

CURRICULUM VITAE

DATE: March 28, 2017

NAME: Rodney E. Kellems, Ph.D.

PRESENT TITLE: Professor and Chairman

ADDRESS: Department of Biochemistry & Molecular Biology
UTH-HSC, 6431 Fannin
Suite 6.200
Houston, Texas 77030

BIRTHDATE: April 24, 1947

CITIZENSHIP: U.S.A.

UNDERGRADUATE EDUCATION:

1965 - 1969 Bellarmine College, A.B.
Biology

GRADUATE EDUCATION:

1969 - 1974 Princeton University, Ph.D.
Biochemistry

POSTGRADUATE TRAINING:

1974-1978 Stanford University
Molecular Genetics

ACADEMIC APPOINTMENTS:

1978-1983 Assistant Professor
Department of Biochemistry
Baylor College of Medicine

1983-1988 Associate Professor
Department of Biochemistry
Baylor College of Medicine

1985-1988 Associate Professor
Department of Molecular and Human Genetics
Baylor College of Medicine

1988-1997 Professor
Department of Molecular & Human Genetics
Baylor College of Medicine

1988 - 1997 Professor, Department of Biochemistry
Baylor College of Medicine

1997-Present Professor and Chairman
Department of Biochemistry and Molecular Biology
University of Texas Medical School at Houston

PROFESSIONAL ORGANIZATIONS:

American Heart Association
American Association for the Advancement of Science
American Society for Biochemistry and Molecular Biology
American Association of Immunologists

HONORS AND AWARDS:

1965-1969 President's Scholarship
 Bellarmine College
1969-1971 National Institutes of Health
 Predoctoral Traineeship
 Princeton University
1974-1976 National Institutes of Health
 Postdoctoral Fellowship
 Stanford University
1982-1987 United States Public Health Service
 Research Career Development Award
 Baylor College of Medicine

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

1988-1993 Member, Mammalian Genetics Study Section, NIH
1993-1997 Member, NIH Reviewers Reserve

BAYLOR COLLEGE OF MEDICINE (1978-1997)

Teaching Experience

Medical School

1979-1993 Lecturer, Medical Biochemistry

Graduate School

1980-1987 Co-Director and Lecturer, Mammalian Molecular Genetics
1985-1994 Lecturer, Organization of the Eukaryotic Nucleus
1995-1997 Lecturer, Genetic Engineering
1980-1997 Thesis Advisor, 15 Graduate Students
 Research Advisor, 8 postdoctoral fellows
 Member, Thesis Advisory Committees (~ 50)

Administrative Experience

Medical School

1980-1985 Member, Faculty Research and Fellowship Committee
1981-1984 Member, MD/Ph.D. Operating Committee
1983-1990 Member and subsequently Chairman, Recombinant DNA Advisory Committee
1984-1985 Member, Physiology Chair Search Committee
1984-1989 Co-director, Medical Scientist Training Program
1986-1989 Director, Gene Therapy for Genetic Diseases Program
1987 Member, Committee on LCME Accreditation
1987-1990 Member, Faculty Promotions Committee

1988-1990 Member, Biosafety Committee
1992-1993 Member, Department of Internal Medicine Review Committee
1994-1996 Member, Research Advisory Committee
1995-1996 Member, Alkek Building Committee

Graduate School

1992-1993 Member, Graduate School Admissions Committee
1992-1997 Member, Graduate School Executive Council
1992-1997 Member, Graduate School Promotions Committee

Biochemistry Department

1979-1984 Coordinator, Departmental Seminar Program
1981-1997 Member and subsequently Chairman, Graduate Education Committee
1991-1997 Director of Graduate Studies
1991-1997 Chairman, Qualifying Examination Committee
1994-1997 Coordinator, Annual Departmental Research Conference
1982-1997 Member, Faculty Search Committees (many)

SERVICE ON THE UNIVERSITY OF TEXAS - HOUSTON HEALTH SCIENCE CENTER COMMITTEES:

1998-present Center for Laboratory Animal Medicine and Care financial Oversight Committee
1998-99 SACS Reaccreditation Task Force: Committee on Multidisciplinary Education
1998 Committee to Review the Office of Development
2000-2001 Intellectual Property Committee
2001-2002 Research Task Force
2002-2003 Search Committee Executive Vice President for Research
2003 Dental School/Medical School Basic Science Merger Steering Committee
2003-2010 Research Council
2005-06 Institute of Molecular Medicine Stem Cell Search Committee

