

CURRICULUM VITAE

STEVEN R. ELLIS

I. Personal Data

Birthdate: September 19, 1954
Place of Birth: St. Paul, Minnesota
Citizenship Status: U.S.A.
Marital Status: Married, Joan K. Ellis
Children: Jeffrey Daniel
Joseph Wesley
Samuel Robert

II. Education

1977 B.S. University of Minnesota, Twin Cities Campus (Biochemistry)
1983 Ph.D. University of Iowa (Biochemistry)

III. Professional Experience

1975-1977 Undergraduate Research Assistant, Lavell M. Henderson (Advisor)
University of Minnesota, St. Paul
1977-1983 Graduate Student, Thomas W. Conway (Advisor) University of Iowa,
Iowa City, Iowa
1983-1987 Postdoctoral Fellow, Dr. Nancy C. Martin, Department of Biochemistry,
The University of Texas Health Science Center at Dallas, Dallas, Texas
1987-1993 Assistant Professor, Department of Biochemistry, University of Louisville,
Louisville, Kentucky
1993-2006 Associate Professor, Department of Biochemistry and Molecular Biology,
University of Louisville, Louisville, Kentucky
2006-present Professor, Department of Biochemistry and Molecular Biology, University
of Louisville, Louisville, Kentucky
2004-Present Research Director, Diamond Blackfan Anemia Foundation
2004-Present Scientific Advisory Board, Daniella Marie Arturi Foundation
2010-Present Visiting professor, Department of Medical Sciences, University of Eastern
Piedmont "A.Avogadro", Novara, Italy

IV. Awards

National Research Service Award, National Institute of General Medical Sciences, 2/85-
2/87
Young Investigator Award, President's Initiative for Research, University of Louisville,
1989

Golden Apple Award, Sophomore Medical Students, 2002, 2003, 2004, 2007, 2008, 2010, 2012, 2013

President's Distinguished Teaching Award, Certificate of Recognition, University of Louisville School of Medicine, 2003

Distinguished Teacher Award, University of Louisville, 2003

Achievement Award Daniella Maria Arturi Foundation, 2007

Health Sciences Award for Technology Innovations in Curriculum, 2007

Master Teacher Award, University of Louisville School of Medicine, 2007

V. Thesis Research: Title: Kinetic Analysis of the Order of Binding of mRNA and Initiating tRNA to *E. coli* Ribosomes

VI. Research Collaboration:

Dr. Johnson Liu, Fienstein Institute of Molecular Medicine

Dr. Jeff Lipton, Schneider Children's Hospital, Feinstein Institute

Dr. Adrianna Vlachos, Schneider Children's Hospital, Feinstein Institute

Dr. Stefan Karlsson, Lund University, Sweden

Dr. Irma Dianzani, University of Eastern Piedmont, Novara Italy

Dr. Benjamin Ebert, Massachusetts Institute of Technology

Dr. David Bodine, National Genomics Institute

Dr. Lisa Mirabello, National Cancer Institute

VII. Research Funding Activity

Active:

Project title: Pre-rRNA processing and Diamond Blackfan anemia

Role: 2% effort, P.I.

Source of Support: Diamond Blackfan Anemia Foundation

Award amount: \$20,000

Dates: 7/1/2013-6/30/2104

Previous Funding:

Project title: Pre-rRNA processing and Diamond Blackfan anemia

Role: 2% effort, P.I.

Source of Support: Diamond Blackfan Anemia Foundation

Award amount: \$20,000

Dates: 7/1/2012-6/30/2103

Project title: Mitochondrial Dysfunction and Histone Acetylation in the Pathogenesis of Shwachman Diamond Syndrome

Role: 2% effort, PI

Source of support: Shwachman Diamond Project

Award amount: \$46,916

Project title: Ribosomal Protein Gene Silencing in Neural Crest Stem Cells
Role: Co-investigator, subcontract from Feinstein Institute for Medical Research
Johnson Liu PI
Source of support: R21, National Institute of Dental and Craniofacial Research
Award amount: \$440,516 total award (7/1/09-3/31/11), \$138,817, subcontract to Louisville

Project title: Ribosome function and Diamond Blackfan Anemia
Role: 25% effort, P.I.
Source of support: R01, National Heart, Lung, and Blood Institute
Award amount: \$1,284,354 total costs (10/1/04-9/30/09)

Project title: 11th Annual Diamond Blackfan Anemia International Consensus
Conference
Role: PI
R13: R13, NHLBI, NIDDK
Award Amount: \$22,500 (meeting held, March 2010)

Project title: Diamond Blackfan Anemia Gene Discovery and Resequencing Project
Role: co-P.I., no percent effort listed
Source of support: National Heart, Lung, and Blood Institute DNA RS&G service
Award amount: No funds awarded, only resequencing service rendered

Project title: LAMR1, a potential lung cancer tumor suppressor in chromosomal region
3p21.3
Role: 20% effort, PI
Source of support: Commonwealth of Kentucky Lung Cancer Research Program
Award Amount: \$296,153 (7/1/02-6/30/05), no cost extension through 2006

Project title: Research Director, Diamond Blackfan Anemia Foundation
Role: 15% effort, PI
Source of support: Diamond Blackfan Anemia Foundation
Award amount: \$23,225 direct costs (7/15/04-7/14/05)

Project Title: Organization and transcription of mitochondrial DNA
Role: 20% effort, Co-PI with Dr. Nancy Martin (UofL)
Source of Support: NIH
Award Amount: \$1,071,250; 9/6/97-11/30/00

Project title: How single genes provide proteins to multiple cellular compartments
Role: 10% effort, Co-PI with Dr. Nancy Martin and Dr. Anita Hopper (Pennsylvania
State University)
Source of Support: NSF
Award Amount: \$399,997; 8/1/95-7/31/00

Project Title: Heme oxygenase and hemophasic shock

Role: 5% effort, Collaborator with Dr. Mark Wilson
Source of Support: VA Merit Review
Award Amount: \$474,400; 1/1/99-12/31/02

Project Title: Characterization of the Tom1/Rps0 regulatory network
Role: PI
Source of support: Center for Genetics and Molecular Medicine, University of Louisville
Award amount: \$12,000; 9/1/99-6/30/00

Project Title: Characterization of the *Pneumocystis carinii* Extracellular matrix receptor
Role: PI
Source of Support: Jewish Hospital Foundation
Award Amount: \$47,439; 11/1/95-10/31/97

