

Curriculum Vitae

NAME: Eric John Wagner, Ph.D.
PRESENT TITLE: Associate Professor
ADDRESS: Department of Biochemistry and Molecular Biology
University of Texas Health Science Center
MSB 6.172, 6431 Fannin Street
Houston, TX 77030
BIRTHDATE: June 18th, 1975

UNDERGRADUATE EDUCATION:

1993-1997 **University of Rochester**, B.S.
Molecular Genetics

GRADUATE EDUCATION:

1997-2002 **Duke University**, Ph.D.
Molecular Cancer Biology
Department of Molecular Genetics and Microbiology
Advisor: Dr. Mariano Garcia-Blanco

POSTGRADUATE TRAINING:

2002-2008 **University of North Carolina at Chapel Hill**
Biochemistry & Genetics
Department of Biochemistry & Biophysics
Mentor: Dr. William Marzluff

ACADEMIC APPOINTMENTS:

2008 Assistant Professor, Department of Biochemistry and Molecular Biology,
UTHealth / The University of Texas Health Science Center at Houston

2012 Assistant Director of the Graduate Program in Biochemistry and Molecular
Biology, The University of Texas Graduate School of Biomedical Sciences
at Houston (UTGSBS).

2013 Director of the Graduate Program in Biochemistry and Molecular
Biology, The University of Texas Graduate School of Biomedical Sciences
at Houston (UTGSBS).

2014 Associate Professor, Department of Biochemistry and Molecular Biology,
UTHealth / The University of Texas Health Science Center at Houston

2015 Associate Professor, Department of Biochemistry and Molecular Biology,
University of Texas Medical Branch at Galveston

PROFESSIONAL ORGANIZATIONS:

2009-present American Society for Biochemistry and Molecular Biology
2009-present The RNA Society
2010-present American Society for Microbiology

HONORS AND AWARDS:

1993 Recipient of Rochester National Grant, University of Rochester
1997 Inducted into the Order of Omega National Honor Society, University of Rochester
1997 Recipient of NIH training grant, Duke University
1998 Awarded scholarship to attend Cellular Physiology class at the Marine Biological Institute in Woods Hole, MA
1999 Department of Defense Breast Cancer Research Predoctoral Fellowship
2000 Student Scientist of the Year Award from the American Cancer Society (Duke University)
2002 Lineberger Cancer Center Postdoctoral Fellowship
2003 Cottrell Postdoctoral Fellowship
2004 NRSA NIH Postdoctoral Fellowship
2004 Scaringe Fellowship (Edinburgh, UK)
2005 Outstanding Postdoctoral Fellow Research Award (UNC)
2006 Best Poster Presentation, Gordon Research Conference (Oxford, UK)
2007 Pathway to Independence Award; K99/RO0 (NIGMS, NIH)
2008 Joseph S. Pagano Award (Lineberger Cancer Center, UNC)
2011 T.C. Hsu Faculty Development Award for Young Faculty in the fields of Cell Biology and Genetics (UTGSBS)
2013 Dean's Teaching Excellence Award (UT Medical School)
2013 Dean's Service Award (UTGSBS)
2014 Dean's Teaching Excellence Award (UT Medical School)
2014 Dean's Service Award (UTGSBS)
2015 Dean's Teaching Excellence Award (UT Medical School)

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

2009-present Ad Hoc Reviewer: *Molecular Biology of the Cell, RNA, Chromosoma, Journal of Cell Biology, Molecular Gene Therapies, WIRES RNA, Methods, Nucleic Acids Research, Molecular and Cellular Biology*
2010 Ad Hoc Reviewer, Austrian Science Foundation
2011-2012 Member, Department of Defense CDMRP Prostate Cancer Division CET-3 study section
2011-2014 Standing Member of the American Heart Association Basic Cell, Genetics, and Epigenetic Peer Review 1 Study Group (GE1)