SERVICE ON THE UNIVERSITY OF TEXAS- HOUSTON MEDICAL SCHOOL COMMITTEES:

1997-present Administrative Council
2000-2006 Research Committee
2000-2005 Molecular Biology Consortium
2003 Department of Integrative Biology & Pharmacology Internal Reviewer Committee (Chair)
2003 LCME Accreditation Committee
2006 Faculty Search Committee – Research Replacement Facility
2011-present Research Committee

SERVICE ON GRADUATE SCHOOL COMMITTEES:

1997-present Member, Graduate Education Committee, Program in Biochemistry and Molecular Biology
1997-present See attachment entitled "GSBS Educational Activities"
1997-present Steering Committee, Graduate Program in Biochemistry and Molecular Biology

SERVICE TO THE COMMUNITY (Consulting Activities)

1984-1986	Genetics Institute, Boston, MA.
1986-1990	Eli Lilly Indianapolis, IN.
1987	Smith, Kline, King of Prussia, PA.
1993-1994	Rothwell, Figg, Ernst & Kurz, Washington, DC. (for Genetics Institute)
1994	Triplex, Woodlands, TX.
1995	Gene Medicine, The Woodlands, TX.
2000	Greenberg Traurig, New York, New York (for Genetics Institute)
2003	Quinn Emanuel Urquhart, Oliver and Hedges, LLP, San Francisco (for Genentech)
2006-07	Kaye Scholer LLP (for Hoffman-LaRoche)

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:

<u>Name</u>	<u>Training Period</u>	<u>Institute Where Degree Obtained</u>	<u>Current Position</u>
Hook, AG	77-87	Baylor College of Medicine	Private Medical Practice
Leys, E.	78-83	Baylor College of Medicine	Professor Ohio State University
Al-Ubaidi, MR	79-88	Baylor College of Medicine	Professor University of Oklahoma
Frayne, EG	80-86	Baylor College of Medicine	President Frayne Consultants
Ingolia, DE	81-87	Baylor College of Medicine	Attorney Intellectual Property
Yen, J-Y	83-88	Baylor College of Medicine	Professor, Academia Sinica, Taiwan
Maa, MC	84-89	Baylor College of Medicine	Research Associate Taiwan
Chang, Z.	85-92	Baylor College of Medicine	Professor Tsinghua University (PRC)
Chen, Z.	86-91	Baylor College of Medicine	Senior Scientist, Zymogenetics, Inc. Seattle, WA.
Hong, L.	87-92	Baylor College of Medicine	Research Scientist Stanford University
Guicherit, O.	88-95	Baylor College of Medicine	Senior Principal Scientist Pfizer, Inc.
Kash, S.	89-94	Baylor College of Medicine	CLIA Laboratory Supervisor Counsyl DNA Diagnostics
Lewis, A.	92-98	Baylor College of Medicine	Clinical Trial Coordinator
Shi, D.	92-99	Baylor College of Medicine	High School Teacher Seattle
Xu, Ping	93-99	Baylor College of Medicine	Taipei, Taiwan
Aldrich, M.	97-2003	University of Texas - Houston	Assistant Professor U.T. Houston

Schaubach, M.M.	97-2003	University of Texas – Houston	Faculty Member, Richmond Community College
Bobst, S.	98-2003	University of Texas – Houston	Consultant
Mei Li	99-2005	University of Texas – Houston	Pathologist

SPONSORSHIP OF POSTDOCTORAL FELLOWS:

<u>Name</u>	<u>Training Period</u>	<u>Institute Where Degree Obtained</u>	<u>Current Position</u>
Yeung, C-Y	80-85	UTGSBS	Retired Professor University of Illinois
Blakesley, V.	82-84	Rice	Physician (Private Practice)
Ramamurthy, V.	85-90	UTMB	Director Research Thapar Ind., India
Chinsky, JM	86-89	NYU	Professor Johns Hopkins
Innis, JW	87-90	University of Florida	Professor University of Michigan
Mifflin, RC	88-91	UTMB	Associate Professor UTMB, Galveston
Winston, JH	89-96	UT Southwestern	Associate Professor UTMB, Galveston
Blackburn, M.	93-97	Thomas Jefferson Univ.	Professor, Dean of Graduate School, Executive Vice President & Chief Academic Officer UT-Houston
Xia, Y.	98-2002	UT-Houston	Professor UT-Houston
Theingi Thway	2002-2003	University of Kansas	Research Scientist (Tanox Inc.)
Claudia Andreu-Vieyra	2003-2004	University of Alberta, Canada	Senior Medical Writer Onco Therapeutics
Cissy Chenyi Zhou	2004-2008	City College of New York	Assistant Professor (UT-Houston)
Athar Siddiqui	2008-Present	Aligarh Muslim University, India	Associate Professor School of Medicine University of Hyderabad
Chen Liu	2010-2013	University of Houston	Research Associate UT-Houston

CURRENT TEACHING RESPONSIBILITIES:

Translational Research (3 lectures)

Grants 102 (UTHSC grant writing course, 1 lecture)

PUBLICATIONS:

A. Abstracts - Not Included

B. Refereed Original Articles in Journals

1. **Kellems, R.E.**, Butow, R.A.: Cytoplasmic-type 80S ribosomes associated with yeast mitochondria. I. Evidence for ribosome binding sites on yeast mitochondria. *J Biol Chem*, **247**(24):8043-8050, 1972. [PMID: 4629740]
2. **Kellems, R.E.**, Allison, V.F., Butow, R.A.: Cytoplasmic-type 80S ribosomes associated with yeast mitochondria. II. Evidence for the association of cytoplasmic ribosomes with the outer mitochondrial membrane *in situ*. *J Biol Chem*, **249**(10):3297-3303, 1974. [PMID: 4598123]
3. **Kellems, R.E.**, Butow, R.A.: Cytoplasmic-type 80S ribosomes associated with yeast mitochondria. III. Changes in the amount of bound ribosomes in response to changes in metabolic state. *J Biol Chem*, **249**(10): 3304–3310, 1974. [PMID: 4208475]
4. **Kellems, R.E.**, Allison, V.F., Butow, R.A.: Cytoplasmic-type 80S ribosomes associated with yeast mitochondria. IV. Attachment of ribosomes to the outer membrane of isolated mitochondria. *J Cell Biol*, **65**(1):1–14, 1975. [PMID: 1092698]
5. Alt, F.W., **Kellems, R.E.**, Schimke, R.T.: Synthesis and degradation of folate reductase in sensitive and methotrexate-resistant lines of S-180 cells. *J Biol Chem*, **251**(10):3063–3074, 1976. [PMID: 944697]
6. **Kellems, R.E.**, Alt, F.W., Schimke, R.T.: Regulation of folate reductase synthesis in sensitive and methotrexate-resistant sarcoma-180 cells: *in vitro* translation and characterization of folate reductase mRNA. *J Biol Chem*, **251**(22):6987–6993, 1976. [PMID: 62753]
7. Schimke, R.T., Alt, F.W., **Kellems, R.E.**, Kaufman, R.J., Bertino, J.R.: Amplification of dihydrofolate reductase genes in methotrexate-resistant cultured mouse cells. *Cold Spring Harbor Symp Quant Biol*, **42**(Pt 2):649–657, 1978. [PMID: 277312]
8. Alt, F.W., **Kellems, R.E.**, Bertino, J.R., Schimke, R.T.: Selective multiplication of dihydrofolate reductase genes in methotrexate-resistant variants of cultured murine cells. *J Biol Chem*, **253**(5):1357–1370, 1978. [PMID: 627542]
9. Schimke, R.T., Kaufman, R.J., Alt, F.W., **Kellems, R.E.**: Gene amplification and drug resistance in cultured murine cells. *Science*, **202**(4372):1051–1055, 1978. [PMID: 715457]
10. **Kellems, R.E.**, Morhenn, V.B., Pfendt, E.A., Alt, F.W., Schimke, R.T.: Polyoma virus and cyclic AMP-mediated control of dihydrofolate-reductase mRNA abundance in MTX-resistant mouse fibroblasts. *J Biol Chem*, **254**(2):309–318, 1979. [PMID: 216671]