Project Title: The Role of Yeast Yst Proteins in the Cell Cycle
Role: P.I.
Source of Award: Competitive Enhancement Grant, Office of Vice President of Research
Award Amount: \$12,500; 7/1/97-6/30/98

Project Title: Bloom-n-Science
Role: Co-PI
Source of Award: JCPS/UofL Coordinating Committee
Award Amount: \$1,984; 1996/97

Project Title: Expression of Mitochondrial Ribosomal Proteins in Yeast
Role: P.I.
Source of Award: NIH, R29
Award Amount: \$350,000 (direct costs); 07/88-06/93

VIII. Publications

1. Hulse, J.D., Ellis, S.R., and Henderson, L.M. (1978) Carnitine biosynthesis. *J. Biol. Chem.* **253**,1654-
2. Li, P.T., Shae, T., Ellis, S.R., and Conway, T.W. (1979) Formylmethionyl-tRNA binding properties of *E. coli* ribosomal protein S1. *Eur. J. Biochem.* **98**,155-
3. Ellis, S.R., and Conway, T.W. (1984) Initial velocity kinetic analysis of 30S initiation complex formation in an *in vitro* translation system derived from *Escherichia coli*. *J. Biol. Chem.* **259**,7607-
4. Ellis, S.R., Morales, M.J., Ji, J.-M., Hopper, A.K., and Martin, N.C. (1986) Isolation and characterization of the *TRM1* locus, a gene essential for the m²G modification of both mitochondrial and cytoplasmic tRNA in *Saccharomyces cerevisiae*. *J. Biol. Chem.* **261**,9703-9709
5. Najarian, D., Ellis, S.R., Dihanich, M., Morales, M., Hopper, A.K., and Martin, N.C. (1986) Do mitochondria and nuclei share transfer RNA modification enzymes? In *Yeast Cell Biology* (Hicks, J. ed) UCLA Symposia on Molecular and Cellular Biology, **Vol 33**, pp. 613-622, Alan R. Liss, Inc., New York
6. Ellis, S.R., Hopper, A.K., and Martin, N.C. (1987) Amino-terminal extension

generated from an upstream AUG is not required for mitochondrial import of yeast N²,N²-dimethylguanosine-specific tRNA methyltransferase. *Proc. Natl. Acad. Sci. USA*, **84**,5172-5176

7. Ellis, S.R., Hopper, A.K., and Martin, N.C. (1989) Amino-terminal extension generated from an upstream AUG codon increases the efficiency of mitochondrial import of yeast N²,N²-dimethylguanosine-specific tRNA methyltransferase. *Mol. Cell. Biol.* **9**,1611-1620
8. Dang, H., Franklin, G.A., Darlak, K., Spatola, A., and Ellis, S.R. (1990) Discoordinate expression of the yeast mitochondrial ribosomal protein Mrp1. *J. Biol. Chem.* **265**,7449-7454
9. Dang, H., Ellis, S.R. (1990) Structural and functional analyses of a yeast mitochondrial ribosomal protein homologous to ribosomal protein S15 of *Escherichia coli*. *Nucleic Acids Res.* **18**,6895-6901
10. Davis, S.C., Tzagoloff, A., and Ellis, S.R. (1992) Characterization of a yeast mitochondrial ribosomal protein structurally related to the mammalian 68-kDa high affinity laminin receptor. *J. Biol. Chem.* **267**,5508-5514
11. Huff, M.O., Hanic-Joyce, P.J., Dang, H., Rodrigues, L.A., and Ellis, S.R. (1993) Two inactive fragments from the yeast mitochondrial ribosomal protein MrpS28 function *in trans* to support ribosome assembly and respiratory growth. *J. Mol. Biol.* **233**,597-605
12. Li, Y., Huff, M.O., Hanic-Joyce, P.J., and Ellis, S.R. (1993) Derivatives of the yeast mitochondrial ribosomal protein MrpS28 replace ribosomal protein S15 as functional components of the *Escherichia coli* ribosome. *J. Mol. Biol.* **233**,606-614
13. Davis, S.C., and Ellis, S.R. (1995) Incorporation of the yeast mitochondrial ribosomal protein Mrp2 into ribosomal subunits requires the mitochondrially-encoded Var1 protein. *Mol. Gen. Genet.* **247**,379-386
14. Demianova, M., Formosa, T.G., and Ellis, S.R. (1996) Yeast proteins related to the p40/laminin receptor precursor are essential components of the 40S ribosomal subunit. *J. Biol. Chem.* **271**,11383-11391
15. Ford, C.L., Randall-Whitis, L., and Ellis, S.R. (1999) Yeast proteins related to the p40/laminin receptor precursor are required for 20S rRNA processing and the maturation of 40S ribosomal subunits. *Cancer Res.* **59**,704-710
16. Lutz, M.S., Ellis, S.R., and Martin, N.C. (2000) Proteasome functional mutants, *pre4-2* and *ump1-1*, suppress the essential function but not the mitochondrial RNase P function of the *Saccharomyces cerevisiae* gene, *RPM2*. *Genetics* **154**,1013-1023
17. Williams, L.R., Ellis, S.R., Hopper, A.K., Davis, E.O., and Martin, N.C. (2000) Splicing before import - An intein in a mitochondrially-targeted preprotein folds and is catalytically active in the cytoplasm *in vivo*. *FEBS Lett.* **476**,301-305
18. Tabb, A.L., Utsugi, T., Wooten, C.R., Sasaki, T., Edling, S., Gump, W., Kikuchi, Y., and Ellis, S.R. (2001) Genes encoding ribosomal proteins Rps0A/B interact with *TOM1* mutants defective in ribosome synthesis. *GENETICS* **157**,1107-1116

