

Prepared 09/02/2020

**KAREN ADELL LEWIS, PH.D.**

Department of Chemistry and Biochemistry  
Texas State University  
KAL137@txstate.edu

601 University Ave  
San Marcos, TX  
(512) 245-2374 (fax)

**APPOINTMENTS**

- 09/2020 – present Associate Professor, Department of Chemistry and Biochemistry  
Texas State University, San Marcos, TX
- 09/2014 – 8/2020 Assistant Professor, Department of Chemistry and Biochemistry  
Texas State University, San Marcos, TX
- 2016 – 2019 Adjunct Doctoral – Graduate Faculty Courtesy Appointment,  
Department of Biology, Texas State University, San Marcos, TX
- 2017 – present Affiliated Faculty, Biomolecular Research Center,  
Boise State University, Boise, ID
- 2017 – present Adjunct Faculty, Department of Cell Systems and Anatomy, University of  
Texas Health San Antonio, San Antonio, TX

**EDUCATION**

- 5/2009 – 07/2014 Postdoctoral Fellow (Advisor: Deborah S. Wuttke, Ph.D.)  
University of Colorado Boulder, Boulder, Colorado
- 7/2003 – 4/2009 Graduate Student (Advisor: Philip J. Thomas, Ph.D.)  
University of Texas Southwestern Graduate School, Dallas, Texas
- 9/2001 – 5/2003 Undergraduate Honors Student (Advisor: Valerie M. Kish, Ph.D.)  
University of Richmond, Richmond, Virginia
- 7/1998 – 6/1999 Werner H. Kirsten Intern (Advisor: Thomas D. Schneider, Ph.D.)  
1999, 2000, 2001 Summer Cancer Research Trainee  
National Cancer Institute at Frederick, Frederick, Maryland

**OTHER PROFESSIONAL EXPERIENCE**

- 2020 Co-Organizer, 34<sup>th</sup> Annual Gibbs Conference on Biological Thermodynamics
- 2015 Consultant, Applied Analytical Inc., Pflugerville, TX  
*Biochemical sample preparation for analysis*

**HONORS AND AWARDS**

- 2018 College Achievement Award for Excellence in Teaching, College of Science  
and Engineering, Texas State University
- 2018 Volunteer of the Year, Central Texas Local Section, American Chemical  
Society

2017	Presidential Distinction Award for Excellence in Service, College of Science and Engineering, Texas State University
2016	Presidential Distinction Award for Excellence in Teaching, College of Science and Engineering, Texas State University
2016 – 2018	Texas State University Service Learning Fellow
2003	Academic Excellence Award, UT-Southwestern Graduate School of Biomedical Sciences, Division of Cell and Molecular Biology
1999 – 2003	Ethyl and Albemarle Science Scholar, University of Richmond

## **PUBLICATIONS AND PRESENTATIONS**

### ***1. Publications***

‡ *Texas State undergraduate student*; + *Texas State graduate student*

**Lewis KA** and Luxford CJ. (2020) “Integrating Manipulatives and Animations to Visualize Holliday Junctions.” *CourseSource*, in press.

Dock-Bregeon A-C, **Lewis KA**, and Conte MR. (2019). “Structural Advances in La and La Related Proteins.” *RNA Biology*. E-published ahead of print; doi: 10.1080/15476286.2019.1695712

Ream JA‡, Lewis LK, **Lewis KA**. (2018) “Horizontal Agarose Gel Mobility Shift Assay for Protein-RNA Complexes.” *Methods in Molecular Biology*, 1855:363-370. doi: 10.1007/978-1-4939-8793-1\_31.

**Lewis KA**, Altschuler SE, Wuttke DS. (2018) “Measuring Low-Picomolar Apparent Binding Affinities by Minigel Electrophoretic Mobility Shift.” *Methods in Molecular Biology*, 1855:341-354. doi: 10.1007/978-1-4939-8793-1\_29.

