CURRICULUM VITAE

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NAME: Robert Allen White
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EDUCATION:

1977 B.A.	University of Massachusetts at Boston
1982 M.S.	Boston College
1989 Ph.D.	Boston College

RESEARCH APPOINTMENTS:

1983-1988	Pre-doctoral Associate, The Jackson Laboratory, Bar Harbor, ME
1988-1992	Research Fellow in Medicine, Hematology/Oncology, Children's Hospital, Boston, MA
1988-1992	Research Fellow in Pediatrics, Harvard Medical School, Boston, MA
1993	Visiting Investigator, Hematology/Oncology, Harvard Medical School and Children's Hospital, Boston, MA
1992-2008	Molecular Geneticist, Mouse Genetics Research Laboratory, Children's Mercy Hospitals & Clinics, Kansas City, MO
2008-2010	Director Genetics Research Laboratory Children's Mercy Hospitals & Clinics, Kansas City, MO
2010-2012	Associate Professor of Molecular Biology/Medical Genetics Department of Biochemistry Dybedal Research Center Kansas City University of Medicine & Biosciences, Kansas City, MO
2012-present	Professor of Molecular Biology/Medical Genetics, Department of Biochemistry, Kansas City University of Medicine & Biosciences, Kansas City, MO

ACADEMIC APPOINTMENTS:

1980	Lecturer in Genetics, Biology Department, Boston College, Chestnut Hill, MA
1981-1983	Teaching Fellow, Biology Department, Boston College, Chestnut Hill, MA
1988-1992	Research Fellow in Pediatrics, Harvard Medical School, Boston, MA

1982-1993	Summer Professor, Introductory Biology, Boston College, Chestnut Hill, MA
1992-2000	Assistant Professor, Department of Pediatrics, University of Missouri-Kansas City School of Medicine, Kansas City, MO
2000-2010	Associate Professor, Department of Pediatrics, University of Missouri-Kansas City School of Medicine, Kansas City, MO
2010-2012	Associate Professor of Molecular Biology/Medical Genetics, Department of Biochemistry, Kansas City University of Medicine & Biosciences, Kansas City, MO
2011-present	Adjunct Research Professor of Genetics, University of Missouri-Kansas City School of Medicine, Kansas City, MO
2012-present	Professor of Molecular Biology/Medical Genetics, Department of Biochemistry, Kansas City University of Medicine & Biosciences, Kansas City, MO
2013-present	Associate Dean, College of Biosciences, Kansas City University of Medicine & Biosciences, Kansas City, MO

MEMBERSHIPS:

American Association for the Advancement of Sciences
American Society of Hematology
American Society of Human Genetics
International Genome Society

GRANTS:

1999-2000	Fight for Sight, The Research Division of Prevent Blindness America #GA99047 "Gene Targeting of Dp260 Retinal Dystrophin: Analysis of Abnormal ERG and Clinical Relevance to Night Blindess" $12,000 This funding was used to produce a retinal dystrophin Dp260 knock out mouse and to analyze the effect of specific Dp260 deficiency of the generation of an abnormal ERG.
1996-2000	The Children's Mercy Hospital Core Lab Post Doctoral Fellow Grant $140,000
2001	Paul Patton Memorial Trust Fund "Treatment of Muscular Dystrophy using Novel Gene Expression" $190,000

2000-2003	Research Agreement, Menninger Research Institute A study of the inheritance of the D2 Dopamine Receptor A1 allele and reward-deficiency syndrome $130,000
2001-2004	March of Dimes MOD #6-FY012-183 “Novel Therapy for Duchenne Muscular Dystrophy: Expressing Retinal Dystrophin in Muscles of a DMD Mouse” $187,440
2001-2005	Hall Foundation Grant in Collaboration with Dr. Alan Godwin, KUMC "Isolation of a Novel Gene from a Mouse Model of Human Ectodermal Dysplasia" $61,000
2006-2008	U01 HD037249 (P.I. Alexander A. Vinks, Pharm.D., Ph.D.) NICHD Pharmacogenetics of Risperidone in Children with Pervasive Developmental Disorder (PDD) Role: DNA genotyping of DRD2 and DRD4 alleles in study patient population $29,160
2007-2009	KCALSI Research Initiative Award “Transgene Therapy for Cardiomyopathy in DMD Mouse Model” $50,000
2011-2012	KCALSI Patton Trust Development Grant “Identification of Novel Gene Causing Pediatric Hereditary Spherocytosis” $50,000

RESEARCH INTERESTS:

The research focus in my lab is the identification of genes involved in the normal production of red blood cells. This has involved using 4 mouse mutants with hereditary anemias. The positional cloning of the causative genes for these anemia mouse mutants has resulted in their identification and provides the experimental data for the next phase of this work in molecular biology. The significance of this work is in the possible development of novel therapies for iron overloading, a condition that leads to severe morbidity and death and includes Hereditary Hemochromatosis and transfusion-dependent diseases such as sickle cell anemia. In addition, I have identified the causative gene for a novel model of Hereditary Spherocytosis (HS), the most common hereditary anemia in man with an incidence as high as 1 out of 2,500 in persons of Northern European descent. It is estimated that 10% of patients with HS has no known genetic defect and this discovery may lead to the identification of the defective gene in this significant group. Finally, I am actively pursuing the identification of a novel erythropoiesis factor in a new mouse mutant with a transient neonatal anemia. A second area of research includes developing a gene therapy strategy including the use of a human retinal dystrophin transgene using muscular dystrophy mice.

PUBLICATIONS:

MANUSCRIPTS:

1. Spark, R. F., Connolly, P. B., White, R. A., Sacks, B. and Landsberg L. (1979) ACTH secretion from a functioning pheochromocytoma. *New England Journal of Medicine* **301:** 416-418.