19. Stribinskis, V., Gao, G.-J., Ellis, S.R., and Martin, N.C. (2001) Rpm2, the protein subunit of mitochondrial Rnase P in *Saccharomyces cerevisiae* also has a role in the translation of mitochondrially-encoded subunits of cytochrome oxidase. *GENETICS* **158**,573-585
20. Pluta, K., Lefebvre, O., Martin, N.C., Smagowicz, W.J., Stanford, D.R., Ellis, S.R., Hopper, A.K., Sentenac, A., and Boguta, M. (2001) Maf1, a negative regulator of RNA polymerase III in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* **21**,5031-5040
21. Stribinskis, V., Gao, G.-J., Sulo, P., Ellis, S.R., and Martin, N.C. (2001) Rpm2: Separate domains promote tRNA and Rpm1r maturation in *Saccharomyces cerevisiae* mitochondria. *Nucleic Acids Res.* **29**,3631-3637
22. Yang, C., Silver, B., Ellis, S.R., and Mower, G.D. (2001) Bidirectional regulation of mitochondrial gene expression during the critical period of neuronal plasticity in the visual cortex. *Biochem. Biophys. Res. Commun.* **287**,1070-1074
23. Tabb-Massey, A., Caffrey, J.M., Logsden, P., Taylor, S., Trent, J.O., and Ellis, S.R. (2003) Ribosomal proteins Rps0 and Rsp21 of *Saccharomyces cerevisiae* have overlapping functions in the maturation of the 3' end of 18S rRNA. *Nucleic Acids Res.* **23**,6798-6805
24. Stribinskis, V., Heyman, H.C., Ellis, S.R., Steffan, M.C., and Martin, N.C. (2005) Rpm2p, a component of yeast mitochondrial RNase P, acts as a transcription activator in the nucleus. *Mol Cell. Biol.* **25**,6546-58
25. Léger-Silvestre, I., Caffrey, J. M., Dawaliby, R., Arias-Alvares, D., Gas, N., Bertolone, S.J., Gleizes, P.E. and Ellis S.R. (2005) Specific Role for yeast homologs Diamond Blackfan Anemia Rps19 protein in ribosome synthesis. *J. Biol. Chem.* **280**,38177-38185
26. Ellis, S.R., and Massey, A.T. (2006) Diamond Blackfan Anemia: A paradigm for a ribosome-based disease. *Med. Hypotheses* **66**, 643-648
27. Flygare, J., Aspesi, A. Bailey, J.C., Miyake, K. Caffrey, J.M., Karlsson, S., and Ellis, S.R. (2006) Human *RPS19* the gene mutated in Diamond Blackfan Anemia, encodes a ribosomal protein required for the maturation of 40S ribosomal subunits. *Blood* **109**, 980-986
28. Ebert, B.L., Pretz, J., Bosco, J., Chang, C.Y., Tamayo, P., Galili, N., Raza, A., Root, D.E., Attar, E., Ellis, S.R., and Golub, T.R. 2008 Identification of *RPS14* as a 5q- syndrome gene by RNA interference. *Nature* **451**, 335-339
29. Farrar, J.E., Nater, M., Caywood, E., McDevitt, M., Kowalski, J.A., Takemoto, C., Talbot, C.C., Meltzer, P., Esposito, D., Beggs, A.H., Schneider, H.E., Grabowska, A., Ball, S., Niewiadomska, E., Sieff, C.A., Vlachos, A., Atsidaftos, E., Ellis, S.R., Lipton, J.M., Gazda, H.T. and Arceci, R.J. A large subunit protein abnormality in Diamond Blackfan anemia (DBA). *Blood* **112**, 1582-1592
30. Nihrane, A., Sezgin, G., Dsilva, S., Dellorusso, P., Yamamoto, K., Ellis, S.R., and Liu, J.M. (2009) Cells depleted of the Shwachman-Diamond syndrome gene product, SBDS, overexpress osteoprotegerin and vascular endothelial growth factor-A. In press *Blood Cells Mol. Dis.* **42**, 85-91
31. Moore, J.B., Farrar, J.E., Arceci, R.J., Liu, J.M., and Ellis, S.R. (2010) Distinct

- ribosome maturation defects in yeast models of Diamond Blackfan anemia and Shwachman Diamond Syndrome. *Haematologica* **95**,57-64
32. Lin, C.A, Ellis, S.R., and True, H.L. 2010 The Sua5 protein is essential for normal translational regulation in yeast. *Mol. Cell. Biol.* **30**,354-363
 33. Boria, I., Garelli, E., Gazda, H.T., Aspesi, A., Quarello, P., Pavesi, E., Ferrante, D., Meerpohl, J.J., Kartal, M., Da Costa, L., Proust, A., Leblanc, T., Simansour, M., Dahl, N., Fröjmark, A.S., Pospisilova, D., Cmejla, R., Beggs, A.H., Sheen, M.R., Landowski, M., Buros, C.M., Clinton, C.M., Dobson, L.J., Vlachos, A., Atsidaftos, E., Lipton, J.M., Ellis, S.R., Ramenghi, U., and Dianzani, I. (2010) The ribosomal basis of Diamond-Blackfan Anemia: mutation and database update. *Hum. Mut.* **31**,1269-1279
 34. Jaako, P., Flygare, J., Olsson, K., Quere, R., Ehinger, M., Henson, A., Ellis, S., Schambach, A., Baum, C., Richter, J., Larsson, J., Bryder, D., Karlsson, S. (2011) Mice with ribosomal protein S19 deficiency develop bone marrow failure and symptoms like patients with Diamond-Blackfan anemia. *Blood* **118**,6087-6096.
 35. Farrar, J.E., Vlachos, A., Atsidaftos, E., Carlson-Donohoe, H., Markello, T.C., Arceci, R.J., Ellis, S.R., Lipton, J.M., Bodine, D.M. (2011) Ribosomal protein gene deletions in Diamond Blackfan anemia. *Blood* **118**, 6943-6951
 36. Sezgin, G., Henson, A.L., Nihrane, A., Singh, S., Wattenberg, M., Alard, P., **Ellis, S.R.** and Liu, J.M. (2013) Impaired growth, hematopoietic colony formation, and ribosome maturation in human cells depleted of Shwachman-Diamond syndrome protein. *Pediatr. Blood Cancer.* **60**,281-286
 37. Bolze, A., Mahlaoui, N., Byun, M., Turner, B., Trede, N., **Ellis, S.R.**, Abhyankar, A., Itan, Y., Brebner, S., Sackstein, P., Puel, A., Picard, C., Abel, L., Faust, S.N., Williams, A.P., Baretto, R., Duddridge, M., Kini, U., Pollard, A., Gaud, C., Frange, P., Orbach, D., Emile, J.-F., Stephan, J.-L., Sorensen, R., Plebani, A., Hammarstrom, L., Conley, M.-E., Selleri, L. and Casanova, J.-L. (2013) Ribosomal protein Sa haploinsufficiency in humans with isolated congenital asplenia. *Science* **340**,976-978
 38. Henson, A.L., Moore, J.B., Alard, P., Wattenberg, M.M., Liu, J.M., and **Ellis, S.R.** (2013) Mitochondrial function is impaired in yeast and human cellular models of Shwachman Diamond syndrome. *Biochem. Biophys. Res. Comm.* **437**,29-34.
 39. Aricò M, Boggio E, Cetica V, Melensi M, Orilieri E, Clemente N, Cappellano G, Buttini S, Soluri MF, Comi C, Dufour C, Pende D, Dianzani I, **Ellis SR**, Pagliano S, Marcenaro S, Ramenghi U, Chiocchetti A, Dianzani U. (2013) Variations of the UNC13D Gene in Patients with Autoimmune Lymphoproliferative Syndrome. *PLoS One* 1;8(7):e68045. doi: 10.1371/journal.pone.0068045.
 40. Harrison BJ, Flight RM, Gomes C, Venkat G, **Ellis SR**, Sankar U, Twiss JL, Rouchka EC, Petruska JC. (2014) IB4-binding sensory neurons in the adult rat express a novel 3' UTR-extended isoform of CaMK4 that is associated with its localization to axons. *J Comp Neurol.* **522**:308-336
 41. Vlachos A, Farrar JE, Atsidaftos E, Muir E, Narla A, Markello TC, Singh SA, Landowski M, Gazda HT, Blanc L, Liu JM, **Ellis SR**, Arceci