Castro JM<sup>+</sup>, Horn DA, Pu X, **Lewis KA**. (2017) “Recombinant Expression and Purification of the RNA-binding LARP6 Proteins From Fish Genetic Model Organisms.” *Protein Expression and Purification*, 134:147-153. doi: 10.1016/j.pep.2017.04.004.

Villarreal MA‡, Biediger NE‡, Bonner NA‡, Miller JN‡, Zepeda SK‡, Ricard BJ‡, García DM, **Lewis KA**. (2017) “Determining Zebrafish Epitope Reactivity to Commercially Available Antibodies.” *Zebrafish*, 14(4): 387-389. doi 10.1089/zeb.2016.1401.

Ream JA‡, Lewis LK, **Lewis KA**. (2016) “Rapid agarose gel electrophoretic mobility shift assay for quantitating protein:RNA interactions.” *Anal Biochem*, 511:36-41. doi10.1016/j.ab.2016.07.027.

**Lewis KA**, Pfaff DA, Earley JN, Altschuler SE, Wuttke DS. (2014) “The tenacious recognition of yeast telomere sequence by Cdc13 is fully exerted by a single OB-fold domain.” *Nucleic Acids Res.* 42(1):475.

Altschuler SE\*, **Lewis KA**\*, and Wuttke DS. (2013) “Practical strategies for the evaluation of high-affinity protein/nucleic acid interactions.” *J. Nucleic Acids Invest.* 4(1):e3. \*co-first authors

**Lewis KA** and Wuttke DS. (2012) “Telomerase and telomere-associated proteins: structural insights into mechanism and evolution.” *Structure* 20(1):28.

- Lewis KA**, Su Y, Jou O, Ritchie C, Foong C, Hynan LS, White CL, Thomas PJ, Hatanpaa KJ. (2010) "Abnormal neurites containing C-terminally truncated  $\alpha$ -synuclein are present in Alzheimer's Disease without conventional Lewy body pathology." *Am. J. Pathol.* 177(6):3037.
- Lewis KA**, Yaeger A, DeMartino GN, Thomas PJ. (2010) "Accelerated formation of  $\alpha$ -synuclein oligomers by concerted action of the 20S proteasome and familial Parkinson's mutations." *J. Bioenerg. Biomembr.* 42(1):85.
- Chen Z\*, **Lewis KA\***, Shultzaberger RK, Lyakhov IG, Zheng M, Doan B, Storz G, Schneider TD. (2007) "Discovery of Fur binding site clusters in *Escherichia coli* by information theory models." *Nucleic Acids Res.* 35(20):6762. \*co-first authors
- Shultzaberger RK, Chen Z, **Lewis KA**, Schneider TD. (2007) "Anatomy of *Escherichia coli* sigma70 promoters." *Nucleic Acids Res.* 35(3):771.
- Liu CW, Giasson BI, **Lewis KA**, Lee VM, DeMartino GN, Thomas PJ. (2005) "A precipitating role for truncated alpha-synuclein and the proteasome in alpha-synuclein aggregation: implications for pathogenesis of Parkinson disease." *J. Biol. Chem.* 280(24):22670.
- Zheng M, Wang X, Doan B, **Lewis KA**, Schneider TD, Storz G. (2001) "Computation-directed identification of OxyR DNA binding sites in *Escherichia coli*." *J. Bacteriol.* 183(15):4571.