11. Gudewicz, T.M., Morhenn, V.B., **Kellems, R.E.**: The effect of polyoma virus, serum factors and dibutyryl cyclic AMP on dihydrofolate reductase synthesis and the entry of quiescent cells into S phase. *J Cell Physiol*, **108**(1):1–8, 1981. [PMID: 6267077]
12. Leys, E.J., **Kellems, R.E.**: Control of dihydrofolate reductase messenger ribonucleic acid production. *Mol Cell Biol*, **1**(11):961-971, 1981. [PMID: 6180296]
13. **Kellems, R.E.**, Harper, M.E., Smith, L.M.: Amplified dihydrofolate reductase genes are located in chromosome regions containing DNA that replicates during the first half of S-phase. *J Cell Biol*, **92**(2):531–539, 1982. [PMID: 7061595]
14. Yoder, S.S., Robberson, B.L., Leys, E.J., Hook, A.G., Al-Ubaidi, M.R., Yeung, C.Y., **Kellems, R.E.**, Berget, S.M.: Control of cellular gene expression during adenovirus infection: Induction and shut-off of dihydrofolate reductase gene expression by adenovirus type 2. *Mol Cell Biol*, **3**(5):819–828, 1983. [PMID: 6865943]
15. Yeung, C.Y., Riser, M.E., **Kellems, R.E.**, Siciliano, M.J.: Increased expression of one of two adenosine deaminase alleles in a human choriocarcinoma cell line following selection with adenine nucleosides. *J Biol Chem*, **258**(13):8330–8337, 1983. [PMID: 6683274]
16. Yeung, C.Y., Ingolia, D.E., Bobonis, C., Dunbar, B.S., Riser, M.E., Siciliano, M.J., **Kellems, R.E.**: Selective overproduction of adenosine deaminase in cultured mouse cells. *J Biol Chem*, **258**(13):8338–8345, 1983. [PMID: 6602803]
17. Yeung, C.Y., Frayne, E.G., Al-Ubaidi, M.R., Hook, A.G., Ingolia, D.E., Wright, D.W., **Kellems, R.E.**: Amplification and molecular cloning of murine adenosine deaminase gene sequences. *J Biol Chem*, **258**(24): 15179–15185, 1983. [PMID: 6197412]
18. Leys, E.J., Crouse, G.F., **Kellems, R.E.**: Dihydrofolate reductase gene expression in cultured mouse cells is regulated by transcript stabilization in the nucleus. *J Cell Biol*, **99**(1 Pt 1):180–187, 1984. [PMID: 6736126]
19. Frayne, E.G., Leys, E.J., Crouse, G.F., Hook, A.G., **Kellems, R.E.**: Transcription of the mouse dihydrofolate reductase gene proceeds unabated through seven polyadenylation sites and terminates near a region of repeated DNA. *Mol Cell Biol*, **4**(12):2921-2924, 1984. [PMID: 6084812]
20. Crouse, G.F., Leys, E. McEwan, R.N., Frayne, E.G., **Kellems, R.E.**: Analysis of the mouse *dhfr* promoter region: existence of a divergently transcribed gene. *Mol Cell Biol*, **5**(8):1847–1858, 1985. [PMID: 3018531]
21. Yeung, C.Y., Ingolia, D.E., Roth, D.B., Shoemaker, C., Al-Ubaidi, M.R., Yen, J.Y., Ching, C., Bobonis, C., Kaufman, R.J., **Kellems, R.E.**: Identification of functional murine adenosine deaminase cDNA clones by complementation in *Escherichia coli*. *J Biol Chem*, **260**(18):10299–10307, 1985. [PMID: 2410423]
22. Ingolia, D.E., Yeung, C.Y., Orengo, I.F., Harrison, M.L., Frayne, E.G., Rudolph, F.B., **Kellems, R.E.**: Purification and characterization of adenosine deaminase from a genetically enriched mouse cell line. *J Biol Chem*, **260**(24):13261–13267, 1985. [PMID: 3902813]

