


## ACADEMIC BACKGROUND

- 2015 – 2020**     **PhD in Mathematics Education**  
Texas State University, San Marcos, Texas  
*Dissertation:* *Transition from Education to Profession: Experiences of Statisticians*   
*Chair:* Dr Alexander White
- 2010 – 2012**     **Master in Applied Probabilities and Statistics - Honors**  
Université de Lorraine, Metz, France  
*Emphasis:* *Statistics, Probability theory, Partial Differential Equations, Epistemology*  
*Research Project:* *Perona-Malik Diffusion in Image Processing with Dr. Ralph Chill*
- 2009 – 2010**     **Bachelor of Physics (Licence de Physique) - Honors**  
Université de Strasbourg, France  
*Emphasis:* *Quantum mechanics, Statistical Physics, Electromagnetism and Theory of Relativity*
- 2008-2009**     **Bachelor of Mathematics (Licence de Mathématiques)**  
Visiting student at Trinity College Dublin, Ireland  
*Emphasis:* *Mathematics, Irish Language and Literature.*
- 2006-2008**     **"Classes préparatoires" – Honors**  
Lycée Fabert, Metz, France  
*Emphasis:* *Acquisition of knowledge in Mathematics, Physics, Chemistry, Engineering science, Literature and English to prepare competitive entrance exams to "Grandes Ecoles".*

## PROFESSIONAL EXPERIENCE

- August**  
**2020 – now**     **Assistant Professor of Instruction**  
The University of Texas at Austin  
*Online courses in the Department of Statistics and Data Sciences*
  - SDS 328M – Biostatistics
  - SDS 348 – Computational Biology & Bioinformatics
  - SDS 358 – Applied Regression
  - SDS 379R – Undergraduate Research*In-person courses in the Department of Statistics and Data Sciences*
  - SDS 320E – Elements of Statistics
  - SDS 322E – Elements of Data Science
  - SDS 324E – Elements of Regression Analysis*Summer Statistics Institute*
  - Common Mistakes in Using Statistics: Spotting them and Avoiding them
- September**  
**2015 – 2020**     **Teaching Assistant and Instructor of Record**  
Texas State University, San Marcos, Texas  
*Courses in the Department of Mathematics*  
*Instructor of record:*
  - MATH 2328 – Elementary Statistics

- MATH 1319 – Mathematics for Business and Economics I
- MATH 1315 – College Algebra (stand alone or paired with support courses)
- MATH 1312 – College Algebra and Statistics

*Teaching Assistant:*

- MATH 2472 – Calculus II
- MATH 2471 – Calculus I
- MATH 1300 and 1311 – Elementary and Intermediate Algebra

**January 2018 – August 2018 Research Assistant (qualitative research)**

with Dr Robert Sigley at Texas State University

*Investigated the relationship between the understanding of the mean and the concept of variation for undergraduate students enrolled in an elementary statistics course*

- *Development of a task with multiple activities involving cubes and applets*
- *Conducting interviews with students*

**August 2016 – August 2017 Research Assistant (quantitative and qualitative research)**

with Dr Kate Melhuish at Texas State University and the Teacher Development Group

*Worked for the “Enhancing Mathematics Teaching and Learning in Urban Elementary Schools: A Cluster-Randomized Efficacy Trial of a Novel Professional Development*

*Approach” project funded by the National Science Foundation, Award Number 1223074*

- *Conducting data management*
- *Performing statistical analysis (Hierarchical Linear Models)*
- *Assessing Mathematical Quality of Instruction (MQI) through videos*
- *Developing the Math Habits Instrument (application for iPad)*

**March 2015 – July 2015 Biostatistician**

CHU Brabois Hospital and INSERM, Nancy, France


*Worked in the Department of Epidemiology and Clinical Research on:*

- April 2013 – June 2013**
  - *Retrieving data from Access and conducting data management*
  - *Performing various statistical analyses with SAS*
  - *Writing protocols and proposals*

**April 2012 – September 2012 Statistical Analyst Intern**

Banque Centrale du Luxembourg, Luxembourg

*Internship in the Department of Statistics to work on a statistical study about funds of funds:*