## 2. Presentations

- Lewis KA, "Structural and functional insights from a fish homolog of the RNA-binding protein LaRP6." Department of Biological Sciences, University of Pittsburgh, Pittsburgh, PA, United States. (21 October 2019)
- Lewis KA, "Both a Student and a Scientist: Science Outreach as Service Learning in an Undergraduate Biochemistry Program," American Society for Biochemistry and Molecular Biology, University of the Incarnate Word, San Antonio, TX, United States. (28 July 2019)
- Lewis KA, Toner CM, Luxford CJ, Transforming Undergraduate Education in the Molecular Life Sciences, "Let's Do The Twist: An Affordable Manipulative for Visualizing Holliday Junctions," American Society for Biochemistry and Molecular Biology, University of the Incarnate Word, San Antonio, TX, United States. (27 July 2019)
- Lewis KA, Departmental Seminar Series, "Insights into LARP6 structure and function using fish homologs," Texas Woman's University Department of Chemistry, Denton, TX, United States. (22 February 2019)
- Lewis KA, Departmental Seminar Series, "Insights into LARP6 structure and function using fish homologs," University of Texas at Arlington Department of Biology, Arlington, TX, United States. (21 February 2019)
- Lewis KA, Departmental Seminar Series, "Insights into LARP6 structure and function using teleost fish homologs," Boise State University Department of Chemistry and Biochemistry, Boise, ID, United States. (2 November 2018)
- Lewis KA, Joint Biological and Biomedical Seminar Series, "Using Comparative Biochemistry to Identify the Molecular Mechanisms of the RNA Binding Protein LARP6," University of Arizona MCB/CBC/CMM Departments, Tucson, AZ, United States. (16 October 2018)
- Lewis KA, Departmental Seminar Series, "Using Comparative Biochemistry to Identify the Molecular Mechanisms of the RNA Binding Protein LARP6," University of Southern

Mississippi Department of Chemistry and Biochemistry, Hattiesburg, MS, United States. (21 September 2018)

Lewis KA, 5th International Meeting of the La-Related Protein Society (LARPSOC), "Insights into LARP6 Structure and Function Using Telost Fish Homologs," La-Related Protein Society (LARPSOC), Rothenburg ob der Tauber, Germany. (11 September 2018)

Lewis KA, "Fish Are Friends: Using Comparative Biochemistry to Identify the Molecular Mechanisms of the RNA Binding Protein LARP6." Department of Biology, Trinity University, San Antonio, TX (26 February 2018)

Lewis KA, "Identifying molecular mechanisms of the collagen regulator LARP6 using comparative biochemistry." Biomolecular Research Center, Boise State University, Boise, ID (23 August 2017)

Lewis KA, "RNA binding by evolutionarily divergent LARP6 proteins." Department of Cellular and Structural Biology, University of Texas Health Sciences Center at San Antonio (29 November 2016)

Lewis KA, "RNA binding by evolutionarily divergent LARP6 proteins." Department of Chemistry and Biochemistry, St. Edward's University, Austin, TX (21 October 2016)

Lewis KA, "Promiscuous nucleic acid binding by La-related protein 6." Department of Chemistry, Boise State University, Boise, ID (13 March 2016)

Lewis KA, "Biochemistry of protein-nucleic acid interactions: from telomeres to mRNA." Department of Biology, Texas State University (23 January 2015)

## **TEACHING ACTIVITY**

2014 – present

Texas State University

CHEM 1430-L, Chemistry for Non-Science Majors: introductory chemistry laboratory for undergraduate non-science majors (*2.5-hour lab; 20 students*)

CHEM 3275/3381, Biochemical Techniques: undergraduate foundational biochemistry majors laboratory (*4-hour laboratory + 2 hour lecture; 30-55 students*)

CHEM 4360, Molecular Biology: senior-level advanced course for undergraduate biochemistry majors and minors (*3 hour lecture; 50-80 students*)

CHEM 4375, Fundamentals of Biochemistry: upper-level survey for undergraduate chemistry majors and biochemistry minors (*3 hour lecture; 80 students*)

CHEM 5375, Fundamentals of Biochemistry: leveling course for incoming M.S. biochemistry students (*3 hour lecture; 1 student*)

CHEM 5383, Molecular Biology & Molecular Genetics: foundational molecular biology for M.S. biochemistry students (*3 hour lecture; 5 students*)