PUBLICATIONS:**A. Abstracts (total of 10).**

1. Albrecht TR and Wagner EJ.: A Genome-Wide RNA Interference Screen Identifies Novel Components Required for snRNA Biosynthesis. Annual Meeting of the RNA Society, Madison WI. 2009.
2. Ezzeddine N, Wagner EJ.: Characterizing 3' end Formation of Drosophila RNA Polymerase II transcripts. Annual Meeting of the RNA Society, Madison WI. 2009.
3. Ezzeddine N, Chen J, Albrecht TR, Wagner EJ.: Integrator 4 is a Critical Component of the Integrator Complex Required for snRNA 3' End Formation and Development Annual Meeting of the RNA Society, Seattle WA. 2010.
4. Chen J, Ezzeddine N, Albrecht TR, Wagner EJ.: Integrator 12 is a Phosphoprotein Involved in snRNA Biosynthesis. Annual Meeting of the RNA Society, Seattle WA. 2010.
5. Wagner EJ.: A Genome-Wide RNAi Screen Identifies Additional Integrator Subunits and a Novel Role of cdk8 in snRNA 3' end formation. RNA UK, Lakes District England. 2010.
6. Masamha CP, Shyu AB, Wagner EJ.: Identification of factors that drive alternative cleavage and polyadenylation in cancer. Eukaryotic mRNA Processing meeting, CSHL NY. 2011.
7. Chen J & Wagner EJ.: Functional Characterization of Drosophila Integrator Subunit 12 identifies a Microdomain Required for snRNA 3' End Formation. ASBMB Transcription Meeting, Snowbird UT. 2012.
8. Masamha CP, Xia Z, Albrecht TA, Li W, Shyu AB, Wagner EJ.: CFIm25 Links Global change in APA to Cell Growth Control and Glioblastoma Survival. Annual Meeting of the RNA Society, Davos Switzerland. 2013
9. Peart, NJ & Wagner EJ.: Defining the *cis* regulatory elements of Dux4 mRNA 3'end formation. Eukaryotic mRNA Processing Meeting, CSHL NY. 2013.
10. Masamha CP, Xia Z, Albrecht TA, Li W, Shyu AB, Wagner EJ.: CFIm25 Links Global change in APA to Cell Growth Control and Glioblastoma Survival. RNA 3' End Formation, Oxford England. 2013.
11. Peart and Wagner EJ. Identification of a Downstream Auxiliary Element that Regulates Dux4 pre-mRNA processing. Annual RNA Society Meeting. Quebec Canada. 2014

B. Refereed Original Articles in Journals (total of 39).

(for up-to-date CV, see: <http://scholar.google.com/citations?hl=en&user=xEhYd0QAAAAJ>)