- *Creating the 1<sup>st</sup> database concerning funds of funds and maintenance of large data sets*
- *Performing statistical analysis (PCA) with SAS*
- *Writing articles for the official BCL quarterly report in Winter 2013* 

**September 2009 – September 2014 Private Tutor**


*Tutored middle school, high school students and undergraduates in Mathematics and Physics.*

*Organized intensive programs to prepare students for different types of exams. (approximately 6 hours a week)*



## SCHOLARLY/CREATIVE WORK

**Refereed Journal Articles**

Melhuish, K., Thanheiser, E., & Guyot, L. (2020). Elementary school teachers’ noticing of essential mathematical reasoning forms: justification and generalization. *Journal of Mathematics Teacher Education*, 23(1), 35-67. 

**Refereed  
Conferences  
Proceedings**

Guyot, L. & White, A. (2022, in process). Promoting opportunities to learn for statisticians. In Proceedings of the Eleventh International Conference on Teaching Statistics (ICOTS-11). Voorburg, The Netherlands: International Statistical Institute.

White, A. & Guyot, L. (2022, in process). Data in search of a context: an online icebreaker activity. In Proceedings of the Eleventh International Conference on Teaching Statistics (ICOTS-11). Voorburg, The Netherlands: International Statistical Institute.

Guyot, L. & White, A. (2019, November). Promoting an Authentic Experience of Statistical Practices in Statistics Education. In S. Otten, A. G. Candela, Z. de Araujo, C. Haines, & C. Munter (Eds.), *Proceedings of the forty-first annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education (PME-NA)* (pp. 421-425). [🔗](#)

Guyot, L., Walker, A., & White, A. (2018, July). Challenges for Independent Student Projects: A Perspective of the Teacher. In M. A. Sorto, A. White, & L. Guyot (Eds.), *Looking back, looking forward: Proceedings of the Tenth International Conference on Teaching Statistics (ICOTS10, July, 2018), Kyoto, Japan*. Voorburg, The Netherlands: International Statistical Institute. [🔗](#)

White, A., Guyot, L., & Walker, A. (2018, July). Data in Search of a Context: An Icebreaker Activity. In M. A. Sorto, A. White, & L. Guyot (Eds.), *Looking back, looking forward: Proceedings of the Tenth International Conference on Teaching Statistics (ICOTS10, July, 2018), Kyoto, Japan*. Voorburg, The Netherlands: International Statistical Institute. [🔗](#)

Fagan, J., Melhuish, K. M., Thanheiser, E., Fasteen, J., Guyot, L., Rosencrans, B. (2017). Connecting teachers' buy-into professional development with classroom habits and practices. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 459-462). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators. [🔗](#)

Thanheiser, E., Rosencrans, B., Melhuish, K. M., Fagan, J., Guyot, L. (2017). Increasing student cognitive engagement in the math classroom through sustained professional development. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 478-482). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators. [🔗](#)

**Conferences  
Proceedings**

Guyot, L. (2019, June). *Transition between Education and Profession: Experiences of Statisticians*. Presentation made at the 51<sup>eme</sup> Journées de la Statistique. Paper in the program. Nancy, France. [🔗](#)

Guyot, L. (2018, June). *Promoting an Authentic Experience of Statistical Practices in Statistics Education*. Presentation made at the 50<sup>eme</sup> Journées de la Statistique. Paper in the program. Paris, France. [🔗](#)