CHEM 5386, Proteins: advanced study of protein evolution, structure, and function for M.S. biochemistry students (*3 hour lecture; 15-20 students*)

## **SCHOLARLY ACTIVITY**

### ***1. Grant Support***

2016 – 2022

Academic Research Enhancement Award, National Institute of General Medical Sciences, National Institutes of Health. "Identification of the

- Molecular Mechanisms of RNA Binding by the Posttranscriptional Regulator LARP6". GM119096-02, K.A. Lewis, PI.
- 2011 – 2013 Ruth L. Kirschstein National Research Service Award, National Institute of General Medical Sciences, National Institutes of Health. "In Vitro Reconstitution and Biochemical Characterization of Yeast Telomerase." GM093528, K.A. Lewis, PI.
- 2004 – 2007 Predoctoral Institutional Research Training Program, National Institute of General Medical Sciences, National Institutes of Health. "Mechanisms of Drug Action and Disposition." GM007062-29, D.J. Mangelsdorf, PI; K.A. Lewis, supported student.

## 2. Research Mentoring Activity

### a. Mentoring Program Participation

- 2018 – present Mentor, REU Site: A Chemistry REU on Molecular Innovation and Entrepreneurship (CheMIE) (NSF 1757843; G.Beall/C.Holland, PI)  
*Student: P. Chaiken, S. Berger*
- 2014 – present Mentor, South Texas Doctoral Bridge Program (NIH GM102783; B. Oyajobi, PI)  
*Students: J. Castro, E. Salas, F. Betancourt, E. Peña, M. Carrizales, A. Ibrahim*
- 2014 – 2020 Mentor, Henry-Louis Stokes Alliance for Minority Participation Program (NSF 1407736; J. Ward, PI; B. Wilson, co-PI)  
*Students: J. Ream, F. Morrison, N. Torres*
- 2016 Mentor, Bridges to Biomedicine Program (NIH GM107759; R. Walter, PI)  
*Student: L. Lane*
- 2015 Mentor, REU Site: A Chemistry REU on Molecular Innovation and Entrepreneurship (CheMIE) (NSF 1156579; W. Brittain, PI)  
*Student: A. Kocian*

### b. Master's Thesis Supervisor (9 completed, 2 in progress)

<i>Student</i>	<i>Thesis</i>	<i>Year</i>	<i>Current position</i>
José Miguel Castro	Biochemical Analysis of Evolutionary Divergent Vertebrate LARP6 Proteins	2017	Associate Scientist II, Bioverativ/Sanofi
Francisco Betancourt	Recombinant expression and purification of the LARP6 proteins from <i>Arabidopsis thaliana</i>	2017	M.S. Medical Sciences, Texas Tech University
Eliseo Salas	Characterizing the ligand specificity of the RNA binding protein LARP6	2017	Ph.D. Genetics Program, Emory University
Eliana L. Peña	Structural and Biochemical Characterization of Domains in the Posttranscriptional Regulator LARP6	2018	Ph.D. Biochemistry, Molecular Biology and Biophysics Program, University of Minnesota
Hatice Kùlköylüođlu	Characterization of the N-Terminal Region of the RNA-Binding Protein LARP6 in Teleosts (issued by Ondokuz Mayıs University, Turkey)	2018	Biologist, Abant İzzet Baysal Üniversitesi

Melissa G. Carrizales	Divergence of the RNA Recognition Motif in Vertebrate LARP6 Proteins	2019	Ph.D. Biochemistry and Biophysics Program, Yale University
Samantha K. Zepeda	Mechanisms of Human LARP6 Nuclear Export	2019	Ph.D. Biochemistry Program, Univ of Washington
Brianna J. Norbury	The Structural and Functional Role of Vertebrate LaRP6 N-Terminal Region	2020	Research Technician, Texas A&M Medical Center Houston
Julia E. Roberts	The N-Terminal Region of the Arabidopsis thaliana LaRP6C Protein Contributes to Structural Stability	2020	Ph.D. Biochemistry University of Colorado Boulder
Ayyam Ibrahim	In progress		
Benjamin Zejnelovski	In progress		

