **Dewey MJ** (PGSC), and Felder MR (PGSC). In Oct 2007 approval was granted for development of a draft sequence (~6X) of *P maniculatus bairdii*, as well as low coverage sequencing (~2X) of *P polionotus*, *P leucopus*, and *P californicus*. (http://www.genome.gov/10002154).

Undegraduate and Graduate Teaching

1. 1966-1968: Universidad de San Carlos, Guatemala City
Courses in Biochemistry and Biology (Peace Corps Volunteer)

2. Major Courses Taught at U of So Carolina (1979-2006)

Developmental Genetics (BIOL 753)

Semester	Students
Fall 79	10
Spring 81	6
Spring 83	12
Spring 85	18
Spring 87	15
Spring 89	9

Developmental Biology (BIOL 506)

Semester	Students
Spring 80	11
Spring 82	5

Cell and Molecular Biology (BIOL 302)

Semester	Students
Spring 90	60
Spring 91	45
Spring 92	120
Spring 93	120
Spring 94	90
Spring 96	40
Spring 97	85

Human Physiology (BIOL 460)

Semester	Students
Spring 98	40
Spring 99	40

Immunobiology (BIOL 620)

Semester	Students
Fall 81	50
Fall 82	45
Fall 83	50
Fall 84	45
Fall 85	45
Fall 86	38
Fall 87	30
Fall 88	25
Fall 89	35
Fall 90	31
Fall 91	35
Fall 92	35
Fall 93	75
Fall 94	80
Fall 95	80
Fall 96	85
Fall 97	85
Fall 98	85
Fall 99	60
Fall 00	65
Fall 01	50
Fall 02	50
Fall 03	50
Fall 04	40
Fall 05	80

3. Colorado State University (2008-2014)

Molecular and GeneralGenetics (BZ350)

Semester	Students
Summer 2008	20
Summer 2009	35
Fall 2009	169
Summer 2010	33
Summer 2011	43
Summer 2012	35
Summer 2013	47
Summer 2014	50
Summer 2015	46

4. Undergraduate Research

a. BIOL 399 UNDERGRADUATE RESEARCH PROJECTS

Jamie Brown; Summer 1981; “Genetic control of red cell osmotic fragility”
Carolyn Mason; Fall 1982; “Effect of repeated bleeding on reticulocyte counts”
Laura Pollitzer; Spring 1983; “Chromosome analysis in allophenic mice”
Carl T Augustus; Spring 1984; “Genetic control of blood formation”
Rodney Small; Fall 1985; “Kinetics of blood formation in parabiotic pairs”
Robin Hurley; Spring 1986;”Effect of W alleles on immune function”
Richard Davis; Spring 1986; “Structure of Y chromosomal DNA”
Anita Jennings; Fall 1986; “Structure of Y chromosomal DNA”
Sherry Lutz; Spring 1987; “Genetic control of growth rates in mice”
Anna Holmgren; Spring 1989; “Defective lens development in C57BL/6 mice”
Evan Thompson; Fall 2000; “Development of pedigree analysis software”
Malissa Massey; Fall 2001; “*Peromyscus* microsatellite markers”
Nicole Segedin; Summer 2002; “*Peromyscus gossypinus* population genetics”

b. SENIOR THESES

Cindy Ely; Spring 1991; “Characterization of a mouse model for sickle cell anemia.” Ms Elypresented this work at the S Caro Academy of Sciences and was awarded the Sigma Xi Award for Outstanding Undergraduate Research.
Heather Riley: 1994; “Effect of hydroxyurea on red cell volume regulation”
Dee Walker; 1994; “Developmental and functional defects of C57BL/6 lenses”
Brian Keisler: 1997; “Genetic control of Na/H exchanger expression and activity”
Stephanie Napier; 2004; “Development of a *Peromyscus* EST database from a placental cDNA library”.
Mara Holland; 2005; "Comparative peromyscine hematology."
Jacinda Hunter, 2006; "Pseudopregnancy induction and artificial insemination in *Peromyscus maniculatus*."