2. Spark, R. F., White, R. A. and Connolly, P. B. (1980) Impotence is not always psychogenic: newer insights into hypothalamic-pituitary-gonadal dysfunction. *Journal of the American Medical Association* **243:** 750-755.

3. White, R. A. (1988) An inherited erythroid ankyrin deficiency in normoblastosis: a mutation causing severe hemolytic anemia. Ph.D. Dissertation. Boston College.

4. White, R. A., Birkenmeier, C. S., Lux, S. E. and Barker, J. E. (1990) Ankyrin and the hemolytic anemia mutation, *nb*, map to mouse Chromosome 8: Presence of the *nb* allele is associated with a truncated erythroid ankyrin. *Proceedings of the National Academy of Sciences USA* **83:** 3117-3121.

5. Peters, L. L., Birkenmeier, C. S., Bronson, R. T., White, R. A., Lux, S. E., Otto, E., Bennett, V., Higgins, A. and Barker, J. E. (1991) Purkinje cell degeneration associated with erythroid ankyrin deficiency in *nb*/*nb* mice. *Journal of Cell Biology* **114:** 1233-1241.

6. Peters, L. L., White, R. A., Birkenmeier, C. S., Lux, S. E. and Barker, J. E. (1992) Changing patterns in cytoskeletal mRNA expression and protein synthesis during murine erythropoiesis in vivo. *Proceedings of the National Academy of Sciences USA* **89:** 5749-5753.

7. White, R. A., Birkenmeier, C. S., Peters, L. L., Barker, J. E. and Lux, S. E. (1992) Murine erythrocyte ankyrin cDNA: highly conserved regions of the regulatory domain. *Mammalian Genome* **3:** 281-285.

8. White, R. A., Peters, L. L., Adkison, L. R., Korsgren, C., Cohen, C. M., and Lux, S. E. (1992) The murine pallid mutation is a platelet storage pool disease associated with the protein 4.2 (pallidin) gene. *Nature Genetics* **2:** 80-83.

9. Birkenmeier, C. S., White, R. A., Peters, L. L., Lux, S. E. and Barker, J. E. (1993) Complex patterns of sequence variation and multiple 5' and 3' ends are found among transcripts of the erythroid ankyrin gene. *Journal of Biological Chemistry* **268:** 9533-9540.

10. Adkison, L. R., White, R. A., Haney, D. M., Lee, J. C., Pusey, K. T. and Gardner, J. (1994) The fibronectin receptor, alpha subunit (*Itga5*) maps to murine Chromosome 15, distal to *D15Mit 16*. *Mammalian Genome* **5:** 456-457.

11. White, R. A., Dowler, L. L., Adkison, L. R., Ezekowitz, R. A. B. and Sastry, K. N. (1994) The murine mannose-binding protein genes (*Mbl1* and *Mbl2*) localize to Chromosomes 14 and 19. *Mammalian Genome* **5:** 807-809.

12. White, R. A., Geissler, E. N., Adkison, L. R., Dowler, L. L., Alper, S. L. and Lux, S. E. (1994) Chromosomal location of the murine anion exchanger genes encoding AE2 and AE3. *Mammalian Genome* **5:** 827-829.

13. Avraham, S., Jiang, S., Ota, S., Fu, Y., Deng, B., Dowler, L. L., White, R. A. and Avraham, H. (1995) Structural and functional studies of the intracellular tyrosine kinase MATK gene and its translated product. *Journal of Biological Chemistry* **270:** 1833-1842.

14. White, R. A., Dowler, L. L., Woo, M., Adkison, L. R., Pal, S., Gershon, D. and Fowler, V. M. (1995) The tropomodulin gene (*Tmod*) maps to Chromosome 4, closely linked to *Mup1*. *Mammalian Genome* **6:** 332-333.

15. White, R. A., Dowler, L. L., Pasztor, L. M., Gatson, L. L., Adkison, L. R., Angeloni, S. V. and Wilson, D., B. (1995) Assignment of the transcription factor GATA-4 gene to human chromosome 8 and mouse chromosome 14: *Gata4* is a candidate gene for *Ds* (disorganization). *Genomics* **27:** 20-26.

16. Koeller, D. M., Axtell, K., Angeloni, S. V., Dowler, L. L., Frerman, F. E., White, R. A. and Goodman, S. I. (1995) Cloning, structure and chromosomal localization of the mouse glutaryl-CoA dehydrogenase gene. *Genomics* **28:** 508-512.

17. White, R. A., Angeloni, S. V. and Pasztor, L. M. (1995) Chromosomal localization of the β-adducin gene to mouse chromosome 6 and human chromosome 2. *Mammalian Genome* **6:** 741-743.

18. Hughes, R., Chan, F. Y., White, R. A. and Zon, L. I. (1995) Cloning and chromosomal localization of a mouse cDNA with homology to the *Saccharomyces cerevisiae* gene Zuotin. *Genomics* **29:** 546-550.

19. Adams, M. E., Dwyer, T. M., Dowler, L. L., White, R. A. and Froehner, S. C. (1995) Mouse α1- and β2-syntrophin gene structure, chromosome localization, and homology with a discs-large (PDZ) domain. *Journal of Biological Chemistry* **270:** 25859-25865.

20. White, R. A., Dowler, L. L., Angeloni, S. V., Pasztor, L. M. and MacArthur, C. A. (1995) Assignment of FGF8 to human chromosome 10q25-26: mutations in FGF8 may be responsible for some types of Acrocephalosyndactyly linked to this region. *Genomics* **30:** 109-111.