23. Frayne, E.G., **Kellems, R.E.**: Structural features of the murine dihydrofolate reductase transcription termination region: Identification of a conserved DNA sequence element. *Nucleic Acids Res*, **14**(10):4113–4125, 1986. [PMID: 3714472]
24. Kaufman, R.J., Murtha, P., Ingolia, D.E., Yeung, C.Y., **Kellems, R.E.**: Selection and amplification of heterologous genes encoding adenosine deaminase in mammalian cells. *Proc Natl Acad Sci USA*, **83**(10):3136–3140, 1986. [PMID: 3486414]
25. Belmont, J.W., Henkel–Tigges, J., Chang, S.M., Wager–Smith, K., **Kellems, R.E.**, Dick, J.E, Magli, M.C., Phillips, R.A., Bernstein, A., Caskey, C.T.: Expression of human adenosine deaminase in murine haematopoietic progenitor cells following retroviral transfer. *Nature*, **322**(6077):385–387, 1986. [PMID: 3016551]
26. Ingolia, D.E., Al–Ubaidi, M.R., Yeung, C.Y., Bigo, H.A., Wright, D.A., **Kellems, R.E.**: Molecular cloning of the murine adenosine deaminase gene from a genetically enriched source: Identification and characterization of the promoter region. *Mol Cell Biol*, **6**(12):4458–4466, 1986. [PMID: 2432402]
27. Ingolia, D.E., Yeung, C.Y., Shoemaker, C., Kaufman, R.J., **Kellems, R.E.**: Expression of murine ADA cDNA in bacterial and mammalian cells. *Adv Exp Med Biol*, **195 PtA**:223–229, 1986. [PMID: 3524134]
28. Yen, J–Y., **Kellems, R.E.**: Independent 5' and 3'–end determination of multiple dihydrofolate reductase transcripts. *Mol Cell Biol*, **7**(10):3732–3739, 1987. [PMID: 2446119]
29. Hook, A.G., **Kellems, R.E.**: Localization and sequence analysis of poly (A) sites generating multiple dihydrofolate reductase mRNAs. *J Biol Chem*, **263**(5):2337–2343, 1988. [PMID: 3339015]
30. Wilson, D.K., Rudolph, F.B., Harrison, M.L., **Kellems, R.E.**, Quioco, F.A.: Preliminary X–ray analysis of crystals of murine adenosine deaminase. *J Mol Biol*, **200**(3):613–614, 1988. [PMID: 3398052]
31. Knudsen, T.B., Green, J.D., Airhart, M.J., Higley, H.R., Chinsky, J.M., **Kellems, R.E.**: Developmental expression of adenosine deaminase in placental tissues of the early postimplantation mouse embryo and uterine stroma. *Biol Reprod*, **39**(4):937–951, 1988. [PMID: 3061489]
32. Stallings, R.L., Siciliano, M.J., Frazier, M.L., Al–Ubaidi, M.R., **Kellems, R.E.**: Hypomethylation and ADA gene expression in mouse CAK cells. *Somat Cell Mol Genet*, **15**(1):1–11, 1989. [PMID: 2464855]
33. Linton, J.P., Yen, J.–Y., Selby, E., Chen, Z., Chinsky, J.M., Liu, K., **Kellems, R.E.**, Crouse, G.F.: Dual bidirectional promoters at the mouse DHFR locus: Cloning and characterization of two mRNA classes of divergently transcribed Rep-1 gene. *Mol Cell Biol*, **9**(7):3058–3072, 1989. [PMID: 2674679]
34. Chinsky, J.M., Maa, M.–C., Ramamurthy, V., Kellems, R.E.: Adenosine deaminase gene expression: Tissue–dependent regulation of transcriptional elongation. *J Biol Chem*, **264**(24):14561–14565, 1989. [PMID: 2474547]