- RJ, Ebert BL, Bodine DM, Lipton JM. (2013) Diminutive somatic deletions in the 5q region lead to a phenotype atypical of classical 5q-syndrome. *Blood* **122**:2487-90.
42. Klarer AC, O Neal J, Imbert-Fernandez Y, Clem A, **Ellis SR**, Clark J, Clem B, Chesney J, Telang S. Inhibition of 6-phosphofructo-2-kinase (PFKFB3) induces autophagy as a survival mechanism. *Cancer Metab.* 2014 Jan 23;2(1):2. [Epub ahead of print]
 43. Parrella S, Aspesi A, Quarello P, Garelli E, Pavesi E, Carando A, Nardi M, **Ellis SR**, Ramenghi U, Dianzani I. Loss of GATA-1 full length as a cause of Diamond-Blackfan anemia phenotype. *Pediatr Blood Cancer.* 2014 **61**,1319-1321
 44. Singh SA, Goldberg TA, Henson AL, Husain-Krautter S, Nihrane A, Blanc L, **Ellis SR**, Lipton JM, Liu JM. p53-Independent Cell Cycle and Erythroid Differentiation Defects in Murine Embryonic Stem Cells Haploinsufficient for Diamond Blackfan Anemia-Proteins: RPS19 versus RPL5. *PLoS One.* 2014 Feb 18;9(2):e89098. doi: 10.1371/journal.pone.0089098. eCollection 2014.
 45. Mirabello L, Macari ER, Jessop L, **Ellis SR**, Myers T, Giri N, Taylor AM, McGrath KE, Humphries JM, Ballew BJ, Yeager M, Boland JF, He J, Hicks BD, Burdett L, Alter BP, Zon L, Savage SA. Whole-exome sequencing and functional studies identify RPS29 as a novel gene mutated in multicase Diamond Blackfan anemia families. *Blood* 2014 pii:Blood-2013-11-540278 Epub ahead of print
 46. Aspesi A, Pavesi E, Robotti E, Crescitelli R, Boria I, Avondo F, Moniz H, Da Costa L, Mohandas N, Roncaglia P, Ramenghi U, Ronchi A, Gustincich S, Merlin S, Marengo E, **Ellis SR**, Follenzi A, Santoro C, Dianzani I. Dissecting the transcriptional phenotype of ribosomal protein deficiency: implications for Diamond Blackfan anemia. *Gene.* 2014 pii: S0378-1119(14)00583-6. doi:10.1016 / j.gene.2014.04.077. [Epub ahead of print]

Invited reviews

1. Tabb, A.L., and Ellis, S.R. (2001) A new perspective on the role of the 37 kDa laminin binding protein in cancer. *Recent Res. Devel. Cancer* **3**,257-266
2. Liu, J.M. and Ellis, S.R. (2006) Ribosomes and marrow failure: coincidental association or molecular paradigm. *Blood* **107**,4583-4588
3. Lipton, J.M., and Ellis, S.R. (2010) Diamond Blackfan Anemia 2008-2009: broadening the scope of ribosome biogenesis disorders. *Curr. Opin. Pediatr.* **22**, 12-19
4. Ellis, S.R., and Gleizes, P.-E. (2011) Diamond Blackfan Anemia: ribosomal proteins going rogue. *Semin. Hematol.* **48**,89-96

5. Ellis, S.R. Nucleolar stress in Diamond Blackfan anemia pathophysiology *Biochem.Biophys. Acta* 2014 **1842** 765-768

Book Chapters

1. Ellis, S.R. and Lipton, J.M. (2008) Diamond Blackfan Anemia: A Disorder of Red Cell Development. *Curr. Top. Dev. Biol.* **82**, 217-241
2. Lipton, J.M., and Ellis, S.R. (2009) Diamond Blackfan Anemia: Diagnosis, Treatment and Molecular Pathogenesis. *Hematology Oncology Clinics of North America* **23**, 261-282
3. Liu, Johnson M; Lipton, Jeffrey M; and Ellis, Steven R (February 2013) Genetics of the Ribosomopathies. In: eLS 2013, John Wiley & Sons Ltd: Chichester <http://www.els.net/> [DOI: 10.1002/9780470015902.a0023863]

Commentaries

1. Lipton, J.M., Ellis, S.R., and Vlachos, A. (2008) Shwachman Diamond Syndrome – Phenotypes and Genotypes: When Clinical Research Informs Biology. *Ped. Blood Cancer* **51**, 449-50
2. Henson, A.L. and Ellis, S.R. (2010) Finding a diamond in the (mouse is) rough. 2010 *Blood* **116**,2623-2625
3. Ellis, S.R. (2011) Drawing to a diamond flush. *Blood* **117**, 2558-9
4. Ellis, S.R. (2011) Of Blood, Bones, and Ribosomes: Is Shwachman Diamond Syndrome a Ribosomopathy? *Genes Dev.* **25**, 898-900
5. Ellis, S.R. (2011) DBA and del(5q): a reciprocal relationship. *Blood* **118**,2032-2033

Diamond Blackfan Anemia Foundation Newsletter Articles

1. Journal club, November 2010 - **An ARF-Independent c-MYC-Activated Tumor Suppression Pathway Mediated by Ribosomal Protein-Mdm2 Interaction**
2. Journal club, December 2010 - **“Severe Iron Overload in Blackfan-Diamond anemia: a Case Controlled Study”**
3. Journal club, April 2011 - **Haploinsufficiency for ribosomal protein genes causes selective activation of p53 in human erythroid progenitor cells.**
4. Journal club, May 2011 - **“HIF1 α synergizes with glucocorticoids to promote BFU-E progenitor self-renewal”.**
5. Journal club, June 2011 - **Dexamethasone and lenalidomide have distinct functional effects on erythropoiesis.**
6. Journal club, July 2011 - **Ribosome-Mediated Specificity of Hox mRNA Translation and Vertebrate Tissue Patterning.**
7. Journal Club, August 2011 - **The dominant negative β isoform of the glucocorticoid receptor is uniquely expressed in erythroid cells expanded**