21. Avraham, S., London, R., Fu, Y., Ota, S., Hiregowdara, D., Pasztor, L. M., White, R. A., Groopman, J. E. and Avraham, H. (1995) Identification and characterization of a novel related adhesion focal tyrosine kinase (RAFTK) from megakaryocytes and brain. *Journal of Biological Chemistry* **270:** 27742-27751.

22. Motwani, M., White, R. A., Guo, N., Dowler, L. L., Tauber, A. I. and Sastry, K. N. (1995) Mouse surfactant protein-D: cDNA cloning, characterization and gene localization to Chromosome 14. *Journal of Immunology* **155:** 5671-5677.

23. White, R. A., Dowler, L. L., Angeloni, S. V., and Koeller, D. M. (1996) Assignment of Etfdh, Etfb and Etfa to chromosomes 3, 7, and 13: the mouse homologs of genes responsible for glutataric acidemia type II in man. *Genomics* **33:** 131-134.

24. White, R. A., Hughes, R. T., Adkison, L. R. and Zon, L. I. (1996) The gene encoding protein kinase SEK1 maps to mouse chromosome 11 and human Chromosome 17. *Genomics* **34:** 430-432.

25. Narita, N., Heikinheimo, M., Bielinska, M., White, R. A., and Wilson, D. B. (1996) The gene for transcription factor GATA-6 resides on mouse chromosome 18 and is expressed in myocardium, vascular smooth muscle, and gut epithelium. *Genomics* **36:** 345-348.

26. White, R. A., Adkison, L. R., Dowler, L. L., and Ray, R. B. (1997) Chromosomal localization of the human gene encoding c-myc promoter-binding protein (CMBP1) to Chromosome 1p35-pter. *Genomics* **39:** 406-408.

27. White, R. A., Dowler, L. L., Hummel, G. S., and Adkison, L. R. (1997) Exclusion of Epb4.2 as a candidate for the mouse mutant pallid. *Mouse Genome* **95:** 492-494.

28. Avraham, S., London, R., Ellis, M., Fu., Y., Jiang, S., White, R. A., Painter, C., and Avaraham, H. (1997) Characterization and chromosomal localization of PTPRO, a novel receptor protein tyrosine phosphatase, expressed in hematopoietic stem cells. *Gene* **204:** 5-16.

29. Brody, S. L., Hackett, B. P., and White, R. A. (1997) Structural characterization of the mouse Hfh4 gene, a developmentally regulated forkhead family member. *Genomics* **45:** 509-518.

30. Pelletier, G. J., Brody, S. L., Liapis, H., White, R. A., and Hackett, B. P. (1998). A human forkhead/winged helix transcription factor expressed in developing pulmonary and renal epithelium. *Am. J. Physiol.* **274:** L351-L359.

31. McAndrew, P. E., Frostholm, A., White, R. A., Rotter, A., and Burghes, A. H. M. (1998). Identification and characterization of RPTPρ, a novel RPTPμ/κ-like receptor protein tyrosine phosphatase whose expression is restricted to the central nervous system. *Mol Brain Res* **56:** 9-21.

32. Lim, B.L., White, R. A., Hummel, G. S., Schwaeble, W., Lynch, N. J., Peerschke, E. I., Reid, K. B., and Ghebrehiwet, B. (1998). Characterization of the murine gene of gC1qBP, a novel cell protein that binds the globular heada of C1q, vitronectin, high molecular weight kininogen and factor XII. *Gene* **209:** 229-237.

33. Fitzgerald, K. M., Cibis, G. W., and White, R. A. (1998). Dystrophin localization in cone cells. *Invest. Ophthalmol. Vis. Sci.* **39:** 218-219.

34. Jiang, S., Tulloch, A. G., Kim, T.-A., Fu, Y., Rogers, R., Gaskell, A., White, R. A., Avraham, H., and Avraham, S. (1998). Characterization and chromosomal localization of PTP-NP2, a new isoform of protein tyrosine phosphatase-like receptor, expressed in brain boutons. *Gene* **215:** 345-359.

35. Dai, G., Chapman, B. M., Liu, B., Orwig, K. E., Wang, D., White, R. A., Preuett, B., and Soares, M. J. (1998). A new member of the mouse prolactin-like protein-C subfamily, prolactin-like protein-Cα: structure and expression. *Endocrinology* **139:** 5157-5163.

36. Fitzgerald, K. M., Cibis, G. W., and White, R. A. (1998). ERG in Duchenne/Becker muscular dystrophy. *Pediatr. Neurol*. **19:** 400-401.

37. Dai, G., Chapman, B. P., Wang, D., White, R. A., Preuett, B., and Soares, M. J. (1999) Prolactin-like protein-A gene strucuture and chromosomal mapping. *Mammalian Genome* **10:** 78-80.

38. Fitzgerald, K. M., Cibis, G. W., Gettel, A. H., Rinaldi, R., Harris, D. J., and White R. A. (1999) ERG phenotype of a dystrophin mutation in heterozygous female carriers of Duchenne muscular dystrophy. *J. Med. Genet.* **36:** 316-322.

39. Soltysik-Espanola, M., Rogers, R. A., Jiang, S., Kim, T.-A., Gaedigk, R., White, R. A., Avraham, H., and Avraham, S. (1999). Characterization of Mayven, a novel actin-binding protein predominantly expressed in brain. *Mol. Biol. Cell*. **10:** 2361-2375.

40. Pillers, D. M., Fitzgerald, K. M., Duncan, N. M., Rash, S. M., White, R. A., Dwinnell, S. J., Powell, B. R., Schnur, R. E., Ray, P. N., Cibis, G. W., and Weleber, R. G. (1999) Duchenne/Becker muscular dystrophy: correlation of phenotype by electroretinography with sites of dystrophin mutations. *Human Genetics* **105:** 2-9.

