

# Lance R. English

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## **TEACHING EXPERIENCE**

**Assistant Professor of Chemistry | Temple College | Temple, TX**

**Fall 2021 – Present**

- Instructor of record for lectures and laboratories for both science majors and nonmajors.
- Duties for all courses include face-to-face instruction, remote instruction, maintenance of office hours, development of curriculum in conjunction with other chemistry faculty, and mentoring undergraduate research students.
- Courses taught:
  - **Chem 1411** – General chemistry I lecture and lab for science majors.
  - **Chem 1412** – General chemistry II lecture and lab for science majors.
  - **Chem 2423** – Organic chemistry I lecture and lab for science majors.
  - **Chem 2425** – Organic chemistry II lecture and lab for science majors.
- Mentor for students participating in the Temple College Undergraduate Research Experience (TCURE) summer program.
- Students mentored or co-mentored:
  - Cassidy Knox – Summer 2023, in conjunction with Steven Whitten, Texas State
  - Aiden Valdez – Summer 2022, in conjunction with Jason Locklin, Temple College

**Adjunct Faculty Member | University of the Incarnate Word | San Antonio, TX**

**Fall 2018 – Fall 2021**

- Instructor of record for lectures and laboratories for both science majors and nonmajors
- Duties for all courses include face-to-face instruction, remote instruction, maintenance of office hours, and development of curriculum in conjunction with course coordinators
- Courses taught
  - **Biol 4251/Chem 4251** – Introductory biochemistry laboratory course with a heavy focus on protein purification and analysis with the goal of preparing biochemistry, chemistry, and biology majors for research laboratory environments
  - **Biol 4299/Chem 4260** – Independent research project working with students to purify and analyze intrinsically disordered proteins
  - **Chem 1101** – General chemistry I laboratory course for science majors
  - **Chem 1120** – Non-majors laboratory course surveying general, organic, and biochemistry topics most relevant to future healthcare professionals
  - **Chem 1320** – Second half of a nonmajors lecture sequence covering general, organic, and biochemistry topics most relevant to future healthcare professionals

**BiochemTV | [www.youtube.com/biochemtv](http://www.youtube.com/biochemtv)**

**Summer 2015 – Present**

- Founded a YouTube channel dedicated to brief chemistry, biochemistry, and software tutorials and general, organic, and biochemistry (GOB) lectures

**Orbis Education Services, Inc. | Indianapolis, IN**

**Spring 2020 – Summer 2020**

- Contracted as a *subject material expert* to design online versions of Chem 1120 and Chem 1320 for the University of the Incarnate Word's Accelerated Bachelor of Science in Nursing program

**Teaching Assistant | Texas State University | San Marcos, TX****Spring 2012 – Summer 2016**

- Laboratory instructor for both the Biology and Chemistry departments
- Duties for all laboratory courses included face-to-face instruction
- Duties for microbiology laboratory courses also included writing quizzes and preparing cultures and growth media
- Duties for biochemistry laboratory courses also included preparing buffers, protein samples, and chromatography media
- Courses taught
  - **Bio 2400** – Laboratory component of an introductory microbiology course for science majors
  - **Chem 1141** – General chemistry I laboratory course for science majors
  - **Chem 3275/Chem 3276** – Introductory biochemistry laboratory courses for biochemistry majors and biochemistry minors respectively

**EDUCATION & RESEARCH****Doctor of Philosophy | Texas State University | San Marcos, TX****Anticipated 2025**

- Aquatic Resources major, 3.91 GPA
- Dissertation: Measuring intrinsic conformational bias in denatured proteins
- Advisor: Dr. Steven T. Whitten

**Master of Science | Texas State University | San Marcos, TX****Aug 2016**

- Biochemistry major, 3.85 GPA
- Thesis: Electrostatic effects on the structure of intrinsically disordered proteins
- Advisor: Dr. Steven T. Whitten