c. HOWARD HUGHES, EPSCOR, & BRIN UG RESEARCH FELLOWS

Brian Keisler; Summer 1996; “Genetics of Na/H antiporter expression”
Katie Patten; Fall-Spring 1996/1997; “Flow cytometric analysis of intracellular pH”
Vakenya Brunson; (Morris College, Sumter) Summer 1999, "PCR and Western based technologies for streamlined identification of transgenic mice"

Alice Mims; Summer 2000; “Development of microsatellite markers for the *Peromyscus* genome project.”
Nicole Garrett; Summer 2003; “Sperm aggregation among peromyscines, a matter of cooperation?
Carol Copeland; Fall-Spring 2003/2004; “Development of artificial insemination technology in *Peromyscus.*
Hermes Exeter (visiting from Claflin U); Summer 2003; “Development of a *Peromyscus* EST database from a placental cDNA library”
Chantall Braithwaite (visiting from Claflin U); Summer 2003; “Development of a *Peromyscus* EST database from a placental cDNA library”

5. <u>Graduate Research</u>

a. PhD STUDENTS

Paul Eldridge; Fall 1984; "Development and hematopoiesis in allophenic mice."
Richard Behringer; Spring 1986; "Cellular site and move of Fv-2 gene action."
Ferez Nallaseth; Fall 1987; "Structure and function of mouse Y chromosome DNA."
Michael Robinson; Spring 1992; "Genetic control of ocular morphogenesis."
Pearl Fernandes; Spring 1994; "Mechanism of <u>rol</u> control of red cell volume regulation."
Clifton Ramsdell; Spring 2006; “Comparative genome mapping of the deer mouse *Peromyscus maniculatus* reveals greater similarity to rat *Rattus norvegicus* than to the lab mouse (*Mus musculus*)”

b.MS STUDENTS

Jennifer Palmer; Summer 1981; "Effect of rabbit anti-mouse serum on the agglutination of allophenic embryos."
N. Kathy Norman; Summer l984; "Genetic control of erythrocyte osmotic fragility."
Cathy Schaefer; Fall 1987; "A gene controlling extreme resistance to osmotic lysis."
Kelly Prince; Fall 2000; “Development of microsatellite markers for the *Peromyscus* genome project.”
Fe Atwater; Summer 2001; “Sequence structure of the 5’-portion of the mouse iduronate sulfatase gene.”
Lance Dupre; Summer 2002; “In vivo consequences of elevated alpha-1-acid glycoprotein on the metabolism and effectiveness and side effects of anti-neoplastic agents.”

c. POSTDOCTORAL STUDENTS

Dr Nicol LoCascio; Fall 1984-Spring 1987; "Cell interactions in allophenic mice."
Dr Tim Platt; Spring 1985-Fall 1988; "Structure of the Y Chromosome"
Dr William Dobson; 1988; "Defective lens formation in C57BL/6 mice."
Dr Pearl Fernandes, Summers 1999-2000; “Spermatogonial stem cells.”
Dr Monica Szalai; 2001-2002; “In vivo assay of cis-acting regulatory elements regulating testis specific gene expression”(a collaboration with WS Kistler, Chemistry USC)
Dr Julie Weston; 2001-2005; *Peromyscus* genomics

d. Thesis Committee Memberships (PhD and MS): 90

6. Sabbatical Leave & Other Visiting Professors

Dr Stephen Maxson; University of Connecticut; Spring 1986; "Molecular structure of the Y chromosome."
Dr Radman Ali; Morris College, Sumter SC; Summer 1992; “Molecular biology techniques”
Dr Rebecca Bullard-Dillard; Claflin U, Orangeburg SC; Summer 2003; “*Peromyscus* Genomics”

7. Other

Recipient of the Mortar Board Excellence in Teaching Award; 1992, 2005.

Paid Consultations:

1999	McGraw Hill Publishing; textbook review *Human Physiology, 6th* by SI Fox.
1994-2006	Dept Natural Sciences & Mathematics, Morris College, Sumter SC; Dr R Ali, Chairman; ongoing consultation for departmental organization and curriculum and course development.
2006-2009	*Peromyscus* Genetic Stock Center, consultation for the preparations of funding proposals to NIH and NSF to support Stock Center mission and research.