41. Hamza, I., Klomp, L. W. J., Gaedigk, R., White, R. A., and Gitlin, J. D. (2000). Structure expression and chromosomal localization of the murine Atox1 gene. *Genomics* **63:** 294-297.

42. Bartnikas, T. B., Waggoner, D. J., Casareno, R. L. B., Gaedigk, R., White, R. A., and Gitlin, J. D. (2000). Chromosomal localization of CCS, the copper chaperone for Cu/Zn superoxide dismutase. *Mammalian Genome* **11:** 409-411.

43. Dai G., Wang D., Liu B., Kasik J. W., Muller H., White R.A., Hummel G. S., Soares M. J. (2000). Three novel paralogs of the rodent prolactin gene family. *J. Endocrinol* **166:** 63-75.

44. White, R. A., Pasztor, L. M., Richardson, P. M., and Zon, L. I. (2000) The gene encoding TBC1 maps to mouse chromosome 5 and human chromosome 4. *Cytogenet. Cell Genet.* **89:** 272-275.

45. Kim, T-A., Ota, S., Jiang, S., Steinberger, A. A., White, R. A., and Avraham, S. (2000) Genomic organization, chromosomal localization and regulation of expression of the neuronal nuclear matrix protein NRP/B in human brain tumors. *Gene* **255:** 105-116.

46. Ghosh, A. K., Majumder, M., Steele, R., White, R. A., and Ray, R. B. (2001) A novel 16-kilodalton cellular protein physically interacts with and antagonizes the functional ability of c-myc promoter-binding protein 1. *Mol. Cell. Biol.* **21:** 655-662.

47. Simckes, A.M., Swanson, S.K., White, R.A. (2002) Chromosomal localization of three Vacuolar-H^+-ATPase 16 kDa Subunit (ATP6c) genes in the murine genome. *Cytogenetic and Genome Research*. **97:** 111-115.

48. White, R. A., McNulty, S., Roman, S., Garg, U., Wirtz, E., Kohlbrecher, D. Nsumu, N. N., Pinson, D., Gaedigk, R., Blackmore, K., Copple, A., Rasul, S., Watanabe, and M. Shimizu, K. (2004) Chromosomal localization, hematological characterization, and iron metabolism of the hereditary erythroblastic anemia (*hea*) mutant mouse. *Blood* **104:** 1511-1518.

49. White, R. A., McNulty, S. G., Nsumu, N. N., Boydston, L. A., Brewer, B. P., and Shimizu, K. (2005). Positional Cloning of the *Ttc7* Gene Required for Normal Iron Homeostasis and Mutated in *hea* and *fsn* Anemia Mice. *Genomics* **85:** 330-337.

50. White, R. A., Boydston, L. A., Brookshier, T. R., McNulty, S. G., Nsumu, N. N., Brewer, B. P. and Blackmore, K. (2005). Iron metabolism anemia *hbd* mice have a mutation in the *Sec15l1* gene for vesicle docking. *Genomics* **86:** 668-673.

51. Gaedigk, R., Law, D. J., Fitzgerald-Gustafson, K. M., McNulty, S. G., Nsumu, N. N., Modrcin, A., Rinaldi, R. J., Pinson, D., Fowler, S., C., Bilgen, M., Burns, J., Hauschka, S. D., and White, R. A. (2006). Improvement in Survival and Muscle Function in an *mdx*, *utrn -/-* Double Mutant Mouse Using a Human Retinal Dystrophin Transgene. *Neuromuscular Disorders* **16:** 192-203.

52. Bittel, D. C., Kibiryeva, N, McNulty, S. G., Driscoll, D. J., Butler, M. G., and White, R. A. (2007) Whole Genome Microarray Analysis of Gene Expression in an Imprinting Center Deletion Mouse Model of Prader-Willi Syndrome. *American Journal of Medical Genetics* **Part A 143A:** 422-429.

53. White, R. A., Sokolovsky, I. V., Britt, M. I., Nsumu, N. N., Logsdon, D. P., McNulty, S. G., Wilmes, L. A., Brewer, B. P., Wirtz, E., Heather R. Joyce, H. R., Fegley, B., Smith, A., and Heruth, DP. (2009). Hematologic Characterization and Chromosomal Localization of the Novel Dominantly Inherited Mouse Hemolytic Anemia, Neonatal Anemia (*Nan*). *Blood Cells, Molecules and Diseases* **43:** 141-148.

54. Heruth, D. P., Hawkins, T., Gibson, M.I., Logsdon, D.P., Sokolovsky, I. V., Nsumu, N.N., Major, S.L., Fegley, B., Woods, G.M., Lewing, K.B., Neville, K.A., Cornetta, K., Peterson, K.R., and White, R.A. (2010). Mutation in Erythroid Specific Transcription Factor KLF1 Causes Hereditary Spherocytosis in the *Nan* Hemolytic Anemia Mouse Model. *Genomics*. **96:** 303-307.

55. White, R. A., Silvey, M. S., and Logsdon, D.P. (2012). Research From the Bedside to the Lab Bench & Back. *Missouri Medicine* **109**: 195-198.

56. Miller, K. L., Silvey, M. S., Logdson, D. P.,Shannon, L. A., Balch, F., Bi, C. Heruth, D. P., Mowrer, C. Holmes, M., Hangge, A. N., Carpenter, S. L., Wheeler, B., Farrow, R., Nsumu, N. N., Sokolovsky, I. V., Costa, F. C., and White, R. A. (2013). Splicing Error in *Gata1* Affects Erythropoiesis in the *Xpna* Mouse (X-Linked Pre- and Neonatal Anemia) With Suggestion of a Novel Compensatory Erythroid Transcription Factor. *Blood* Manuscript in preparation.