1. Wagner EJ, Carstens RP, Garcia-Blanco MA.: A novel isoform ratio switch of the polypyrimidine tract binding protein. ***Electrophoresis***, 20:1082-1086, 1999.
2. *Carstens RP, *Wagner EJ, Garcia-Blanco MA.: An intronic splicing silencer causes skipping of the IIIb exon of fibroblast growth factor receptor 2 through involvement of polypyrimidine tract binding protein. ***Mol. Cell Biol.***, 20:7388-7400, 2000. (*Co-First Authors).
3. Wagner EJ, Garcia-Blanco MA.: Polypyrimidine tract binding protein antagonizes exon definition. ***Mol. Cell Biol.***, 21:3281-3288, 2001.
4. Zeng Y, Wagner EJ, Cullen BR.: Both natural and designed Micro RNAs can inhibit the expression of cognate mRNAs when expressed in human cells. ***Mol. Cell***, 9:1327-1333, 2002.
5. Wagner EJ, Garcia-Blanco MA.: RNAi-mediated PTB depletion leads to enhanced exon definition. ***Mol. Cell***, 10:943-949, 2002.
6. Mistry N, Harrington W, Lasda E, *Wagner EJ, *Garcia-Blanco MA.: Of urchins and men: evolution of an alternative splicing unit in fibroblast growth factor receptor genes. ***RNA***, 9: 209-217, 2003. (*Co-corresponding Authors)
7. Wagner EJ, Curtis ML, Robson NR, Baraniak AP, Eis PS, Garcia-Blanco MA.: Quantification of alternatively spliced FGFR2 RNAs using the RNA invasive cleavage assay. ***RNA***, 9(12):1552-1561, 2003.
8. Baraniak AP, Lasda EL, Wagner EJ, Garcia-Blanco MA.: A stem structure in fibroblast growth factor receptor 2 transcripts mediates cell-type-specific splicing by approximating intronic control elements. ***Mol. Cell Biol.*** 23(24):9327-9337, 2003.
9. Wollerton MC, Gooding C, Wagner EJ, Garcia-Blanco MA, Smith CW.: Autoregulation of polypyrimidine tract binding protein by alternative splicing leading to nonsense-mediated decay. ***Mol. Cell***, 13(1):91-100, 2004.
10. Wagner EJ, Baines A, Albrecht TA, Brazas RM, Garcia-Blanco MA.: Imaging alternative splicing in living cells. ***Methods Mol. Biol.***, 257:29-46, 2004.
11. Florez PM*, Sessions OM*, Wagner EJ*, Gromeier M, Garcia-Blanco MA.: The polypyrimidine tract binding protein is required for efficient picornavirus gene expression and propagation. ***J. Virology***, 79(10):6172-6179, 2005. (*contributed equally)
12. Wagner EJ, Baraniak AP, Sessions OM, Mauger D, Moskowitz E, Garcia-Blanco MA.: Characterization of the intronic splicing silencers flanking FGFR2 exon IIIb. ***J. Biol. Chem.***, 280(14):14017-14027, 2005.
13. Dominksi Z, Yang XC, Purdy M, Wagner EJ, Marzluff WF.: A CPSF-73 homologue is required for cell cycle progression but not cell growth and interacts with a protein having features of CPSF-100. ***Mol. Cell Biol.***, 25(4):1489-1500, 2005.
14. Erkman JA., Wagner EJ, Dong J, Zhang Y, Kutay U, Marzluff WF.: Nuclear import of the stem-loop binding protein and localization during the cell cycle. ***Mol. Biol. Cell***, 16(6):2960-2971, 2005.

15. Wagner EJ, Berkow A, Marzluff WF.: Expression of an RNAi-resistant SLBP restores S phase progression. **Bioch. Soc. Tran.**, 33:471-473, 2005.
16. Wagner EJ, Ospina JK, Hu Y, Dundr M, Matera AG, Marzluff WF.: Conserved zinc fingers mediate multiple functions of ZFP100, a U7 snRNP associated protein. **RNA**, 12(7):1206-1218, 2006.
17. Richardson RT, Alekseev OM, Grossman G, Widgren EE, Thresher R, Wagner EJ, Sullivan KD, Marzluff WF, O'Rand MG.: Nuclear autoantigenic sperm protein (NASP), a linker histone chaperone that is required for cell proliferation. **J. Biol. Chem.**, 281(30):21526-21534, 2006.
18. Wagner EJ, Marzluff WF.: ZFP100, a component of the active U7 snRNP limiting for histone pre-mRNA processing, is required for entry into S phase. **Mol. Cell Biol.**, 26(17):6702-12, 2006.
19. Wagner EJ, Burch BD, Godfrey AC, Salzler HR, Duronio RJ, Marzluff WF.: A genome-wide RNA interference screen reveals that variant histones are necessary for replication-dependent histone pre-mRNA processing. **Mol. Cell**, 28(4):692-699, 2007.
20. Cakmakci NG, Lerner R, Wagner EJ, Zheng LX, Marzluff WF.: SLIP1, a factor required for activation of histone mRNA translation by the stem-loop binding protein. **Mol. Cell Biol.**, 28(3):1182-1194, 2008.
21. Marzluff WF, Wagner EJ, Duronio RJ.: Metabolism and regulation of canonical histone mRNAs: life without a polyA Tail. **Nat. Rev. Gen.**, 9(11):843-854, 2008.
22. Sullivan KD, Mullen TE, Marzluff WF, Wagner EJ.: Knockdown of SLBP results in nuclear retention of histone mRNA. **RNA**, 15(3):459-472, 2009.
23. Chen J, Wagner EJ.: snRNA 3' end formation: the dawn of the integrator complex. **Biochem. Soc. Trans.**, 38(4):1082-7, 2010.
24. Ezzeddine N, Chen J, Waltenspiel B, Burch B, Albrecht TR, Zhou M, Warren WD, Marzluff WF, Wagner EJ.: A subset of Drosophila integrator proteins is essential for efficient U7 snRNA and spliceosomal snRNA 3'-end formation. **Mol. Cell Biol.**, 31(2):328-341, 2011.
25. van Hoof A*, Wagner EJ*.: A brief survey of mRNA Surveillance. **Tren. in Bioch. Sci.**, 36(11):585-592, 2011. (*co- corresponding authors).
26. *Wagner EJ, *Carpenter PB*.: Understanding the language of Lys36 methylation at histone H3. **Nat. Rev. Mol. Cell Biol.**, Jan 23;13(2):115-26, 2012. (*co- corresponding authors).
27. Albrecht TR, Wagner EJ.: snRNA 3' end formation requires heterodimeric association of Integrator subunits. **Mol. Cell Biol.**, Mar;32(6):1112-23, 2012.
28. Chen J, Ezzeddine N, Waltenspiel B, Albrecht TR, Warren WD, Marzluff WF, Wagner EJ.: An RNAi screen identifies additional members of the Drosophila Integrator Complex and a requirement for cyclin C/Cdk8 in snRNA 3'-end formation. **RNA**, Dec;18(12):2148-56, 2012.