**Bachelor of Science | Texas State University | San Marcos, TX****Aug 2013**

- Microbiology major, biochemistry minor, 3.66 GPA
- Undergraduate Research: The effects of indole supplementation on *Pseudomonas sp.* growth
- Advisor: Dr. J. Robert McLean

**Bachelor of Science | Texas State University | San Marcos, TX****Aug 2007**

- Geography major, mathematics minor, 3.35 GPA
- Certificate in Geographic Information Systems

**Associate of Science | Grayson College | Denison, TX****Aug 2003**

- Computer science major, 3.84 GPA

**PUBLICATIONS****Key: \* Corresponding author.**

- Yawasky AE, Ori AL, **English LR**, Whitten ST, Herr AB\*. Convergent behavior of extended stalk regions from staphylococcal surface proteins with widely divergent sequence patterns. Protein Science. 2023. [Link](#).
- **English LR**, Voss SM, Tilton EC, Paiz EA, So S, Parra GL, Paiz EA, Whitten ST\*. Impact of heat on coil hydrodynamic size yields the energetics of denatured state conformational bias. Journal of Physical Chemistry B. 2019. [Link](#).
- **English LR**, Tischer A, Demeler AK, Demeler B, Whitten ST\*. Sequence reversal prevents chain collapse and yields heat-sensitive intrinsic disorder. Biophysical Journal. 2018. [Link](#).

- **English LR**, Tilton EC, Ricard BJ, Whitten ST\*. Intrinsic  $\alpha$  helix propensities compact hydrodynamic radii in intrinsically disordered proteins. *Proteins*. 2017. [Link](#).
- Yarawsky AE, **English LR**, Whitten ST, Herr AB\*. The proline/glycine-rich region of the biofilm adhesion protein Aap forms an extended stalk that resists compaction. *Journal of Molecular Biology*. 2016. [Link](#).
- Dasari R, Masi M, Lisy R, Ferdérin M, **English LR**, Cimmino A, Mathieu V, Brenner AJ, Kuhn JG, Whitten ST, Evidente A, Kiss R, Kornienko A\*. Fungal metabolite ophiobolin A as a promising anti-glioma agent: In vivo evaluation, structure–activity relationship and unique pyrrolylation of primary amines. *Bioorganic & Medicinal Chemistry Letters*. 2015. [Link](#).
- Earl RA\*, Mitchell JS, **English LR**. Designing an evaporation pond for a fleet carwash. *Papers and Proceedings of Applied Geography Conferences*. 2005. [Link](#).

## CONFERENCE TALKS

Key: \* Corresponding author. Presenting author.

- Whitten ST\*, **English LR**, Paiz EA. Heat effects on coil hydrodynamic size reveal the energetics of denatured state conformational bias. 64<sup>th</sup> Annual Meeting of the Biophysical Society, San Diego, CA. February 17, 2020.
- **English LR**, Paiz EA, Whitten ST\*. Conformational bias in denatured protein and its role in folding. 74<sup>th</sup> Calorimetry Conference, Santa Fe, NM. July 31, 2019.
- **English LR\***, Tilton EC, and Whitten ST. Teaching study skills. Transforming Undergraduate Education in the Molecular Life Sciences, University of the Incarnate Word, San Antonio, TX. July 25-28, 2019.
- **English LR** and Whitten ST\*. Measuring intrinsic conformational bias in denatured proteins via mean hydrodynamic size. Southeast Regional Biophysical Consortium, Louisiana State University, Baton Rouge, LA. June 2-3, 2019.
- Whitten ST\* and **English LR**. Conformational bias in unfolded proteins studied by sequence reversal. 63<sup>rd</sup> Annual Meeting of the Biophysical Society, Baltimore, MD. March 3, 2019.
- **English LR** and Whitten ST\*. Sequence reversal prevents chain collapse and yields heat sensitive intrinsic disorder. 73<sup>rd</sup> Calorimetry Conference, Tahoe City, CA. August 6, 2018.
- **English LR** and Whitten ST\*. Intrinsic  $\alpha$ -helix propensities determined from heat effects on retro-nuclease hydrodynamic size. 72<sup>nd</sup> Calorimetry Conference. Colorado Springs, CO. July 31, 2017.