ABSTRACTS:

1. White, R. and Barker, J. (1987) Normoblastosis: a mutant mouse with severe hemolytic anemia. *Blood* **70:** 57a.

2. Peters, L. L., White, R. A., Birkenmeier, C. S. and Barker, J. E. (1989) Ankyrin mRNA expression in normal and ankyrin deficient mice. *Journal of Cellular Biochemistry* **13B:** 231.

3. Peters, L. L., Birkenmeier, C. S., White, R. A., Lux, S. E. and Barker, J., E. (1989) Erythroid ankyrin mRNA is reduced in both reticulocytes and brain in mice homozygous for the nb hemolytic anemia mutation. *Blood* **74:** 59a.

4. White, R. A., Birkenmeier, C. S., Barker, J. E. and Lux, S. E. (1990) Characterization of mouse erythrocyte ankyrin shows that spectrin and band 3 binding domains and portion of alternatively spliced sequences in the regulatory domain are highly conserved. *Blood* **76:** 14a.
5. Peters, L. L., Birkenmeier, C. S., Bronson, R., White, R. A., Lux, S. E. and Barker, J. E. (1990) The hemolytic anemia mutation, nb, includes a neurological component resulting from a deficiency of erythroid ankyrin in the purkinje cells of the cerebellum. *Blood* **76:** 14a.

6. White, R. A., Peters, L. L., Adkison, L. R., Korsgren, C., Cohen, C. M., Lux, S. E. (1992) The pallid mutation: murine platelet storage pool disease associated with the protein 4.2 (pallidin) gene. *Molecular Biology of the Cell* **3:** 271a.

7. White, R. A., Geissler, E. N., Adkison, L. R., Dowler, L. L., Alper, S. L. and Lux, S. E. (1993) Chromosomal location of the genes for the mouse anion exchangers AE2 and AE3. *Molecular Biology of the Cell* **4:** 398a.

8. Adkison, L. R., Pusey, K. T., Lee., J. C. and White, R. A. (1994) Abnormalities observed in inner ear development of pallid, mocha and muted mouse mutants. *Am. J. Hum. Genet.* **55:** A124.

9. Avraham, H., Jhun, B., Jiang, S., Ota, S., Deng, B., Dowler, L., White, R. and Avraham, S. (1994) Structural and functional studies of the intracellular tyrosine kinase MATK gene and its translated product. *Blood* **84:** 389a.

10. Fitzgerald, K. M., Heruth, D. P., Dowler, L. L., Giambrone, S. A., Sahni, M., Angeloni, S. V., Simckes, A. M., Cibis, G. W., Rothberg, P. G. and White, R. A. (1995) Identification of cDNAs encoding two human retinal dystrophin isoforms: alternative splicing of a complex first exon. *Investigative Ophthalmology and Visual Science* **36:** S771.

11. Simckes, A. M., Giambrone, S., Dowler, L. L. and White, R. A. (1995) Chromosomal mapping and characterization of the 16kDa vacuolar H^+-ATPase (V-H-ATPASE) subunit in the mouse. *J. Amer. Soc. Neph.* **6:** 315a.

12. Harris, D. J., Pasztor, L. M. and White, R. A. (1995) Another look at a family with t(8;12) and hereditary spherocystosis. *Am. J. Hum. Genet.* **57:** A338.

13. Avraham, H., London, R., Fu, Y., Ota, S., Hiregowdara, D., Li, J., Jiang, S., Pasztor, L. M., White, R. A., Groopman, E. and Avaraham, S. (1995) Identification and characterization of a novel related adhesion focal tyrosine kinase (RAFTK) from megakaryocytes and brain. *Blood* **86:** 282a.

14. Simckes, A. M., Giambrone, S. A., Dowler, L. L., and White, R. A. (1996). Mapping and characterization of the vacuolar H^+ATPase (V-H-ATPase) subunit in the mouse. *Ped. Res*. **39:** 370A.

15. Pillers, D. M., Fitzgerald, K. M., Duncan, N. M., Rash, S. M., White, R. A., Ray, P. N., Cibis, G. W., and Weleber, R. G. (1998) Genotype predicts electroretinogram (ERG) phenotype in patients with Duchenne and Becker muscular dystrophy. *Am. J. Hum. Genet.* **63:** A380.

16. Preuett, B., Seal, R., Adkison, L. R., Gaedigk, R., Hutchison, S., Birren, B., Devon, K., and White, R. A. (1998) A high resolution linkage map of the pallid platelet storage pool disease mutant locus region and generation of a genomic contig. *Blood* **92:** 34a.

17. White, R. A., Hummel, G. S., Copple, A., Shimizu, K., Kohlbrecher, D., Pinson, D. A., Garg, U., and Watanabe, M. (1998) Characterization and chromosomal mapping of the hereditary erythroblastic anemia (hea) mouse mutation: a potential iron transport defect. *Blood* **92:** 326a.

18. Hummel, G. S., Gaedigk, R., Reddig, R., Copple, A., Watanabe, M., and White, R. A. (1998) cDNA isolation, sequence, tissue expression, genomic structure, and chromosomal mapping of mouse glycophorin C. *Blood* **92:** 9b.

19. Fitzgerald, K. M., Giambrone, S. A., Brunken, W. J., Cibis, G. W., and White, R. A. (1999). Anatomical and functional analysis of the retina in utrophin knock-out mice. *Invest. Ophthalmol. Vis. Sci.* **40:** S222.

20. Gaedigk, R., K. M. Fitzgerald, Giambrone, S. A., Cibis, G. A., and White, R. A. (1999). Gene targeting of dystrophin Dp260 isoform. *Am. J. Hum. Genet.* **65:** A108.