- from polycythemia vera patients.**
8. Journal club, September 2011 – **Six degrees of separation.**
 9. Journal club, October 2011 - **New insights into p53 activation.**
 10. Journal club, November 2011- **Ribosomal protein deletions in Diamond Blackfan anemia**
 11. Journal Club, December 2011 – **Highlights of the 2011 ASH Meeting.**
 12. Journal Club, February 2012 – **Heme transport and DBA**
 13. Journal Club, April 2012 – **We can do better, Iron Overload and DBA**
 14. Journal Club, June 2012 – **Induced pluripotent stem cells to the rescue**
 15. Journal Club, July 2012 – **GATA1 as a new DBA gene**
 16. Journal Club, August 2012 – **Highlights of the Banff Ribosome Synthesis Meeting**

 17. Journal club, September 2012 – **Much ado about leucine**
 18. Journal Club, January 2013 – **Missense mutation muddle**
 19. Journal Club, March 2013 – **Ribosomal proteins in the news**
 20. Journal Club, May 2013 – **Size matters**
 21. Journal club, August 2013. **How I spent my summer vacation (Camp Sunshine)**
 22. Journal club, October 2013, **Diminutive, exceptionally or notably small**
 23. Journal club, November 2013, **Here lies one whose name is writ in water**
 24. Journal club, December 2013, **Year-end review**
 25. Journal club, March 2014, **Summary of the 2014 ICC Meeting**
 25. Journal Club, April 2014, **And they're off**

IX. Teaching

A. Courses Taught

1. Undergraduate
 - a. Biochemistry (545) 15 lecture hours, Spring 1998-present - Course Director (98-06)
5 hours recitation, 1998-present
 - b. Gene Expression 1 lecture hour, Spring 1989-95
 - c. Biotechnology Methods 4 afternoons laboratory instruction, Summer 1995;
2 lecture hours, Summer 1998-2004
 - d. Molecular Evolution 1.5 lecture hour, Fall 2002
2. Graduate
 - a. Molecular Biology 9 lecture hours, Spring 1988-95
4 lecture hours, Fall 1998-2000
 - b. Membrane Biochemistry 5 lecture hours, Fall 1989-92
 - c. Methods II 2 lecture hours, Spring/Fall 1988-2004
4 lecture hours, Fall 2005

- d. Advanced Cell Biology 3 lecture hours, Fall 1993-94, 2014
 - e. Enzymology 4 lecture hours, Spring 1996
 - f. Biochemistry (645) 20 lecture hours (15 hours overlap with 547), Spring 1998-present
Course Director (98-06)
 - g. Adv. Eukaryotic Genetics 10 lecture hours, Fall 1997/98
12 lecture hours, Fall 1999-2005
3. Professional Courses
- a. Dental Biochemistry, 13 lecture hours, Spring 1989-91
7 lecture hours, Spring 2010
 - b. Medical Biochemistry, 9 lecture hours, Fall 1991
11 lecture hours, Fall 1992
13 lecture hours, Fall 1993
14 lecture hours, Fall 1994
15 lecture hours, Spring 1996-2003
25 lecture hours, Spring 2004
14 lecture hours, Spring 2005
14 lecture hours, Spring 2006
25 lecture hours, Spring 2007
Course co-director in 2007
25 lecture hours, Spring 2008
Co-course director
33 lecture hours, Spring 2009
Course director
30 lecture hours, Spring 2010-11
 - c. Genetics and
Molecular
Medicine
Co-course director
28 lecture hours, Spring 2012
Co-course director
22 hrs lecture, 6 hours flipped classroom, 12
hrs team-based learning, Spring 2013
Co-course director
19 lecture hrs, 8 hours flipped classroom, 3
Self-instructionals
4. Visiting professor
Course in Italy –
Molecular Medicine 20 hours, May 2012
20 hours, September 2013
5. Outreach –
- a. Summer Medical
and Dental Education
Program 4.5 hours, June, 2006-2012, 2014
 - b. Trover Rural Scholars

Program

12 lectures hours, Summer 2003-present

B. Students Trained

1. Ph.D.
 - a. Hong Dang, May 1992
 - b. Stephen C. Davis, May 1993
 - c. Mary O. Huff, May 1995
 - d. Yan Li, July 1995
 - e. Amy Tabb, 2001
 - f. Diana Alvares, 2004
 - g. Jacqueline Caffery, 2005
 - h. Anna Aspesi, visiting scholar, 2006
 - i. Joseph B. Moore IV, current
 - j. Elisa Pavesi, visiting scholar, 2007
 - k. Adrianna Henson (MD/PhD) 2012
2. M.S.
 - a. Stephanie Webb, Candidate 1987/88
 - b. Marina Demianova, Candidate 1994/96
 - c. Mary J. Elliot, December 98, served as co-advisor in last year
3. Medical Students
 - a. Glen Franklin, Summer 1989
 - b. Vidal Sheen, Summer 1992
 - c. Steven Edling, Summer 1996/7
 - d. William Gump, Summer 1998
 - e. Anne Fitzpatrick, Summer 1999
 - f. Steven Taylor, Summer 1999
 - g. Jennifer Bergant, Summer 2001
 - h. Adrianna Henson, Summer 2007
 - i. Megan McIntosh, Summer 2007
4. Undergraduate Students
 - a. Michael Hans, Summer 1989
 - b. Stephen Porter, Summer 1991
 - c. Raynese Scott, Summer 1993
 - d. Bruce Thompson, Summer 1994
 - e. Chris Ford, 1996/97
 - f. Leslie Randall-Whitis, Spring 1997
 - g. Paula Logsdon, Fall 1999
 - h. Nicholas Kuchle, Fall 2003
 - i. Brittany Bell, Fall 2004

X. Postdoctoral Fellows

Leslie-Ann Griffiths, 1990

Pamela Hanic-Joyce, 90/91
Amy Tabb, 2001-2002
Junying Han, 2005-2007
Paola Querello, visiting scholar, 2006/2007