29. Chen J, Waltenspiel B, Warren WD, Wagner EJ.: Functional analysis of IntS12 identifies a microdomain that mediates activation of the Drosophila Integrator Complex. **J Biol. Chem.**, Feb; 15;288(7):4867-77, 2013.
30. Peart N, Sataluri A, Baillat D, Wagner EJ.: Non-mRNA 3' End Formation: how the other half lives. **WIRES RNA**., Sep-Oct;4(5):491-506, 2013.
31. Wang S, Wagner EJ, Mattox W.: Half Pint/Puf68 is required for negative regulation of splicing by the SR splicing factor Transformer2. **RNA Biol.**, Aug 1;10(8):1396-406, 2013.
32. Jodoin JN, Sitaram P, Albrecht TR, May S, Shboul M, Lee E, Reversade B, Wagner EJ*, and Lee LA*.: Nuclear-localized Asunder regulates cytoplasmic dynein localization via its role in the Integrator complex. **Mol. Biol. Cell**, Sep;24(18):2954-65, 2013 (*co-corresponding authors).
33. Jodoin JN, Shboul M, Albrecht TR, Lee E, Wagner EJ, Reversade B, LeeLA.: Integrator, a small nuclear RNA-processing complex, is required for ciliogenesis. **Biol. Open**, Dec 15;2(12):1390-6, 2013.
34. Masamha CP, Xia Z, Yan J, Albrecht TA, Li M, Shyu AB, Li W, Wagner EJ.: CFIm25 links Alternative Polyadenylation to Glioblastoma Tumor Suppression. **Nature**, Jun 19; 510(7505): 412-416. 2014.
Research Highlight: Han T, Kim JK: Driving glioblastoma by alternative polyadenylation. **Cell Research. 2014
35. Zhang KL, Zhou X, Han L, Chen LY, Chen JC, Shi ZD, Yang M, Ren Y, Yang J, Frank TS, Zhang CB, Zhang JX, Pu PY, Zhang JN, Jiang T, Wagner EJ*, Li M*, Kang CS*. MicroRNA-566 activates EGFR signaling and its inhibition sensitizes glioblastoma cells to nimotuzumab. **Mol. Cancer** Mar 20;13:63. 2014 (*co-corresponding authors).
36. Gardini A, Baillat A, Cesaroni M, Hu D, Marinis JM, Wagner EJ, Lazar MA, Shilatifard A, Shiekhhattar R.: Integrator Regulates Transcriptional Pause Release Following Activation. **Mol. Cell** Oct 2;56(1):128-39. 2014.
37. Xia Z, Donehower LA, Cooper TA, Neilson JR, Wheeler DA, Wagner E.J., Li W. (2014) Dynamic Analysis of Alternative Polyadenylation from RNA-seq Reveal a 3'UTR Landscape Across Seven Tumor Types. **Nature Comm.** Nov 20;5:5274.
38. Baillat D & Wagner E.J. (2015) Integrator: surprisingly diverse function in gene expression. **Trends in Biochemical Science**. May; 40(5); 257-264.
39. Peart N & Wagner EJ (2015) Gain of Function Reporters for mRNA 3' End Formation: Design and Optimization. **Biotechniques**. (in press)