21. White, R.A., Roman, S., McNulty, S.G., Kohlbrecher, D., Young, K.N., Garg, U., Wirtz, E.D., Fitzgerald, K.F., and Schindel, B.P. (2001). Iron Metabolism in the neonatal anemia (*Nan*) mutant mouse. *Blood* **98:** 6a.

22. White, R.A., McNulty, S.G., Roman, S., Garg, U., and Kohlbrecher, D. (2001). Dominant microcytic anemia (*Dma*): A new iron metabolism mutant. *Blood* **98:** 6a.

23. White, R.A., McNulty, S.G., Roman, S., Garg, U., Schindel, B.P., Hummel, G.S., Wirtz, E.D., Kohlbrecher, D., Gaedigk, R., Wantanabe, M., and Shimizu, K. (2001). Alteration of iron overloading status in the hereditary erythroblastic anemia (*hea*) and flaky skin (*fsn*) mutant mice: rescue of the anemia phenotype by supplemental dietary iron. *Blood* **98:** 6a.

24. White, R.A., Vorontosova, E., Chen, R., Lunte, S.M., Davies, M.I., Heppert, K.E., McNulty, S.G., Young, K.N., Butler, M.G., Brannan, C.I., Thompson, T., and Fowler S.C. (2002). A Behavioral and Correlated Neurochemical Mouse Phenotype Related to the Absence of Snrpn, a Locus Associated with Prader-Willi Syndrome. *Am. J. Human Genet.* **71:** 467.

25. White, R. A., McNulty, S. G., Nsumu, N. N., Shimizu, K., Rasul, S., and Wirtz, E. (2003). A deletion in the Ttc7 (tetracopeptide repeat domain 7) gene is found in the hereditary erythroblastic anemia (hea) mutant. *Blood* **102:** 756a.

26. White, R. A., Whitmire, K., McNulty, S. G., Boydston, L., and Roman, S. (2003). X-linked anemia (gene symbol Xla) mouse: a novel dominant mutant with a transitional severe neonatal anemia. *Blood* **102:** 506a.

27. Gaedigk, R., Law, D. J., Fitzgerald-Gustafson, K. M., McNulty, S. G., Nsumu, N. N., Modrcin, A., Rinaldi, R. J., Pinson, D., Fowler, S., C., Bilgen, M., Burns, J., Hauschka, S. D., and White, R. A. (2004). Human retinal dystrophin transgene converts lethal muscular dystrophy into viable mild myopathy in dystrophin-utrophin null mice. *Mol. Biol. Cell* **15:** 276a.

28. White, R.A., Boydston, L.A., Brookshier, T.R., McNulty, S.G., Nsumu, N.N., Brewer, B.P., and Blackmore K. (2005). Iron metabolism anemia *hbd* mice have a mutation in the Sec15l1 gene for vesicle docking. *Blood* **106:** 998a-999a.

29. White, R.A., Heruth, D.P., Hawkins, T., Logsdon, D., Gibson, M., Sokolovsky, I, Nsumu, N., Major, S., Fegley, B., Woods, G., Lewing, K., Neville, K., Cornetta, K., and Peterson, K. (2010). Mutation in erythroid specific transcription factor KLF1 causes Hereditary Spherocytosis in the Nan (neonatal anemia) hemolytic anemia mouse model. *Blood* **116**: 1320a.

30. Miller, K., Silvey, M., Logdson, D., Balch, F., Nsumu, N., Sokolovsky, I., Gibson, M., Bi, C., Heruth, D. P. and White, R. A. (2011). The Xla (x-linked anemia) mouse: a transient, neonatal anemia caused by a Gata1 splicing mutation. *Blood* **118:** 1366-1367a.

31. Miller, K. L., Theisen, C., Cone, B. Williams, J., Logsdon, D.P., Costa, F. C. and White, R.A. (2013). Identification of novel transcription factor impacting iron homeostasis. *The Faseb Journal* **27:** 769.5

PRESENTATIONS:

1. "Chromosomal location of the genes for mouse anion exchangers AE2 and AE3"
December 11-15, 1993
33rd Annual Meeting of the American Society for Cell Biology, New Orleans Convention Center, New Orleans, LA

2. "Identification and analyses of human retinal dystrophin Dp260"
March 30, 1996
National Society of Genetics Counselors, Quarterage Hotel Convention Center, Kansas City, MO

3. "Identification and analysis of human retinal dystrophin"
April 22, 1996
Division of Basic Medical Sciences, Mercer University School of Medicine, Macon, GA

4. “Genetic analyses of a novel mouse hemolytic anemia”
June 18, 1997
Departmental of Experimental Medicine and Hematology/Oncology Research, Department of Medicine, Harvard Institutes of Medicine, Beth Israel Deaconess Medical Center, Boston, MA

5. “Retinal Dp260 function: potential for gene therapy of muscular dystrophy”
August 7, 1998
The Children’s Mercy Hospital Noon Research Seminar Series, Kansas City, MO

6. “A Tale of Two Anemias: a Dickens of a Cloning Project”
October 2, 1998
The Children’s Mercy Hospital Noon Research Seminar Series, Kansas City, MO

7. “A high resolution map of the pallid storage pool disease mutant locus and generation of a genomic contig”
December 4-8, 1998
40th Annual Meeting of the American Society of Hematology, Miami Beach Convention Center, Miami Beach, FL

8. “Characterization and chromosomal mapping of the hereditary erythroblastic anemia (hea) mouse mutation: a potential iron transport defect”
December 4-8, 1998
40th Annual Meeting of the American Society of Hematology, Miami Beach Convention Center, Miami Beach, FL