## c. Thesis/Dissertation Committee Member

<i>Student</i>	<i>Degree</i>	<i>Thesis/Dissertation</i>	<i>Year</i>	<i>Current position</i>
Blanca Rodriguez	M.S.	Investigation of the binding affinity of RNA molecules for hydroxalcite and montmorillonite as potential RNA interference-based therapy delivery systems	2015	Ph.D. student, Duke University
Shobha Gokul	M.S.	Quantifying the ability of RF-amide neuropeptide analogs to promote amyloidosis of recombinant human prion protein	2015	Scientist I, Asuragen, Austin, TX
Jordan Chang	M.S.	Molecular genetic characterization of <i>Xiphophorus maculatus</i> JP 163 B skin upon exposure to varying wavelengths of light	2016	Ph.D. student, Penn State Biomedical Sciences
Lance English	M.S.	Electrostatic effects on the structure of intrinsically disordered proteins	2016	Ph.D. student, Texas State Biology
Leona Martin	M.S.	Investigating the cold adaptation of intrinsically disordered proteins in p53 homologues	2016	Mass spectrometry specialist, MD Anderson Cancer Ctr, Houston, TX
Erin Tilton	M.S.	Cold adaptation of intrinsically disordered structure studied in p53 homologues	2016	High school chemistry teacher, Bastrop ISD
Chance Berman	M.S.	Purification of the alpha subunit of the epithelial sodium channel ( $\alpha$ ENAC) for surface plasmon resonance (SPR) studies	2016	
Kelsey Middleton	M.S.	Working towards a cancer cell selective and brain penetrating anti-glioma drug	2016	
Kimberly Ramsdell	M.S.	Elucidation of critical residues within the extracellular loop of the epithelium sodium channel	2016	Lecturer, Dept Chem & Biochem, University of the Incarnate Word, San Antonio, TX
Taylor Dismuke	M.S.	The identification of residues critical in the extracellular domain of the beta subunit of epithelial sodium channels	2017	Ph.D. student, University of North Carolina
Toyosi Adewunmi	M.S.	Identification of accessory proteins and their impact on the expression of the epithelial sodium channel (ENaC)	2017	Ph.D. student, Baylor College of Medicine
Monica Weis	M.S.	DNA double-stranded break repair is associated with changes in cell cycling and cell morphology in <i>Saccharomyces cerevisiae</i>	2017	

Veronica Partridge	M.S.	The role of CDKN3 in neuroblastoma differentiation	2017	
Michaela Sousares	M.S.	MicroRNA-506-3p as a differentiation agent for neuroblastoma	2017	
Benjamin Ricard	M.S.	The effects of primary sequence perturbation on the structure of intrinsically disordered proteins	2017	Ph.D. student, Dartmouth University
Kimberly Long	M.S.	c-MYC G-Quadruplex DNA Structures: Characterization and Photocleavage	2018	Ph.D. student, Univ. of Texas School of Pharmacy
Nestor Rodriguez	M.S.	Differential Requirements for Nonhomologous End-Joining (NHEJ) Pathway Genes in DNA Repair	2018	
Richard Nuckels	Ph.D.	Differential Selection Pressure Among Duplicated Genes in Teleosts	2018	Lecturer, Univ Texas San Antonio
Lance English	Ph.D.	In progress		
George Parra	M.S.	Phosphoserine Incorporation into the Intrinsically Disordered N-Terminal Domain of the p53 Tumor Suppressor Protein	2019	
Elisia Paiz	M.S.	Using Heat Effects on Coil Hydrodynamic Size to Reveal the Nature and Energetics of Denatured State Conformational Bias	2019	Ph.D. student, Biophysics, UT-Southwestern
Sahar Kianarsi	M.S.	Effects of Cobalt on <i>Chromobacterium violaceum</i> Quorum Signaling in the Absence and Presence of Oxygen	2019	
Chelsea Davis	M.S.	The Inhibition of Mitogen-Activated Protein Kinase p38 $\alpha$ by Rooperol and Analogues	2020	
O'Taveon Fitzgerald	M.S.	Impact of DNA End Structure and Cellular Growth Phase on DNA Repair by Nonhomologous End-Joining (NHEJ) in <i>Saccharomyces cerevisiae</i>	2020	Ph.D. program, UT-Health San Antonio
Nathaniel Belnap	M.S.	In progress		
Kathryn Banks	M.S.	The Function of ALYREF on UAP56 Mediated R-Loop Resolution	2020	
Pete Camacho	M.S.	In progress		
Lydia Dollison	M.S.	In progress		
Jesse Durham	M.S.	In progress		