C. Manuscripts submitted/in prep.

1. Oegema R, Baillat D, Heijnsman D, Schot R, Kia SK, Hoogeboom JM, Lequin M, Poulton CJ, Dobyns WB, de Coo IFM, Verheijen FW, Kremer A, van der Spek P, van Unen L, Wagner EJ*, Fornerod M, Mancini GMS* Mutations in Integrator Complex component INTS8 lead to defective snRNA processing and abnormal brain development. **Genes & Development** (pre-submission).2015. (co-corresponding authors)

2. Peart N and Wagner EJ. Characterization of the Dux4 3'end processing sequences identifies a downstream auxiliary element required for efficient cleavage and polyadenylation. *RNA Biol.* (in prep). 2014
3. Masamha CP, Xia Z, Collum S, Li W, Wagner EJ*, Shyu AB*. CFIm25 Regulates Alternative Polyadenylation of Glutaminase mRNA to Modulate Glutamine Metabolism. *EMBO Reports* (under revision)

SERVICE at UTHealth:

Faculty Committees- UT Medical School

1. Vice-Chair of Graduate School Education Committee (2013-2014)
2. Chair of Graduate School Education Committee (2014-pres)

Faculty Committees- UTGSBS

1. Admissions Committee (2012-2014)
2. Recruiting Council (2012-2013)
3. Internal Site Reviewer (2013)
4. Academic Standards Committee (2014-2015)

Graduate Student Committees

Students within the BMB program

1. Jiandong Chen (2009-2012). Chair of Advisory
2. Sarah May (2010-2011). Examination/Chair of Advisory.
3. Natoya Peart (2010-present). Chair of Advisory.
4. Anupama Sataluri (2010-2012). Chair of Advisory.
5. Denisse Gonzales (2010). Examination.
6. Sing-Yi Hou (2012). Examination.
7. William O'Brien III (2012). Examination.
8. Luis Acero (2011-2012). Advisory/Examination.
9. Lihe Chen (2011-2012). Advisory/Examination.
10. Scott Collum (2013-present). Chair of Advisory.
11. Drew Dolino (2014). Chair of Examination.
12. Hong Liu (2014-2015). Chair of Examination.
13. Kemly Philips (2015). Chair of Examination.

Students in other programs within the UT Medical School:

14. Daneen Schaeffer (2009-2010). Supervisory.
15. Borislava Tsanova (2009-2014). Examination/Supervisory.
16. Ana Klauer (2009-2012.). Advisory/Examination/Supervisory.
17. Jacob Verghese (2012). Supervisory.

18. Jennifer Abrams (2012-2014). Supervisory.
19. Kimberly Cope (2011-2014). Advisory/Examination.
20. Malik Raynor (2011-pres.). Advisory/Examination.
21. Alexandra Marshall (2012-pres.). Advisory.
22. Jael Han (2013-pres). Advisory.
23. Jillian Moran (2013-pres). Advisory.
24. Michael McCarthy (2011-2013.). Advisory.
25. George Britton (2013-2014). Advisory.
26. Chris Evans (2014-pres). Advisory.
27. Kelsey Maxwell (2014). Examination.

Students in other programs at UT MD Anderson

28. Shanzi Wang (2009-2012). Supervisory.
29. Kari Brewer (2009-2012). Supervisory.
30. Julie Allen (2010-2012). Supervisory.
31. Katelynn Bill (2010-11). Advisory.
32. Rajesha Rupaimoole (2011-pres.). Examination/Supervisory.
33. Behrouze Zand (2012-2013). Advisory.
34. Archana Nagaraja (2012-pres.). Examination/Advisory.
35. Han Chen (2012-pres.). Advisory.
36. Belinda Martinez (2013-pres.). Advisory
37. Erin Williams (2014-pres.). Advisory

Graduate Students Rotated:

1. George Tiller (2009-2010). (Student shared with Dr. Ambro van Hoof) Project: Developing a model system to study *Drosophila* totivirus.
2. Rita Sirrieh (2010-2011). Project: Understanding the role of Integrator 10 in snRNA 3' end formation.
3. Morayo Adebibi (2013). Project: Investigating CFIm25 regulated biosynthesis of miR-21.
4. Caitlin Edmunds (2014). Project: Investigating APA in lung cancer cells.
5. Erin Williams (2014). Project: Determine histone modifications recognized by the PHD finger of IntS12.
6. Doug Litwin (2015). Project: Mapping interaction motifs between IntS5 and IntS8.
7. Camilla Fontes (2015). Project: Developing a CRISPR-mediated fluorescence reporter cell line to display GLS RNA processing

Other Service at the UT Medical School

1. Judge for GSEC Student Poster Competition (2009)
2. Master Advisor for First-Year UT Medical students (2010-present)
3. Organizer of The Program in Biochemistry and Molecular Biology Annual Research Retreat (2011-2013)
4. Organizer of Department of Biochemistry and Molecular Biology Seminar Series (2011-2013)

SERVICE ON OTHER UNIVERSITY COMMITTEES:**Student Committees- Baylor College of Medicine, Houston:**

1. **Gloria Echeverria** (2010-pres.). Advisory.
Ph.D. student in Dr. Tom Cooper's laboratory

Student Committees- University of Texas Medical Branch, Galveston:

2. **Curtis Nutter** (2014-pres.). Advisory.
Ph.D. student in Dr. Muge's Kuyumcu-Martinez

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:**Graduate Students Trained:**

1. **Jiandong Chen** (2009-2013). Ph.D. thesis student. Project: Understanding the role of Integrator 12 in snRNA 3' end formation.
2. **Sarah May** (2010-2011). M.S. thesis student. Project: Identification of Integrator subunits in P bodies of mammalian and *Drosophila* cells.
3. **Natoya Peart** (2010- present). Ph.D. thesis student. Project: Characterizing the mechanism of Dux4 mRNA 3' end formation and designing inhibitory therapeutic agents.
4. **Anupama Sataluri** (2010-2013). M.S. thesis student. Project: Characterizing Domains within Human Integrator 4 in cell cycle progression and Cajal Body maintenance.
5. **Scott Collum** (2012-present). Ph.D. thesis student. Mechanisms of CFIm25 regulated Alternative Cleavage and polyadenylation.

SPONSORSHIP OF POSTDOCTORAL FELLOWS:**Postdoctoral Fellows:**

1. **Nader Ezzeddine** (2009-2011). Project: The function of Integrator 4 in *Drosophila* snRNA 3' end formation.
2. **Chioniso Patience Masamha** (2010-pres.). Project: Developing a model system to study alternative cleavage and polyadenylation in cancer progression.
3. **David Baillat** (2012-pres.). Project: Investigating the mechanism of the Integrator Complex in snRNA 3' end formation. (Dr. Baillat is a Research Track Assistant Professor)

SPONSORSHIP OF MEDICAL STUDENTS:**UT Medical Students:**

1. **Mark Cooper** (2010). UT Summer Research Program funded through NIDDK. Project: Exploring the role of chromatin modifications in the alternative cleavage and polyadenylation of Cyclin D.
2. **Jay Messer** (2013). UT Summer Research Program. Project: Investigating the

connection between CFIm25-regulated APA and neural differentiation

TEACHING RESPONSIBILITIES:

UT Medical School:

2009-2015	Conference Leader/Lecturer Medical Biochemistry, UT Medical School (20 lectures/year)
2012-2015	Lecturer Medical Biochemistry for Texas JAMP program (13 lectures/year)
2013-2015	Lecturer Medical School Pre-entry Program: Biochemistry (5 lectures/year)

UT Graduate School of Biomedical Sciences:

2009-2013	Instructor Ethics in Biomedical Sciences, UTGSBS (11 sessions/year)
2009-2013	Lecturer Topics in Biochemistry, UTGSBS (3 lectures/year)
2009-2015	Lecturer Methods in Biochemistry, UTGSBS (2 lectures/year)
2012-2014	Course Director Seminars in Biochemistry
2014-2015	Course Director Emerging Fields in Biochemistry and Molecular Biology: RNA Biology