9. “A Tale of Two Anemias: a Dickens of a Cloning Project”
March 6, 1999
Georgia Academy of Sciences & Genetics Society of Georgia, Georgia Perimeter College, Lawrenceville, GA

10. “A Walk on the Wild Side: Cloning of a Platelet Disease Gene”
June 4, 1999
The Children’s Mercy Hospital Noon Research Seminar Series, Kansas City, MO

11. “Knockout of dystrophin Dp260 isoform leads to abnormal ERG”
September 7, 1999
Mouse Retinal Degenerations: Symposium and Workshop
The Jackson Laboratory, Bar Harbor, ME

12. “Gene Targeting of Dystrophin Dp260 Isoform”
October 19-23, 1999
49th Annual Meeting of the American Society of Human Genetics
San Francisco, CA

13. “R is for Retina, K is for Knockout: New Insight into the ABCs of Retinal Dystrophin in Muscular Dystrophy”
April 21, 2000
The Children’s Mercy Hospital Noon Research Seminar Series, Kansas City, MO

14. "How to Catch a Gene"
Grand Rounds
June 1, 2000
The Children's Mercy Hospital, Kansas City, MO

15. "Iron Metabolism in the neonatal anemia (*Nan*) mutant mouse".
December 1-5, 2001
43rd Annual Meeting of the American Society of Hematology, Orange County Convention Center, Orlando, FL

16. "Dominant microcytic anemia (*Dma*): A new iron metabolism mutant".
December 1-5, 2001
43rd Annual Meeting of the American Society of Hematology, Orange County Convention Center, Orlando, FL

17. "Alteration of iron overloading status in the hereditary erythroblastic anemia (*hea*) and flaky skin (*fsn* mutant mice: rescue of the anemia phenotype by supplemental dietary iron".
December 1-5, 2001
43rd Annual Meeting of the American Society of Hematology, Orange County Convention Center, Orlando, FL

18. "A Behavioral and Correlated Neurochemical Mouse Phenotype Related to the Absence of Snrpn, a Locus Associated with Prader-Willi Syndrome."
October 15-19, 2002
52nd Annual Meeting of the American Society of Human Genetics , Baltimore, MD

19. "A deletion in the Ttc7 (tetracopeptide repeat domain 7) gene is found in the hereditary erythroblastic anemia (hea) mutant."
December 6-9, 2003
45th Annual Meeting of the American Society of Hematolgy, San Diego, CA

20. "X-linked anemia (gene symbol Xla) mouse: a novel dominant mutant with a transitional severe neonatal anemia."
December 6-9, 2003
45th Annual Meeting of the American Society of Hematology, San Diego, CA

21. "Advances in Treatment of Duchenne Muscular Dystrophy: Gene Therapy"
February 25, 2004
Child Neurology Conference
Children's Mercy Hospital & Clinics, Kansas City, MO

22. "Treatment Advances in Muscular Dystrophy: Dp260 Gene Therapy"
May 25, 2004
CME Seminar Series
Children's Mercy Hospital & Clinics, Kansas City, MO

23. "Mouse Genetics Clinic: Stem Cell Gene Therapy of Duchenne Muscular Dystrophy and Potential Therapeutic Treatment of Iron Overloading by Excretion in Urine"
October 6, 2004
Scholarship Oversight Committees/Research Labs Seminar Series
Children's Mercy Hospital, Kansas City, MO

24. "Human retinal dystrophin transgene converts lethal muscular dystrophy into viable mild myopathy in dystrophin-utrophin null mice."
December 4-8, 2004
44th Annual Meeting of the American Society for Cell Biology, Washington DC

25. "Iron metabolism anemia hbd mice have a mutation in the Sec15l1 gene for vesicle docking."
47th Annual Meeting of the American Society of Hematology,
December 10-13, 2005 , Atlanta, Georgia.

26. "Prevention of Lethal Muscular Dystrophy in a Severe DMD Mouse Model via Human Retinal Dystrophin Transgene: Implications for DMD Gene Therapy"
April 23-26, 2006
New Directions in Biology and Disease of Skeletal Muscle, Dallas TX.

27. "Identification of a Gene Causing Hereditary Spherocytosis in Mouse and Man"
Academic Scholar Conference
Children's Mercy Hospital, Kansas City, MO
February 13, 2009

28. "Identification of a Gene Causing Hereditary Spherocytosis in Mouse and Man"
Kansas City University of Medicine & Biochemistry, Kansas City, MO
April 5, 2010

29. "Let's Make a Red Blood Cell (or not): An Adventure in Erythropoiesis with the *Xla* (X-linked anemia) Mouse"
Science Friday Seminar Series
Kansas City University of Medicine & Biosciences
July 30, 2010

30. "Mutation in erythroid specific transcription factor KLF1 causes hereditary spherocytosis in the Nan (neonatal anemia) hemolytic anemia mouse model."
December 4-7, 2010
52nd Annual Meeting of the American Society of Hematology, Orlando, FL

31. "The Xla (x-linked anemia) mouse: a transient, neonatal anemia caused by a Gata1 splicing mutation."
December 10-13, 2011
53rd Annual Meeting of the American Society of Hematology, San Diego, CA

32. “Identification of a novel transcription factor impacting iron homeostasis”.
April 20-24, 2013
Experimental Biology 2013, Boston, MA

INVITED SPEAKER:

1. Shawnee Mission West High School Career Fair and Exhibition, 2001

2. March of Dimes Walk America Kickoff Speaker, 2002
Hyatt Regency Hotel
Kansas City, MO

3. March of Dimes Walk America Kickoff Speaker, 2003
Overland Park, KS

4. Kansas City March of Dimes Corporate Breakfast
Co-hosted by Mayor Kay Barnes and Mr. Tim Kelley, President of Sprint Business, for the sole purpose of informing the business leaders, within the Kansas City metro area, of the current March of Dimes research initiatives. Anna Roosevelt, granddaughter of President Franklin D. Roosevelt, Founder of the March of Dimes was co-speaker.
February 5, 2003
Fairmont Hotel
Kansas City, MO