XI. Committees

University: Medical School Admissions Committee, 2000-present
University: Curriculum advisory Committee, 2012-present
University: Master Educator Awards Committee, 2008-present
University: Promotions Committee, 2008-present
University: MD/PhD, 2012-present
University: Steering Committee, LCME Response Task Force, 2014
University: Research Integrity, 2013-14
University: Dean search committee, 2013
University: Educational Policy Committee, 2004-2011
University: Medical School Curriculum Implementation Committee, 2011
University: Program Advisory Committee (Educational Effectiveness), 2004-2006
University: Radiation Oncology Chair Review Committee, 2004
University: Chair, LCME Accreditation Self Study Committee (Admissions), 2004
University: Animal Care and Use Committee, 1989-2000
University: Rules and Policies Committee, 1991-92
University: Graduate Student Grievance Committee (*Ad hoc*), 1994-95
Biochemistry Department: Research Committee
Biochemistry Department: Personnel Committee, 1989-1991, 2014
Biochemistry Department: Graduate Executive Committee (Recruitment) (?-2004)
Biochemistry Department Exam I Committee (2009)

XII. Professional Service

Research director, Diamond Blackfan Anemia Foundation 2004-present
Scientific Review Board, Daniella Marie Arturi Foundation 2004-present
Academic editor - PlosOne
Invited Reviewer for the Association of American Medical College's MedEdPORTAL project
Review manuscripts for Blood, Journal of Biological Chemistry, Nucleic Acids Research,
Molecular and Cellular Biology, Journal of Bacteriology, Journal of Cell Science, Journal
of Histological Chemistry and Cytochemistry, Pediatric Blood and Cancer,
Haematologica, RNA, FASEB Journal, Nature Genetics, American Journal of Pathology,
RNA Biology, PlosGenetics, Biochem BioPhys Acta, Orphan drugs
Ad hoc member, Virology and Molecular Genetics Review Panel, American Cancer
Society, June, 1992
Ad hoc member, NIH Study Section, Physiological Chemistry, October, 1992
Member, NSF/EPSCoR Review Panel; 1994, 2001-2005
Panel review member, NIH, Clinical hematology; 2006

Panel review member, NSF, SBIR/STTR Biomedical Engineering III; 2002-2004, 2007- 11
Panel review member, NSF, SBIR/STTR Genetics/proteomics, 2006
Panel review member, State of Texas Advanced Technology Program 2003
Panel Review Member, Ford Diversity Scholarships (National Academy), 2009, 2011, 2012, 2013
Panel Review Member, American Heart Association, Hemostasis/Thrombosis, 2009, 2010, 2011 (co-chair), 2012 (co-chair), 2013 (co-chair/chair), 2014 (chair)
Reviewer of grant proposals for National Science Foundation, Mississippi/Alabama Sea Grant Consortium, Brown Cancer Center Seed Grants, Medical Research Council (UK), Research Council University of Leuven (Belgium)
NBME, 2013 Biochemistry Exam Reviewer

XIII. Abstracts/Invited talks

2013

Presentations and/or other Educationally Related Activities

Local

Seminars on lessons learned from a flipped classroom, 2 lectures, one in the dental school the other in the medical educators course

National

Poster on the flipped classroom at the Association of Biochemistry Course Director's Meeting

Seminars

Ribosomopathies: Bone Marrow Failure and Beyond, July, IUPUI
Clinical Applications of the molecular underpinnings of Diamond Blackfan anemia, December, North Carolina Research Campus, Kannapolis NC

Meeting Talks

Pre-rRNA processing comes of age in the clinic, Stowers Institute, Kansas City, **30 minutes**
Directions of DBA research, Camp Sunshine Maine, **1 hr**

2012

Integration of Biochemistry into years three and four of the medical curriculum, American Society of Chairs of Medical and Graduate Biochemistry Departments, January, Maui Hawaii (**30 minute talk**)

The Mysterious Role of Hydroxymethyl Cytosine in the Epigenetic Regulation of Glioma- and Leukemo-genesis, Hematology conference, March (**seminar**)

Non-ketotic hyperglycinemia: a biochemical perspective, Pediatric Morning Report, UofL, April (**20 minute talk**)

Sideroblastic Splicing Syndromes: Whole Exome Sequencing Reveals Molecular Underpinnings of Myelodysplastic Syndrome Subclasses, Hematology Conference (**seminar**)

An Interdisciplinary approach to DBA diagnosis, disease management, and basic research, Italian DBA Foundation, May, Verona Italy, (**10 minute talk**)

Direction of DBA research, DBA Foundation, July, Camp Sunshine, Maine (**30 minute talk**)

Pre-rRNA processing comes of age in the clinic, MD/PhD program UofL July (**30 minute talk**)

Pre-rRNA processing comes of age in the clinic, 9th International Conference on Ribosome Synthesis, August, Banff, Canada (**20 minute talk**)

2011

From Cabernet to Clinic: Yeast Insights into the Inherited Bone Marrow Failure Syndromes, Texas Children's Hospital, Houston Texas (**Seminar**)

Using clinical conferences as a means of delivering basic science content in the clerkship years, Meeting of the American Association of Medical Biochemistry Course Directors, Myrtle Beach, South Carolina (**10 minute talk**)

DBA Foundation (USA), Verona, Italy Meeting of the Italian DBA foundation (**10 minute talk**)

Phenotypic Heterogeneity in a Yeast Model of Shwachman Diamond Syndrome, 6th International Congress on Shwachman Diamond Syndrome, New York (**15 minute talk**)

The biochemical underpinnings of ornithine transcarbamoylase deficiency, Pediatrics, UofL, August (**20 minute talk**)

Methylmalonic academia, Pediatric morning report, September, UofL (**20 minute talk**)

2010

Ribosome Synthesis and Inherited Bone Marrow Failure Syndromes, American Association of Cancer Research, Protein Translation and Cancer (**20-30 minute talk**)

From Barolo to Bedside: Yeast Insights into the Inherited Bone Marrow Failure Syndromes. University of Torino, Italy (**seminar**)

From Carbernet to Clinic: Yeast Insights into the Inherited Bone Marrow Failure Syndromes. University of Toulouse, France (**seminar**)

Inhibition of Histone Deacetylase Activity Suppresses the 60S Subunit Maturation Defect in a Yeast Model of Shwachman Diamond Syndrome, European Hematology Association, Barcelona, (**15 minute talk**)

Wonders of Yeast, University Piemonte Allessandria, Italy (**seminar**)

Direction of DBA Research, Camp Sunshine, Maine (**seminar**)