## d. Undergraduate Research Supervisor (38 alumni, 5 current)

<i>Student</i>	<i>Year(s)</i>	<i>Graduation</i>	<i>Post-graduate position; current position</i>
Michael Villarreal	2014 – 2015	2015	Lab Technician, UTMB, Galveston, TX
Netsanet Geleta	2014 – 2015	2015	Technician, Sonic Reference Lab, Austin, TX
Benjamin Euhus	2015	2015	Matriculating M.S. student, Technion Israel Institute of Technology, Haifa, Israel
Andrew Kocian	2015	2016	Quality Assurance Technician, Fifth Generation Inc., Austin, TX

Jennifer Ream	2014 – 2015	2017	
Rachel Koerber	2015	2018	
Ellie Peña	2015 – 2016	2016	M.S. student, Texas State Biochemistry
Shahad Amdeen	2015 – 2016	2016	
Natalie Bonner	2015 – 2016	2016	M.S., Univ of North Texas Med. Sci.; M.D. student, Dell Medical School at the University of Texas at Austin
Nicole Biediger	2015 – 2016	2016	D.O. student, University of Incarnate Word
Bisola Kayode-Williams	2015 – 2018	2018	
Jennifer Miller	2015 – 2016	2016	M.S. student, University of Incarnate Word
Maria Buena Karla D Belen	2016 – 2018	2018	
LaPatience Lane	2016 - 2017	2018	
Marriah Lewis	2016 – 2017	2017	
Katie Shaw	2016	2016	High school teacher, Maryland Public Schools
Chelsea Toner	2016 – 2018	2018	Ph.D. student, Biochemistry Program, University of Colorado Boulder
Samantha Zepeda	2016 – 2017	2017	M.S. student, Texas State Biochemistry
Mia Furgurson	2016 – 2017	2017	Ph.D. student, Molecular Physiology & Biophysics, Baylor College of Medicine
Maria Alejandra Moreno Aldana	2017	2017	Applying to M.D. programs
Lindsay Chovanec	2017 - 2018	2018	2 <sup>nd</sup> LT, U.S. Air Force
Corina Foster	2017 – 2018	2018	
Jessica Foster	2017 – 2018	2018	
Avery Guzman	2017 – 2018	2018	PharmD student, University of Texas at Austin
Courtney Otte-Petrill	2017 – 2018	2018	M.S., University of Strathclyde, Scotland
Charles Sanders	2017 – 2018	2018	
David Stephens	2017 – 2018	2018	Ph.D. student Biochemistry and Biophysics Program, University of Montana
Benjamin Collier	2018 – 2018		
Julia Roberts	2018 – 2019		Early-entry M.S. student, Texas State University Biochemistry
Paul Chaiken	2018		
Shane Rich-New	2018 – 2020		
Lindsey Clarke	2018 – 2019	2019	Applying to PA school
Savannah Berger	2019		