- Conferences Presentations** Guyot, L. (2021, February). *Learning in Transition to the Workplace: Perspectives from the Statistical Community and Implications*. Presentation made at the Conference of Statistical Practice. Online.
- Guyot, L. (2019, October). *Transition from Education and Profession: Experiences of Statisticians*. Presentation made at the Women in Statistics and Data Science conference. Bellevue, WA.
- Guyot, L. (2019, July). *Transition from Education to Profession: Experiences of Statisticians*. Speed presentation and poster at the Joint Statistical Meetings. Denver, CO.
- Sigley, R. & Guyot, L. (2019, July). *Studying the Relationship between Students' Perception of the Mean and their Understanding of Variance*. Speed presentation and poster at the Joint Statistical Meetings. Denver, CO.
- Guyot, L. & White, A. (2019, May). *What do statisticians do?* Breakout session presented twice at the US Conference on Teaching Statistics. State College, PA.
- Guyot, L. (2019, February). *Transition from Education and Profession: Experiences of Statisticians*. Presentation made at the Conference of Statistical Practice. New Orleans, LA.
- Abili, M. & Guyot, L. (2018, November). *Teaching Statistics: A Comparison on Topics and Approaches Across Disciplines*. Presentation made at the Tenth International Research Conference for Graduate Students. San Marcos, TX.
- Guyot, L. (2018, April). *Promoting an Authentic Experience of Statistical Practices in Statistics Education*. Presentation made at the Conference of Texas Statisticians. San Antonio, TX.
- Sorto, M. A., Bower, R., Guyot, L., Akbuga, E., Song, Z., & Webre, B. (2017, April). *Las Matemáticas en Nuestras Aulas: Bilingual Strategies in Secondary Classrooms*. Presentation at the 2017 National Council of Teachers of Mathematics Annual Meeting. San Antonio, TX.
- Shaughnessy, M., Melhuish, K., Thanhesier, E., Fredericks, J., Rosencrans, B., Fagan, J., & Guyot, L. (2017, March). *The Math Habits & Routines Classroom Observation Tool: Connecting teacher moves and student reasoning*. Presentation at the Teachers Development Group Leadership Seminar. Portland, OR.
- Invited Talks** Guyot, L. (2021, March). *Learning in Transition to the Workplace: Perspectives from the Statistical Community and Implications*. Presentation made at the SDS Seminar Series, The University of Texas at Austin.
- Guyot, L. (2019, October). *Discussion: Teaching Statistics across Campus*. Hosted discussion at the Statistics Seminar, Texas State University.
- Guyot, L. (2019, September). *Conferences and Being Part of the Statistics Community*. Presentation made at the Statistics Seminar, Texas State University.

Sigley, R., Guyot, L., & White, A. (2018, September). *Studying the Relationship Between Students' Perception of the Mean and their Understanding of Variance*. Presentation made at the Statistics Seminar, Texas State University.

Guyot, L., Walker, A., & White, A. (2018, April). *Challenges for Independent Student Projects: A Perspective of the Teacher*. Presentation made at the Statistics Seminar, Texas State University with guest students.

Sigley, R. & Guyot, L. (2018, April). *Exploring the Relationship Between Mean Understanding and Variability*. Presentation made at the Statistics Seminar, Texas State University.

Guyot, L. (2018, March). *What do statisticians do?* Presentation made at the Statistics Seminar, Texas State University.

Guyot, L. (2017, November). *Statistical Practice in the Classroom*. Presentation made at the Statistics Seminar, Texas State University.

Melhuish, K., Fagan, J., Guyot, L. (2017, September). *Exploring the efficacy of the Mathematics Studio Model Professional Development*. Presentation made at the Math Education Seminar, Texas State University.

White, A., Lesser, L. M., Straughn, M., Guyot, L. (2016, October). *Multiple Perspectives of the Mean: Making Connections between Basic and Advanced Statistical Content*. Presentation made at the Statistics Seminar, Texas State University.

## Posters

Guyot, L. (2019, March). *What do Statisticians do?* Poster presented at the Women in Science and Engineering conference. San Marcos, TX.

Guyot, L. (2018, July). *What do statisticians do?* Poster presented at the Tenth International Conference on Teaching Statistics. Kyoto, Japan.

Guyot, L. (2018, April). *What do statisticians do?* Poster presented at the Conference of Texas Statisticians. San Antonio, TX.