5. “A Tale of Two Anemias: A Dickens of a Cloning Project”
UMKC School of Dentistry
Biology Seminar Series
March 26, 2003

6. “A Tale of Two Anemias: A Dickens of a Cloning Project”
Kansas University School of Medicine
May 19, 2003

7. "The Iron is Hot: Identification of the Gene for Two Allelic Iron Metabolism Mouse Mutants"
Kansas University School of Medicine
March 25, 2004

8. "Treatment Advances in Duchenne Muscular Dystrophy: Dp260 Gene Therapy"
Kansas and Missouri Stem Cell Science Symposium
Stower's Research Institute
Kansas City, MO
September 27, 2004

9. "The Iron is Hot: Identification of the Gene for Two Allelic Iron Metabolism Mouse Mutants"
Veteran's Administration Hospital
Kansas City, Missouri
February 16, 2005

10. "Treatment Advances in Duchenne Muscular Dystrophy: Dp260 Gene Therapy"
University of St. Mary
Leavenworth, KS
April 22, 2005

11. "A Tale of Two Anemia Genes: A Dickens of a Cloning Project."
Evangel University, Springfield, MO
April 19, 2006

12. "Prevention of Lethal Muscular Dystrophy in a Severe DMD Mouse Model via Human Retinal Dystrophin Transgene: Implications for DMD Gene Therapy "
Evangel University, Springfield, MO
October 11, 2006

13. "Breaking Up is Hard To Do: Identification of a New Gene for Hereditary Hemolytic Anemia in Mouse and Man"
Evangel University, Springfield, MO
October 3, 2007

14. "Breaking Up is Hard To Do: Identification of a New Gene for Hereditary Hemolytic Anemia in Mouse and Man"
Hem/Onc Section Seminar
Children's Mercy Hospital, Kansas City, MO
March 5, 2008

15. "From Genes to Disease: Mouse Hematology Clinic"
Genetics Research Interest Group
Children's Mercy Hospital, Kansas City, MO
March 6, 2008

16. "The Search for a Novel Gene for Hereditary Spherocytosis Using the Nan (Neonatal Anemia) Mouse Model"
Kansas University Medical Center, Kansas City, KS
January 26, 2009

17. "A Tale of Two Anemias: A Dickens of a Cloning Project"
Evangel University, Springfield, MO
February 18, 2009

18. “Breaking Up is Hard To Do: The Search for a Gene Causing Hemolytic Anemia in Mouse and Man”
University of St. Mary, Leavenworth, KS
April 14, 2009

19. “Identification of a Gene Causing Hereditary Spherocytosis in Mouse and Man”
UMKC School of Dentistry Bone Research Group Seminar
July 8, 2009

20. “Hereditary Anemias in Mouse and Man”
Evangel University, Springfield, MO
April 4, 2012

JOURNAL REVIEWER:

1.	*Nature Genetics*	1996
2.	*Genomics*	1999
3.	*Gene*	2000
4.	*Journal of Neuropsychiatry and Clinical Neuroscience*	2004
5.	*Experimental Biology and Medicine*	2006
6.	*FEBS* Journal	2006
7.	*Molecular Vision*	2010
8.	*Journal of Human Genetics*	2010

GRANT REVIEWER:

1992-2004	BRSC (Basic Research Science Committee) Primary Reviewer Vice Chair (2004) Children's Mercy Hospitals & Clinics
2004	BRSC (Basic Research Science Committee) Vice Chair Children's Mercy Hospitals & Clinics
2006	BRSC (Basic Research Science Committee) Primary Reviewer Children's Mercy Hospitals & Clinics
2003-2005	KCALSI (Kansas City Area Life Sciences Institute) Primary Reviewer

UNIVERSITY/HOSPITAL COMMITTEES:

Member
Basic Research Science Committee
Children's Mercy Hospitals & Clinics
1992-2004
2006-2009

Vice Chair
Basic Research Science Committee
Children's Mercy Hospitals & Clinics
2004
Member
Children's Mercy Hospitals & Clinics Institutional Review Board
1998-present

Vice Chair
Children's Mercy Hospitals & Clinics Institutional Review Board
2005-2007

Chair
Children's Mercy Hospitals & Clinics Institutional Review Board
2007-2010

Member and Reviewer
University of Missouri-Kansas City School of Medicine Non-MD Promotion Committee
2004-2010

Member and Reviewer
University of Missouri-Kansas City Institutional Biosafety Committee
2007-2010

Member
Licensee Board Committee (formerly radiation safety committee)
Children’s Mercy Hospitals & Clinics
2004-2010

Member
Research Lab Safety Committee
Children’s Mercy Hospitals & Clinics
2009-2010

Member
Animal Users Committee
University of Missouri Kansas City
2008-2010

Member
KCUMB IRB
2010-2011

Vice Chair
KCUMB Research Committee
2011-2012

Chair
Search Committee for KCUMB Vice President of Research
2011-2012

Chair
Institutional Biosafety Committee
2012-2013

Member
Student Academic and Professional Progress Committee
2010-present

Member
KCUMB IACUC
2010-present

Member
KCUMB Research Committee
2011-present

Member
Admissions Committee
2013-present

Vice Chair
College of Biosciences Curriculum Committee
2013-present

Member
Provost Academic Council
2013-present

Member
Outcomes and Assessment Committee
2013-present

AWARDS:

Kansas City Research Trailblazer Award
March of Dimes
November 4, 2004