Ezra Hackler	2019 – present		
Andrea Stapper	2019 – 2020	2020	
Alexis Symons	2019 – 2020	2020	
Ethan Hernandez	2019 – 2020	2020	
Stefan Vidovic	2019 – 2020	2020	
Emily Brooke Lewis	2020	2020	
Olga Petrova	2020 – present		
Monnette Villarreal	2020 – present		
Sheila Gonzalez	2020 – present		
Jacob Patterson	2020 – present		

## **SERVICE ACTIVITY**

### ***1. Institutional***

#### a. University

- 2014 Departmental representative, Bobcat Days (15 Nov)
- 2015 Poster Session Judge, Bridges to Biomedicine Summer REU
- 2016 Instructor, Poster Session Preparation and Practice, Bridges to Biomedicine Summer REU
- 2016 – Co-facilitator, H-LSAMP Science Café (each long semester)
- 2017 Panelist, NIH Grantwriting Workshop, Texas State University (13 Jan)
- 2017 Panelist, Undergraduate Research Forum, Program for Excellence in Teaching and Scholarship (27 Oct)
- 2017, 2019 Poster Session Judge, Women in Science and Engineering Symposium
- 2017 – Tenure-Track Faculty Representative, University Leadership Assembly
- 2018 – Lead coordinator, Texas State University College of Science and Engineering/Hernandez Elementary School STEM Field Trip & Science Camp

#### b. Department

- 2014 Member, Biochemistry Lecturer Search Committee
- 2014 – Member, Biochemistry Curriculum Committee
- 2015 Member, 2015 Departmental Retreat Planning Committee
- 2015 – Member, Equipment Committee
- 2015 Coordinator, CENT 409/Biochemistry Core Renovation
- 2016 – Faculty Advisor, Texas State University ASBMB Student Chapter
- 2016 – Member, CHEM/BCHM Graduate Admissions Committee
- 2017 – 2018 Member, Biochemistry Faculty Search Committee (S. Kerwin, chair)

### ***2. Professional***

#### a. Manuscript Review

- 2016 *Journal of Experimental Zoology, Part B: Molecular and Developmental Evolution*

- 2016 – *Molecules*  
 2017 *Journal of Visualized Experiments (JoVE)*  
 2017 – *Pathogens*

b. Professional Development

- 2017 Panelist, American Chemical Society Postdoc to PUI Professor (P3) Workshop, Trinity University, San Antonio, TX (2 – 4 Mar)  
 2018 Judge, Annual Biomedical Research Conference for Minority Students, Indianapolis, IN (14 – 18 Nov)

3. *Community*

- 2014 Boy Scouts of America Capitol Area Council STEM Adventure Weekend, Chemistry co-leader  
 2015 Boy Scouts of America Capitol Area Council STEM Adventure Weekend, Chemistry assistant  
 2015 Speaker & Organizer, Central Texas ACS Local Section Nobel Prize Celebration  
 2015 Speaker and Co-Organizer, American Chemical Society Local Section Lectures on Color and Chemistry, Art.Science.Gallery, Austin, TX (17 Nov)  
 2016 Presenter and Co-Organizer, American Chemical Society Local Section Color and Chemistry Workshops, Art.Science.Gallery, Austin, TX (17 Jan, 24 Jul, 4 Dec)  
 2016 Organizer, Central Texas ACS Local Section Nobel Prize Celebration  
 2017 Speaker, Cpt. Thomas Moore Chapter of the Daughters of the American Revolution (20 Apr)  
 2017 Organizer, Texas State Biochemistry/Hernandez Elementary School 5<sup>th</sup> Grade Science Camp (17 – 21 Apr)  
 2017 Speaker and Organizer, American Chemical Society Central Texas Local Section Nobel Prize Event (4 Oct)

**PROFESSIONAL MEMBERSHIPS**

- 2014 – present American Society for Biochemistry and Molecular Biology  
 2015 – present American Chemical Society