Selective Forces Contributing to the Progression of an Inherited Bone Marrow Failure to Leukemia: Ribosomes, Mitochondria, and Epigenetics, Oh My! UofL, Molecular Targets (**seminar**)

2009

Ribosomes and Bone Marrow Failure Syndromes: A Tale of Two Diamonds. University of Maryland Baltimore County (**seminar**)

Conference Summary, 10th Annual DBA Consensus Conference (**talk, session chair**)

Biology of Ribosomes and Defects in Human Disease, American Society of Pediatric Hematology and Oncology, Annual Meeting (**invited speaker, session on ribosomes and disease**)

Diamond Blackfan Anemia: What's The 5S Ribonucleoprotein Subcomplex Got To Do With It? DBA/RFA Meeting, National Heart Lung and Blood Institute (**talk**)

From Cabernet to Clinic: Yeast Insights Into Inherited Bone Marrow Failure Syndromes Feinstein Institute for Molecular Medicine, Jason Bennette Lecture (**seminar**)

Inhibition of Histone Deacetylase Activity Suppresses the 60S Subunit Maturation Defect in a Yeast Model of Shwachman Diamond Syndrome. Ribosome Synthesis 2009 (**talk, session chair**)

From Cabernet to Clinic: Yeast Insights Into Inherited Bone Marrow Failure Syndromes Stem Cell Centre, University of Lund (**seminar**)

2008

Yeast models for DBA and SDS differ in their effect on translation of specific mRNA classes 9th Annual DBA Consensus Conference (**talk**)

Yeast Models of Diamond Blackfan Anemia and Shwachman Diamond Syndrome Differ in Their Effect on the Synthesis and Function of Ribosomal Subunits NIDDK-sponsored Workshop on Ribosomes and Their Role in Disease (**talk**)

Yeast Models of Diamond Blackfan Anemia and Shwachman Diamond Syndrome Differ in Their Effect on the Synthesis and Function of Ribosomal Subunits DBA/RFA Meeting, National Heart Lung and Blood Institute (**talk**)

2007

Biology III – 8th Annual Diamond Blackfan International Consensus Conference – Cellular Consequences of Ribosomal Defects: A Tale of Two Diamonds (**talk given by Johnson Liu as Dr. Ellis could not attend conference due to weather**)

Translating Basic Science into Therapeutic Strategies for Shwachman Diamond Syndrome – Lund University, Lund, Sweden (**invited speaker, minisymposium on erythropoiesis**)

Translating Basic Science into Therapeutic Strategies for Shwachman Diamond Syndrome - Universita del Piemonte Orientale, Novara, Italy (**Seminar**)

Links between SDS and other Bone Marrow Failure Syndromes – 4th International Congress on Shwachman Diamond Syndrome (**invited speaker**)

Ribosomes and Bone Marrow Failure Syndromes: A Tale of Two Diamonds – University of Texas, Austin Texas (**Seminar**)

2006

Scientific Program – 2006 American Society of Hematology Meeting, Orlando, Dec 2006

(invited speaker)

Biology I - 7th Annual Diamond Blackfan Anemia International Consensus conference

(session moderator)

Yeast and human Rps19 proteins function in the maturation of 40S ribosomal subunits, 7th Annual Diamond Blackfan Anemia International Consensus conference **(talk)**

Nihrane, A., Moore, J.B., Yamamoto, K., Ellis, S.R., and Liu, J. Translation and transcription defects linked to depletion of Shwachman-Diamond Syndrome gene product: comparison to RPS19. 7th Annual Diamond Blackfan Anemia International Consensus conference **(talk given by Dr. Liu)**

Han, Y., Masey, A., Logsdon, P., Bailey, J.C., and Ellis, S.R. Ribosomal proteins and Diamond Blackfan Anemia, 7th Annual Diamond Blackfan Anemia International Consensus conference

2005

Functions of Rps19, Implications for Diamond Blackfan Anemia, Universita del Piemonte Orientale, Novara, Italy **(Seminar)**

Functions of Rps19, Implications for Diamond Blackfan Anemia, Lund University, Lund, Sweden **(Seminar)**

Functions of Rps19, Implications for Diamond Blackfan Anemia, Uppsala University, Uppsala, Sweden **(Seminar)**

Nihrane, A., Ellis, S.R., Yamamoto, K., and Liu, J. Ribosomal RNA and Gene Expression Abnormalities with Knockdown of the Shwachman-Diamond Syndrome Gene, SBDS. Third International Congress on Shwachman Diamond Syndrome. Robinson College, Cambridge, England

Ellis, S.R. Sixth International Diamond Blackfan Anemia Consensus Conference – Clinical Care Consensus Meeting. Clinical care consensus manuscript to be published citing all meeting participants. New York, New York

Ellis, S.R., Nihrane, A., and Liu, J.M. Translation Initiation Defect Linked to Depletion of Shwachman-Diamond Syndrome Gene Product. Translational Control Meeting, Heidelberg, Germany

Ellis, S.R., Han, J., and Logsdon, P.M. Creation of a ribosomal protein *Sa/LAMR1* heterozygous mouse. American Society of Hematology, Atlanta

2004

Ellis, S.R., Arce-Lara, C., Caffrey, J.M., Alvarez-Arias, D. Ribosomal protein S19 and Diamond Blackfan anemia. American Society of Hematology, San Diego CA

Nihrane, A., Ellis, S.R., Yamamoto, K., and Liu, J. Ribosomal RNA and gene expression abnormalities with knockdown of the Scwachman-Diamond Syndrome gene, SBDS. American

Society of Hematology, San Diego CA

Caffrey, J.M., Alvarez-Arias, D., and Ellis, S.R. Ribosomal protein S19 and Diamond Blackfan anemia. Translational control: Cold Spring Harbor

Ellis, S.R. Defective ribosome synthesis and its role in Diamond Blackfan Anemia.