## CONFERENCE POSTERS

Key: \* Corresponding author. Presenting author.

- Valdez A, Locklin JL\*, **English LR**. Assessing glycogen reserves in two Central Texas zebra mussel populations to evaluate post-invasion summer starvation. Texas Academy of Sciences 2023 Annual Meeting, San Angelo, TX. March 3, 2023.
- Paiz EA, **English LR**, Bebo A, Parra GL, Whitten ST\*. Conformational bias in denatured protein and its role in folding. 2019 Annual Biomedical Research Conference for Minority Students (ABRCMS), Anaheim, CA. November 14, 2019.
- Paiz EA, **English LR**, Bebo A, Parra GL, Whitten ST\*. Conformational bias in denatured protein and its role in folding. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. October 5, 2019.
- Paiz EA, **English LR**, So S, Whitten ST\*. Thermodynamics of conformational bias in the denatured state of protein. 2019 Women in Science & Engineering (WISE) Conference, Texas State University, San Marcos, TX. March 8, 2019.
- Paiz EA, **English LR**, So S, Whitten ST\*. Thermodynamics of conformational bias in the denatured state of protein. 2018 Annual Biomedical Research Conference for Minority Students (ABRCMS), Indianapolis, IN. November 14, 2018.
- Parra GL, **English LR**, Whitten ST\*. Phosphoserine incorporation into the intrinsically disordered N-terminal domain of the p53 tumor suppressor protein. 2018 Annual Biomedical Research Conference for Minority Students (ABRCMS), Indianapolis, IN. November 14, 2018.
- **English LR**, Voss SM, Tischer A, Demeler AK, Demeler B, Whitten ST\*. Sequence reversal prevents chain collapse and yields heat-sensitive intrinsic disorder. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. October 6-9, 2018.
- Parra GL, **English LR**, Whitten ST\*. Quantitative model of phosphorylation on disordered protein structure. 2018 Inaugural Department of Chemistry & Biochemistry Research Colloquium, Texas State University, San Marcos, TX. April 6, 2018.
- Voss SM, Zamarripa J, **English LR**, Whitten ST\*. Structural determinants of liquid-liquid phase separation in intrinsically disordered proteins. 2018 Inaugural Department of Chemistry & Biochemistry Research Colloquium, Texas State University, San Marcos, TX. April 6, 2018.