GRANT SUPPORT:

Current/Approved Funding:

RP140800 Wagner (PI) 11/01/14-11/01/17
 Cancer Prevention and Research Institute of Texas (CPRIT)
"The Role of Alternative Polyadenylation in Glioblastoma Tumor Progression"
 The goals of this project are to generate a CFIm25 APA "Atlas" specific to GBM cells; to determine the role of CFIm25 as an APA master regulator in GBM tumor formation and progression; and to determine the post-transcriptional regulatory networks that regulate CFIm25 levels in GBM cells.

1009 Wagner (PI) 01/01/15-12/31/16
 Friends of FSH Research
"Testing Molecular Determinants of DUX4 3' End Formation"
 The aims of this study are to design and optimize AONs capable of causing transcriptional readthrough of the Dux4 cleavage and polyadenylation signals and to test AONs ability to prevent cleavage and polyadenylation of endogenous Dux4 mRNA in FSHD cells and assess genome-wide impact of AONs on global mRNA cleavage and polyadenylation.

UL1 TR000371 Wagner (PI) 01/01/15-12/31/16
 NIH/CTSA and UTHealth Brain Initiative
"Deciphering a role for 3'UTR length in neural plasticity"
 The goals of this project are to identify specific genes in specific neural cell types that are regulated through APA and to discover diversity of function within brain cell types and explore fundamental biological principles that underlie these functions.

AU-1889 Wagner (PI) 06/01/15-05/31/18
 Welch Foundation
"Cryo-EM Analysis of the Integrator Complex"
 This project aims to 1) develop a tandem purification of *Drosophila* Integrator complex to increase Cryo-EM resolution and determine the location of where RNAPII associates with the complex; 2) map the position of each Integrator subunit in the 3-dimensional Cryo-EM reconstruction of the Integrator Complex using maltose binding protein fusion proteins.

1R01CA166274 Wagner (PI) 04/01/12-03/31/15
 National Institutes of Health/NCI
"A HTS Assay for Inhibitors of Proximal Cleavage and Polyadenylation"
 This project aims to develop a high throughput screening assay for compounds that interfere with the process of alternative cleavage and polyadenylation.

1R01CA193466-01 Li (PI)/Wagner (co-I) 1/1/16 – 12/31/21
 National Institutes of Health/NCI
"Computational and Experimental Modeling of Alternative Polyadenylation"
 This study will analyze the importance of alternative polyadenylation in tumors using TCGA. The Wagner lab will be conducting the wet experiments to complement the Li lab bioinformatics.

PENDING GRANT SUPPORT:

Agency:	NSF
Title:	Investigating the <i>Drosophila</i> Integrator Complex in small RNA biosynthesis and Transcriptional Pause Release
I.D.:	NSF1517812
P.I.:	Eric J. Wagner
Project Period:	9/1/16 – 8/31/20

Agency: NIH (R01)
 Title: Adenosine Signaling and Lung Fibrosis
 I.D.: R01HL070952
 P.I.: Michael Blackburn
 Project Period: 9/1/15 – 8/31/20

COMPLETED GRANT SUPPORT:

Agency: The Muscular Dystrophy Foundation (Research Grant)
 Title: Developing Dux4 3' End Formation Antagonists to treat FSHD
 I.D.: MDA 202141
 P.I.: Eric J. Wagner
 Project Period: 8/1/2011- 3/31/2014

Agency: NIH/NINDS (R21)
 Title: Assay for Compounds that Elicit Misprocessing of Small Nuclear RNA
 I.D.: 1R21NS067660-01
 P.I.: Eric J. Wagner
 Project period: 09/25/09-8/31/11

Agency: NIH/NIGMS (K99-R00)
 Title: Characterizing Novel Factors Involved in Histone pre-mRNA Processing
 I.D.# 5R00GM080447-03
 P.I.: Eric J. Wagner
 Project period: 08/01/09-7/31/12