Guyot, L., Melhuish, K. M., Fagan, J. (2017). Effect of Teachers' Participation in a Professional Development on Student Achievement: A Longitudinal Large-Scale Study. In E. Galindo & J. Newton (Eds.), *Proceedings of the 39th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education* (pp. 537). Indianapolis, IN: Hoosier Association of Mathematics Teacher Educators. [link](#)



## SERVICE / LEADERSHIP

- **Proposal/Grant Writing:** Assistance with writing the undergraduate major proposal for a Bachelor of Science in Statistics and Data Science at the University of Texas at Austin.
- **Committee Member:**

- CNS Professional Track Faculty Committee (2022-2025)
- SDS's 2022-2023 Seminar Series organization committee: invite and welcome speakers
- Undergraduate Certificates: discuss courses and exceptions for the certificates in Scientific Computation & Data Sciences and in Applied Statistical Modeling (2020-2022)
- **Reviewer / Referee:**
  - Journal of Statistics Education (2021, 2022)
  - USCLAP, biannual project competition (2021, 2022)
  - PME-NA, North American Chapter of the International Group for the Psychology of Mathematics Education (2017, 2019)
  - IRC, International Research Conference for Graduate Students (2019)
  - ICOTS, International Conference on Teaching Statistics (2018, 2022)
- **Co-Editor:** ICOTS, International Conference on Teaching Statistics (Spring / Summer 2018)
- **Session Chair:**
  - Teaching Statistics Online (International Conference On Teaching Statistics, September 2022)
  - Tips for Collaborative Grant Writing (Conference on Statistical Practice, February 2021)
  - Communicating with Stakeholders (Conference on Statistical Practice, February 2019)
- **Guest lecturer:**
  - MATH 2311 – Principles of Mathematics I (October 26<sup>th</sup>, 2018)
  - MATH 2312 – Informal Geometry (October 4<sup>th</sup>, 2017)
  - MATH 2472 – Calculus II (February 20<sup>th</sup> and March 10<sup>th</sup>, 2017)
- **Volunteer:**
  - Panel discussion: Career preparation as a statistician/mathematician (December 2020)
  - Running the Statistics Education/History booth at the Joint Statistical Meetings (July 2019)
  - Graduate Student Panelist, Mathematics Department Open House (November 2018)
  - Assessing K-2 and 2nd grade children's mathematical thinking at a local elementary school under the supervision of Dr Jessica Bishop by administering formative assessments (in the form of a clinical interview) and analyzing assessment data (Spring 2017, Spring 2018)
- **Organization Member:**
  - American Statistical Association (ASA)
  - American Mathematical Society (AMS)
  - Mathematical Association of America (MAA)
  - National Council of Teachers of Mathematics (NCTM)

## **SCHOLARSHIPS / AWARDS**

- **Scholarships/Fellowships:**
  - Student Government Scholarship – \$4,000 (Year 2018-2019, Year 2019-2020)
  - The Graduate College Scholarship - Science & Engineering – \$2,000 (Year 2019-2020)
  - Women in Science and Engineering (WiSE) Scholarship – \$1,000 (Fall 2019)

- Ross & Sarah Wayment Endowed Scholarship – \$750 (Fall 2019)
- The Graduate College Doctoral Research Support Fellowship – \$5,000 (Spring 2019)
- **Awards:**
  - Travel Award for the Women in Statistics and Data Science conference – \$400 (2019)
  - Recognition for Academic Excellence at the Doctoral Level (2018, 2019)
  - Rising Scholarly Travel Activity and Research (S.T.A.R) grant – \$1,000 (2018, 2019)

## ■ TECHNOLOGY

- **Statistical Software:** R Studio, SAS, SPSS, HLM software
- **Programming Language:** Python, SQL, Fortran
- **Communication:** R Markdown, Jupyter Notebooks, GitHub
- **Instructional Software:** Fathom, Tuva labs, Desmos, Geometer's Sketchpad
- **Online Teaching:** Canvas, Zoom, Panopto
- **Online Homework Platform:** Gradescope, Sapling, MyMathLab, ALEKS, ConnectMath
- **Documents:** MS Office, Adobe Acrobat DC, LaTeX

## ■ LANGUAGES

- **French:** native comprehension, composition
- **English:** advanced comprehension, composition
- **German and Spanish:** some reading, listening comprehension