- [Parra GL](#), [English EJ](#), **English LR\***. BiochemTV: a multifaceted approach to free and accessible science, technology, and healthcare tutorials. Central Texas ACS Centennial Celebration, Austin, TX. November 10, 2017.
- **English LR**, [Voss SM](#), Tischer A, Auton M, Whitten ST\*. Intrinsic  $\alpha$ -helix propensities compact retro nuclease R<sub>h</sub>. Central Texas ACS Centennial Celebration, Austin, TX. November 10, 2017.
- **English LR**, [Voss SM](#), Tischer A, Auton M, Whitten ST\*. Intrinsic  $\alpha$ -helix propensities compact retro nuclease R<sub>h</sub>. 2017 Biochemistry & Structural Biology Department Annual Retreat, UT Health San Antonio, San Antonio, TX. November 3, 2017.
- **English LR**, [Voss SM](#), Tischer A, Auton M, Whitten ST\*. Intrinsic  $\alpha$ -helix propensities compact retro nuclease R<sub>h</sub>. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. September 23-26, 2017.
- [Parra GL](#), **English LR**, Whitten ST\*. Phosphorylation effects on hydrodynamic size in intrinsically disordered proteins. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. September 23-26, 2017.
- [Parra GL](#), **English LR**, Whitten ST\*. Phosphorylation effects on hydrodynamic size in intrinsically disordered proteins. PREM Research Poster Session for External Advisory Board, Texas State University PREM Center, San Marcos, TX. April 11, 2017.
- **English LR**, Ricard BJ, Tilton EC, Engelhardt DM, Whitten ST\*. pH effects on intrinsically disordered protein structures. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. September 24-27, 2016.
- [Ricard BJ](#), **English LR**, Tilton EC, Perrin TA, Whitten ST\*. Quantifying the contributions of intrinsic conformational propensities and net charge on the hydrodynamic size of disordered protein structures. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. September 24-27, 2016.
- [Parra GL](#), **English LR**, Whitten ST\*. Phosphorylation effects on hydrodynamic size in intrinsically disordered proteins. Gibbs Conference on Biological Thermodynamics, Southern Illinois University, Carbondale, IL. September 24-27, 2016.
- **English LR**, Tilton EC, Ricard BJ, [Whitten ST\\*](#). Quantifying the contributions of intrinsic conformational propensities and net charge on the hydrodynamic size of disordered proteins. Gordon Research Conference on Intrinsically Disordered Proteins, Les Diablerets, Switzerland. June 28, 2016.
- **English LR**, Engelhardt DM, Tilton EC, Reyes C, Whitten ST\*. Electrostatic effects on intrinsically disordered protein structure. Texas PREM Network Summer Conference, Texas State University, San Marcos, TX. June 27-28, 2016.
- [Tomasso ME](#), Devarajan D, Tarver MJ, **English LR**, Tilton EC, Whitten ST\*. Experimental polyproline II propensities describe sequence effects on hydrodynamic size in intrinsically disordered proteins. Texas PREM Network Summer Conference, Texas State University, San Marcos, TX. June 27-28, 2016.
- [Parra GL](#), **English LR**, Whitten ST\*. Phosphorylation effects on hydrodynamic size in intrinsically disordered proteins. Texas PREM Network Summer Conference, Texas State University, San Marcos, TX. June 27-28, 2016.
- [Ricard BJ](#), [Tomasso ME](#), **English LR**, Tilton EC, Whitten ST\*. Hydrodynamic radii of intrinsically disordered proteins determined from intrinsic polyproline II propensities. ASBMB 2016 Annual Conference, San Diego, CA. April 2-6, 2016.
- [Tomasso ME](#), Devarajan D, Tarver MJ, **English LR**, Tilton EC, Whitten ST\*. Experimental polyproline II propensities describe sequence effects on hydrodynamic size for intrinsically disordered proteins. 60<sup>th</sup> Annual Meeting of the Biophysical Society, Los Angeles, CA. March 2, 2016.

## **PROFESSIONAL SERVICE**

### **Website Steering Committee | Temple College | Temple, TX**

**Fall 2023—Present**

- Help drive the planning and implementation of an updated Temple College website in conjunction with a group of students and faculty from all departments across campus.

### **Curriculum Committee | Temple College | Temple, TX**

**Fall 2023—Present**

- One of four voting faculty members tasked with reviewing and approving revisions to the college curriculum.

### **Science Educator Symposium Steering Committee | Temple College | Temple, TX**

**Spring 2023—Present**

- Design and distribute promotional materials and staff the event in conjunction with other science faculty members, the Texas A&M Engineering Experiment Station Nuclear Power Institute, and ESC Region 12.