Agency: Department of Defense-Prostate Cancer Directive
 Title: Avoiding microRNA function through Alternative Polyadenylation in Prostate Cancer
 I.D.: PC100374
 P.I.: Eric J. Wagner
 Project Period: 4/1/2011- 3/30/2012

Agency: Cancer Prevention and Research Institute of Texas (CPRIT)
 Title: Understanding the Connection Between microRNA Expression and Alternative Cleavage and Polyadenylation in Cancer
 I.D.: HIRP100107
 P.I.: Eric J. Wagner
 Project Period: 5/01/2010-4/30/2012

Agency: National Institute of Health
 Title: Alternative Cleavage and Polyadenylation Events as Biomarkers
 ID: 1R03CA167752
 PI: Eric J. Wagner
 Project Period: 01/01/13-12/31/14

Invited Seminars:

- 2009 Department of Molecular and Cellular Biology (Baylor College of Medicine, Houston, TX). Invited Departmental Seminar.
- 2009 Department of Biochemistry (University of Michigan). Invited Departmental Seminar.
- 2010 Department of Molecular and Cellular Biology (Rosalind Franklin University, Chicago). Invited Departmental Seminar.
- 2011 Department of Integrated Biology and Pharmacology (UTHealth, Houston TX). Invited Departmental Seminar.
- 2011 Department of Genetics (MD Anderson Cancer Center, Houston, TX). Invited Departmental Seminar.
- 2012 Workshop in RNA Processing (UTHealth).
- 2012 Department of Molecular Physiology and Biophysics (Baylor College of Medicine, Houston, TX). Invited Departmental Seminar.
- 2012 Center for Noncoding RNAs in Cancer (MD Anderson Cancer Center, Houston, TX). Invited Oral Presentation.
- 2013 Department of Biology (University of Missouri at St. Louis). Invited Departmental Seminar.
- 2014 Department of Biochemistry and Molecular Biology (University of Texas Medical Branch at Galveston). Invited Departmental Seminar.
- 2014 Lineberger Cancer Center (University of North Carolina at Chapel Hill). Postdoctoral Fellow Research Retreat. Keynote Speaker.
- 2015 Department of Biochemistry and Molecular Biology (University of Texas Medical Branch at Galveston). Departmental Seminar.
- 2015 Program in Genetics (University of North Carolina at Chapel Hill). Departmental Seminar.
- 2015 UTHealth Department of Pediatrics Annual Retreat (UTHouston). Keynote Speaker.
- 2015 Department of Biochemistry and Molecular Biology (University of Texas Medical Branch at Galveston). Departmental Seminar.
- 2015 Department of Biology (University of North Carolina at Chapel Hill). RNA Interest Group Seminar.
- 2015 Sarepta Therapeutics (Cambridge, MA). Invited Seminar
- 2015 Department of Biological Sciences (University of Texas at Dallas). Departmental Seminar.

Conferences Attended (2009-present)**Oral Presentations**

- 2009 RNA Society Meeting (Madison, WI).
Chosen for Plenary Oral Presentation
- 2010 ASBMB Meeting (Anaheim, CA).
Invited Oral Presentation
- 2010 RNA UK (Lakes District, UK).
Invited Oral Presentation
- 2012 ASBMB Transcriptional Control (Snowbird Utah).
Invited Oral Presentation
- 2013 Annual Meeting of the RNA Society (Davos, Switzerland).
Chosen for Plenary Oral Presentation
- 2013 RNA 3' End Formation Workshop (Oxford, UK).

Oral Presentation

- 2015 Annual Meeting of the RNA Society (Madison, WI)
Chosen for Plenary Oral Presentation
- 2015 Eukaryotic mRNA Processing (CSHL)
Chosen for Platform Oral Presentation
- 2015 NC RNA Society Meeting (Duke University)
Chosen for Platform Oral Presentation

Poster Presentations

- 2010 Annual RNA Society Meeting (Seattle, WA).
- 2011 Cold Spring Harbor mRNA Processing.
- 2013 Cold Spring Harbor mRNA Processing.
- 2014 Annual RNA Society Meeting (Quebec City, CA).
- 2015 Annual RNA Society Meeting (Madison, WI).