35. Knudsen, T.B., Gray, M.K., Church, J.K., Blackburn, M.R., Airhart, M.J., **Kellems, R.E.**, Skalko, R.G.: Early postimplantation embryo lethality in mice following in utero inhibition of adenosine deaminase with 2'-deoxycoformycin. *Teratology*, **40**(6):615–626, 1989. [PMID: 2623648]
36. Ramamurthy, V., Maa, M–C., Harless, M.L., Wright, D.A., **Kellems, R.E.**: Sequence requirements for transcriptional arrest in exon one of the murine adenosine deaminase gene. *Mol Cell Biol*, **10**(4):1484–1491, 1990. [PMID: 1690842]
37. Chinsky, J.M., Ramamurthy, V., Fanslow, W.C., Ingolia, D.E., Blackburn, M.R., Shaffer, K. T., Higley, H.R., Trentin, J.J., Rudolph, F.B., Knudsen, T.B., **Kellems, R.E.**: Developmental expression of adenosine deaminase in the upper alimentary tract of mice. *Differentiation*, **42**(2): 172-183, 1990. [PMID: 2187728]
38. Al–Ubaidi, M.R., Ramamurthy, V., Maa, M-C, Ingolia, D.E., Chinsky, J.M., Martin, B.D., **Kellems, R.E.**: Structural and functional analysis of the murine adenosine deaminase gene. *Genomics*, **7**(4): 476-485, 1990. [PMID: 2387582]
39. Maa, M-C, Chinsky, J.M., Ramamurthy, V., Martin, B.D., **Kellems, R.E.**: Identification of transcription stop sites at the 5' and 3' ends of the murine adenosine deaminase gene. *J Biol Chem*, **265**(21):12513-12519, 1990. [PMID: 2373702]
40. Chen, Z., Harless, M.L., Wright, D.A., **Kellems, R.E.**: Identification and characterization of transcriptional arrest sites in exon one of the human adenosine deaminase gene. *Mol Cell Biol*, **10**(9): 4555-4564, 1990. [PMID: 1697031]
41. Hong, L., Mulholland, J., Chinsky, J.M., Knudsen, T.B., **Kellems, R.E.**, Glasser, S.R.: Developmental expression of adenosine deaminase during decidualization in the rat uterus. *Biol Reprod*, **44**(1):83-93, 1991. [PMID: 2015355]
42. Knudsen, T.B., Blackburn, M.R., Chinsky, J.M., Airhart, M.J., **Kellems, R.E.**: Ontogeny of adenosine deaminase in the mouse decidua and placenta: Immunolocalization and embryo transfer studies. *Biol. Reprod.*, **44**(1):171-184, 1991. [PMID: 2015347]
43. Chang, Z.Y., Nygaard, P., Chinault, A.C., **Kellems, R.E.**: Deduced amino acid sequence of *E. coli* adenosine deaminase reveals evolutionarily conserved amino acid residues: Implications for catalytic function. *Biochemistry*, **30**(8):2273-2280, 1991. [PMID: 1998686]
44. Mifflin, R.C., **Kellems, R.E.**: Coupled transcription-polyadenylation in a cell-free system. *J Biol Chem*, **266**(29):19593-19598, 1991. [PMID: 1918066]
45. Innis, J.W., Moore, D.J., Kash, S.F., Ramamurthy, V., Sawadogo, M., **Kellems, R.E.**: The murine adenosine deaminase promoter requires an atypical TATA box which binds transcription factor IID and transcriptional activity is stimulated by multiple upstream SP1 binding sites. *J Biol Chem*, **266**(32):21765-21772, 1991. [PMID: 1939199]
46. Innis, J.W., **Kellems, R.E.**: A heat-labile factor promotes premature 3' end formation in exon 1 of the murine adenosine deaminase gene in a cell-free transcription system. *Mol Cell Biol*, **11**(11):5398-5409, 1991. [PMID: 1717827]