Astbury College (**seminar**)

Ellis, S.R. Coupling Ribosome synthesis to cytokine signaling as the molecular basis for Diamond Blackfan anemia. Morehead State University (**seminar**)

Ellis, S.R. Ribosome synthesis defects and clinical heterogeneity in Diamond Blackfan anemia and Treacher Collins Syndrome. Birth Defects Center, University of Louisville (**seminar**)

Ellis, S.R. Coupling ribosome synthesis to cytokine signaling as the molecular basis for Diamond Blackfan anemia. Molecular targets group seminar series. (**seminar**)

Ellis, S.R. Ribosomes and Diamond Blackfan Anemia. Camp Sunshine, Camp for DBA patients and their families (**two hour presentation**)

Ellis, S.R. The role of the yeast ribosomal protein in the maturation of 40S ribosomal subunits: implications for Diamond Blackfan Anemia. International Consensus Conference on Diamond Blackfan Anemia. New York City (**15 min talk**)

Ellis, S.R. Ribosomal protein S19 and Diamond Blackfan Anemia. CGGeM, University of Louisville (**20-30 minute talk**)

Ellis, S.R. LAMR1, a potential lung cancer tumor suppressor in chromosomal region 3p21.3. Kentucky Lung Cancer Program Scientist's Seminar (**15 min talk**)

2003

Ellis, S.R. Equating ribosomal protein structures with functions in rRNA processing. Triennial Meeting on ribosome synthesis. Arcachon France (**15 min talk**)

Ellis, S.R. Ribosome Function and Tumorigenesis. 2nd International conference on tumor cell metabolism. Point Clear, Alabama (**30 min talk**)

Ellis, S.R. Bone marrow failure, craniofacial abnormalities, and cancer susceptibility: the facts in the case of Diamond Blackfan Anemia. Brown Cancer Center (**seminar**)

2002

Tabb, A.L., and Ellis, S.R. Yeast ribosomal proteins S0 and S21 cooperate in the formation of the 3' end of 18S rRNA. Translational Control, Cold Spring Harbor Laboratory

2001

Tabb, A.L., and Ellis, S.R. Yeast ribosomal proteins S0 and S21 cooperate in the formation of the 3' end of 18S rRNA and interact with components of the ADA/SAGA transcriptional coactivator complex. The Ribosome, Symposium Cold Spring Harbor Laboratory

2000

Amy L. Tabb, Takeshi Sasaki*, Yoshiko Kikuchi*, and Steven R. Ellis Overexpression of Rps0 proteins suppresses growth arrest of cells with defects in ribosome synthesis resulting from a mutant E3 ubiquitin ligase. Triennial meeting on ribosome synthesis, Lake Tahoe, CA
Ellis, S.R. Overexpression of Rps0 proteins suppresses growth arrest of cells with defects in ribosome synthesis resulting from a mutant E3 ubiquitin ligase. Triennial meeting on ribosome synthesis, Lake Tahoe, CA **(15 min. talk)**

Ellis, S.R. Ribosome synthesis and cancer. Biology Department, University of Louisville **(seminar)**

Ellis, S.R. Multiple roles for the translational machinery in cancer. High school symposium held through the University of Louisville **(seminar)**

1999

Tabb, A.L., Utsugi, T., Sasaki, T., Kikuchi, Y., and Ellis, S.R. Yeast genes encoding homologs of the human p40/37-kDa laminin receptor precursor interact genetically with *TOM1*. Yeast Cell Biology, Cold Spring Harbor

Tabb, A.L., Utsugi, T., Wooten, C.R., Sasaki, T., Gump, W., Kikuchi, Y., and Ellis, S.R. Yeast genes encoding homologs of the human p40/37-kDa laminin receptor precursor interact genetically with *TOM1*. Yeast Genetics and Human Disease II, Vancouver, B.C, Canada

Williams, L.R., Ellis, S.R., Hopper, A.K., and Martin, N.C. Using a self-splicing protein to gain insight into the process of mitochondrial import. Yeast Cell Biology, Cold Spring Harbor

Stribinskis, V., Ellis, S.R., Steffan, M., Weis, P., and Martin, N. An *RPM2* allele that uncouples mitochondrial Rnase P activity from another, unknown function causes a petite negative phenotype in *Saccharomyces cerevisiae*. International Conference on Yeast Genetics and Molecular Biology, Rimini, Italy

Lutz, M.S., Ellis, S.R., and Martin, N.C. Proteasome mutants *pre4-2* and *ump1-1* suppress the unknown essential function but not the mitochondrial RNA processing function of the multifunctional yeast gene *RPM2*. Biology of Proteolysis, Cold Spring Harbor

1998

Ford, C.L., Randal-Whitis, L., and Ellis, S.R. Yeast ribosomal proteins Rps0A and Rps0B are required for 20S rRNA processing and maturation of 40S subunits. RNA "98" University of Wisconsin, Madison.

Stribinskis, V., Ellis, S.R., and Martin, N.C. Rnase P and MRP workshop. **10/15 minute talk**

1997

Ford, C.L., Randal-Whitis, L., and Ellis, S.R. Yeast cells depleted of Yst proteins have defects in nuclear morphology. The Ribosome: It's (Nucleolar) Synthesis and Structure.

Noordwijkerhout, The Netherlands (**15-20 min talk**)

Ford, C.L., Randall-Whitis, L., and Ellis, S.R. Yeast cells depleted of Yst proteins have defects in cell cycle progression and in the maturation of 40S ribosomal subunits. Yeast Cell Biology Meeting, Cold Spring Harbor

Ellis, S.R. Yeast cells depleted of Yst proteins have defects in nuclear morphology. Centre College (**Invited/recruitment talk**)

1996

Ford, C.L. and Ellis, S.R. Association of Yst proteins with 40S ribosomal subunits is magnesium dependent. Yeast 96 Meeting

Ford, C.L., Edling, S., Henson, E. and Ellis, S.R. Yeast proteins related to the S2/p40 family of ribosomal proteins are required for translation and cell viability. Translational Control Meeting, Cold Spring Harbor

Ellis, S.R. Ribosomal proteins and translational control: thirteen years later. Thomas W. Conway Symposium, University of Iowa. **Invited Talk**

1995

Ellis, S.R. Structure, function, and evolution of mitochondrial ribosomal proteins. Department of Biology, University of Kentucky. **Invited talk**

Ellis, S.R. Retinal Development: What's yeast got to do with it? Department of Neurobiology and Anatomical Sciences, University of Louisville. **Invited talk**

Ellis, S.R. Retinal Development: What's yeast got to do with it? Deciphering the Genome: New tools, technologies, and applications. James Graham Brown Cancer Center. University of Louisville. **Invited talk**

XIV. Community Service

Scientist-in-Residence, Bloom Elementary, 1996-2000

Board of Directors, Highland Community Ministries, 1992-2004

Steering Committee, Individual and Family Assistance Program, 1993-2004

Covenant Housing Volunteer

Habitat for Humanity Volunteer

12 lectures, 8th grade science, Sacred Heart Model School, Spring 1992

Steering Committee, Breckenridge Project, co-sponsored by University of Louisville/Jefferson County Public Schools Coordinating Committee and Bardstown Road Presbyterian Church, 1992/93

Reviewer, Amgen Science Teaching Award 2003, 2004, 2005