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|--|---------------------------------|
| <b>Science Challenge Core Team, Exam Lead, &amp; Roundtable Coordinator   Temple College   Temple, TX</b>  | <b>Fall 2021—Present</b>        |
| <ul style="list-style-type: none"> <li>• Author, update, and grade exams for students competing for Temple College scholarships.</li> <li>• Write question prompts and recruit alumni for roundtable discussion.</li> <li>• Help design and organize the event with other members of the core planning team.</li> </ul>              |                                 |
| <b>Digital Classroom Workshop   Temple College   Temple, TX</b>  | <b>Fall 2023, Spring 2024</b>   |
| <ul style="list-style-type: none"> <li>• Gave professional development presentation to other faculty members on how to implement Google Jamboard in face-to-face STEM classes.</li> </ul>  |                                 |
| <b>Honor Code Council   Texas State University   San Marcos, TX</b>  | <b>Fall 2014—Spring 2020</b>    |
| <ul style="list-style-type: none"> <li>• One of three voting student members, along with three faculty members, to hear honor code infraction appeals.</li> <li>• Make direct recommendations to the Dean of Students regarding the validity of academic dishonesty accusations and the appropriateness of any sanctions.</li> </ul> |                                 |
| <b>Poll Everywhere Workshop   University of the Incarnate Word   San Antonio, TX</b>   | <b>Spring 2019</b>              |
| <ul style="list-style-type: none"> <li>• Gave instructional seminar to other university faculty on implementation and management of Poll Everywhere.</li> </ul>  |                                 |
| <b>Color Science Workshop   American Chemical Society   Austin, TX</b>   | <b>Fall 2017</b>                |
| <ul style="list-style-type: none"> <li>• Gave lecture on the electromagnetic spectrum and additive/subtractive color theory.</li> <li>• Led workshop attendees through interactive demonstrations of additive color mixing, colorimetric pH indicators, and diffraction grating.</li> </ul>  |                                 |
| <b>Bridges to Biomedicine Bootcamp   Texas State University   San Marcos, TX</b>   | <b>Summer 2015, Summer 2016</b> |
| <ul style="list-style-type: none"> <li>• Trained community college students and incoming freshmen on microbiology and biochemistry principles including aseptic technique, genetic transformations, buffer calculations, and growth media preparation.</li> </ul>  |                                 |
| <b>Student Health Advisory Committee   Texas State University   San Marcos, TX</b>   | <b>Fall 2012—Spring 2014</b>    |
| <ul style="list-style-type: none"> <li>• Assisted and advised the Director of the Student Health Center and the Vice President for Student Affairs regarding the Student Health Center Strategic Plan, annual budget, student health insurance plan, and Medical Service Fee.</li> </ul>   |                                 |

## **ACADEMIC AWARDS**

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|---|---------------------------------------|
| <b>Above and Beyond Award, Temple College</b>   | <b>Spring 2023</b>                    |
| <b>School of Mathematics, Science and Engineering Part-Time Faculty Teaching Award Nominee, UIW</b> | <b>Fall 2019, Fall 2020</b>           |
| <b>The Honor Society of Phi Kappa Phi</b>   | <b>Fall 2017</b>                      |
| <b>Biochemistry Graduate Student of the Year, Texas State University</b>                            | <b>Spring 2016</b>                    |
| <b>Alpha Chi National College Honor Society</b>   | <b>Fall 2014</b>                      |
| <b>Dean's List, Texas State University</b>  | <b>Fall 2011, Fall 2012—Fall 2013</b> |
| <b>International Scholar Laureate Program Nominee</b>   | <b>Fall 2012</b>                      |
| <b>National Society of Collegiate Scholars Nominee</b>  | <b>Spring 2012</b>                    |
| <b>Dean's List, Grayson County College</b>  | <b>Fall 2002—Spring 2003</b>          |
| <b>Phi Theta Kappa International Honor Society Nominee</b>  | <b>Fall 2002</b>                      |
| <b>Sigma Kappa Delta National English Honor Society Nominee</b>                                     | <b>Fall 2002</b>                      |

## **REFERENCES**

**Rachell E. Booth, Ph.D.**, Professor, University of the Incarnate Word, 210-829-3158, rbooth@uiwtx.edu

**Karen A. Lewis, Ph.D.**, Associate Professor, Texas State University, 512-245-6391, kal137@txstate.edu

**Jason L. Locklin, Ph.D.**, Dean, Division of Natural Sciences, Temple College, 254-298-8409, Jason.locklin@templejc.edu

**John McClain, Ph.D.**, Department of Physical Sciences Chair, Temple College, 254-298-8406, john.mcclain@templejc.edu

**Steven T. Whitten, Ph.D.**, Associate Professor, Texas State University, 512-245-7893, sw50@txstate.edu