47. Chen, Z., Innis, J.W., Sun, M. H., Wright, D.A., **Kellems, R.E.**: Sequence requirements for transcriptional arrest in exon 1 of the human adenosine deaminase gene. *Mol Cell Biol*, **11**(12):6248-6256, 1991. [PMID: 1944287]
48. Guicherit, O.M., Rudolph, F.B, **Kellems, R.E.**, Cooper, B.F.: Molecular cloning and expression of a mouse muscle cDNA-encoding adenylosuccinate synthetase. *J Biol Chem*, **266**(33):22582-22587, 1991. [PMID: 1939273]
49. Kellems, R.E.: Gene amplification in mammalian cells: strategies for protein production. *Curr Opin Biotechnol.*, **2**(5):723-729. 1991. Review [PMID: 1367725]
50. Winston, J.H., Hanten, G.R., Overbeek, P.A., **Kellems, R.E.**: 5' flanking sequences of the murine adenosine deaminase gene direct the expression of a reporter gene to specific prenatal and postnatal tissues in transgenic mice. *J Biol Chem*, **267**(19):13472-13479, 1992. [PMID: 1618849]
51. Kash, S.F., Innis, J.W., Jackson, A.U., **Kellems, R.E.**: Functional analysis of a stable transcription arrest site in the first intron of the murine adenosine deaminase gene. *Mol Cell Biol*, **13**(5):2718-2729, 1993. [PMID: 8474437]
52. Mohamedali, K.A., Guicherit, O.M., **Kellems, R.E.**, Rudolph, F.B.: The highest levels of purine catabolic enzymes in mice are present in the proximal small intestine. *J Biol Chem*, **268**(31):23728-23733, 1993. [PMID: 8226898]
53. Guicherit, O.M., Cooper, B.F., Rudolph, F.B., **Kellems, R.E.**: Amplification of an adenylosuccinate synthetase gene in alanosine resistant murine T-lymphoma cells: Molecular cloning of a cDNA encoding the "non-muscle" isozyme. *J Biol Chem*, **269**(6):4488-4496, 1994. [PMID: 8308018]
54. Datta, S.K., Guicherit O.M., **Kellems, R.E.**: Adenylosuccinate synthetase: A dominant amplifiable genetic marker in mammalian cells. *Somatic Cell Mol Genet*, **20**(5):381-389, 1994. [PMID: 7825060]
55. Kash, S.F., **Kellems, R.E.**: Control of transcription arrest in intron 1 of the murine adenosine deaminase gene. *Mol Cell Biol*, **14**(9):6198-6207, 1994. [PMID: 8065352]
56. Winston, J.H., Hong, L., Akroyd, S., Hanten, G., Waymire, K., Overbeek, P., **Kellems, R.E.**: Diverse genetic regulatory elements are required to direct the proper tissue-specific and developmental expression of the murine adenosine deaminase gene. *Adv Exp Med Biol*, **370**:579-584, 1994. [PMID: 7660973]
57. Wakamiya, M., Blackburn, M.R., Jurecic, R., McArthur, M.J., Geske, R.S., Cartwright, J. Jr., Mitani, K., Vaishnav, S., Belmont, J.W., **Kellems, R.E.**, Finegold, M.J., Montgomery, C.A., Bradley, A., Caskey, C.T.: Disruption of the adenosine deaminase gene causes hepatocellular impairment and perinatal lethality in mice. *Proc Natl Acad Sci USA*, **92**(9):3673-3677, 1995. [PMID: 7731963]
58. Blackburn, M.R., Wakamiya, M., Caskey, C.T., **Kellems, R.E.**: Tissue-specific rescue suggests that placental adenosine deaminase is important for fetal development in mice. *J Biol Chem*, **270**(41):23891-23894, 1995. [PMID: 7592575]

59. Blackburn, M.R., Datta, S.K., Wakamiya, M., Vartabedian, B.S., **Kellems, R.E.**: Metabolic and immunological consequences of limited adenosine deaminase expression in mice. *J Biol Chem*, **271**(25):15203-15210, 1996. [PMID: 8663040]
60. Blackburn, M.R, **Kellems R.E.**: Regulation and function of adenosine deaminase in mice. *Prog Nucleic Acid Res Mol Biol*, **55**:195-226, 1996. [PMID: 8787611]
61. Sideraki V., Mohamedali K.A., Wilson D.K., Chang Z., **Kellems R.E.**, Quijcho F.A., Rudolph F.B.: Probing the functional role of two conserved active site aspartates in mouse adenosine deaminase. *Biochemistry*, **35**(24):7862-7872, 1996. [PMID: 8672487]
62. Winston, J.H., Hong, L., Datta, S.K., **Kellems, R.E.**: An intron 1 regulatory region from the murine adenosine deaminase gene can activate heterologous promoters for ubiquitous expression in transgenic mice. *Somat Cell Mol Genet*, **22**(14):261-278, 1996. [PMID: 9000171]
63. Lewis, A.L. Guicherit, O.M., Datta, S.K., Hanten, G.R., **Kellems, R.E.**: Structure and expression of the murine muscle adenylosuccinate synthetase gene. *J Biol Chem*, **271**(37):22647-22656, 1996. [PMID: 8798436]
64. Shi D., Winston J.H., Blackburn M.R., Datta S.K., Hanten G., **Kellems R.E.**: Diverse genetic regulatory motifs are required for murine adenosine deaminase gene expression in the placenta. *J Biol Chem*, **272**(4):2334-2341, 1997. [PMID: 8999942]
65. Blackburn, M.R., Wakamiya, M., **Kellems, R.E.**: Purine metabolic disturbances in adenosine deaminase deficient fetuses and placentas suggest a protective role for this enzyme during murine development. *Trophoblast Res*, **11**:121-135, 1997.
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