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## **EDUCATION**

- Principal Certification Program, University of Houston-Victoria, 2011
- Ed.D. University of Houston, 2003, Curriculum & Instruction
- M.Ed. University of Houston, 1996, Elementary Education
- B.S. University of Houston, 1994, Kinesiology-Sports Administration

## **PUBLICATIONS, EDITORIAL CONTRIBUTIONS AND REVIEWS**

**Domjan, H. N., & Johnson E. N.** (2022). *The Itsy Bitsy Water Cycle*. Columbia, S.C.

Mikeska, J.N., Webb, J., Bondurant, L., Kwon, M., Imasiku, L., **Domjan, H.**, & Howell, H. (2021). Using and adapting simulated teaching experiences to support preservice teacher learning. In P.H. Bull and G.C. Patterson (Eds.), *Redefining teacher education and teacher preparation programs in the post-COVID-19 era*. IGI Global. [DOI: 10.4018/978-1-7998-8298-5](https://doi.org/10.4018/978-1-7998-8298-5)

Dogan, B., Gronseth, S., & **Domjan, H.** (2021) *Pre-Service Teachers' Online Teaching During the Covid-19 Pandemic: A Case Study of How "Effective Communication," "Problem-Solving" And "Cultural Competency" Growth Expectations Changed through the ITECH-STEM Summer Camp*, (Society of Information Technology & Teacher Education Conference)

Wong, S. S., Zhang, J., & **Domjan, H.** (Accepted). Oh deer! Using Socioscientific Issues to teach inquiry-based lessons with English Language Learners. *Science Scope*.

**Doman, H.** (2021) Journal of Classroom Interaction, Reviewer

**Domjan, H.** (2018, April 10). Calling Generation Z: The Energy Industry Reaches Out To Its Future Workforce) [Blog post]. Retrieved from <https://www.forbes.com/sites/uhenergy/2018/04/10/calling-generation-z-the-energy-industry-reaches-out-to-its-future-workforce/#43643973bb29>

**Domjan, H.** (2013) *Texas Science Fusion*. Houghton Mifflin Harcourt, Reviewer

## **PROFESSIONAL PRESENTATIONS**

**Domjan, H.** (2023). *STEM Stories Using Children's Literature*. STEM 4 Innovation Virtual Conference for K-12 Education.

**Domjan, H. & Hurt, C.** (2022) *Combatting STEM Learning Loss Panel*. Children at Risk STEM Summit.

**Domjan, H., Tuule, I., Fine, J., Perry-Allen, L. Gerbermann, J., Antoine, A., White, S., Nunoo, J., Glass, S. Duran R.** (2022) *Launch into STEAM Panel*. Region 4 Service Education Center. Full STEAM Ahead Conference.

**Domjan, H.** (2022). *Women in STEM*. Winning Women Virtual Conference. Kids' Lives Matter International.

- Domjan, H.** (2022). *Got Energy? Inquiring Minds Want to Know!* National Science Teachers Association Conference, Houston, TX.
- Domjan, H.** (2021) *Designing and Adapting Simulated Teaching Experiences for Preservice Teacher Learning of Practice.* (Society of Information Technology & Teacher Education Conference)
- Domjan, H., Howell, H., Mikeska, J., Marsteller, R., Minsung, K., Imasku, L., & Zangori, L.** (2021, May 18) *Reflections on the use of Math and Science Simulations during COVID* (Mursion Webinar Series)
- Dogan, B., Gronseth, S., & **Domjan, H.** (2021) *Pre-Service Teachers' Online Teaching During the Covid-19 Pandemic: A Case Study of How "Effective Communication," "Problem-Solving" And "Cultural Competency" Growth Expectations Changed through the ITECH-STEM Summer Camp,* (Society of Information Technology & Teacher Education Conference)
- Domjan, H.** (2021) *Virtual Career Day.* Career Day Speaker, Oyster Creek Elementary School.
- Domjan, H.** and Ronduen, L. (2021, January 10) *Energized! A focus on energy transformations* STEM 4 Innovation Virtual Conference for K-12 Education.
- Domjan, H.** (2020) *STEM Career Awareness.* Career Day Speaker, James Bowie Middle School.
- Domjan, H.** (2020) Engineering, Science and Technology Council of Houston Leadership Conference. *Scientific Educational Opportunities*
- Domjan, H.** (2019) *You and STEM.* Career Day Speaker, James Bowie Middle School.
- Domjan, H.** (2019) *STEM in US Education.* Taiwan Cooperative Learning Delegation.
- Domjan, H.** (2019) Engineering, Science and Technology Council of Houston Leadership Conference. *STEM & SEFH.*
- Domjan, H.** (2018) *STEM Matters.* Keynote Speaker, Gathering of Eagles STEM Symposium at Milby High School.
- Domjan, H.** (2018) *The "S" in STEM.* Keynote Speaker, Cy-Fair Physics Educators.
- Domjan, H.** (2018) *Technology in STEM.* Keynote Speaker, ITECH-STEM.
- Domjan, H.** (2018) *STEM Education.* Career Day Speaker, James Bowie Middle School.
- Domjan, H.** (2017) *Collegiate Education.* Career Day Speaker, James Bowie Middle School.
- Domjan, H.** (2017) *STEM in the Health Profession.* College of Health Care Professions.
- Domjan, H.** (2017) *STEM Education.* Innovation in Education Presentation, James A. Baker III Hall, Rice University.
- Domjan, H.** (2017) *STEM A National Security Concern.* Gathering of Eagles Vietnam Veteran Conference.
- Domjan, H.** and Sanchez-Perez, E. (2017) *A STEM Project Model.* LES VI – Equity: We Can Get There. Houston Community College Southeast.
- Domjan, H.** (2017). *Weather or Not, Here Comes the Water Cycle!* Conference for the Advancement of Science Teaching, Houston, TX.

- Domjan, H., Wong, S. and Ronduen, L. (2017).** *Got Energy? Energize Your Classroom!* Conference for the Advancement of Science Teaching, Houston, TX.
- Domjan, H. (2016)** *STEM in Space Education.* Innovation in Education Presentation, James A. Baker III Hall, Rice University.
- Domjan, H. (2016)** *STEM in our schools.* Hispanic Association of Colleges and Universities, University of Houston, Houston, TX.
- Domjan, H. (2015).** *Using the NSTA Learning Center as an Online Textbook for Teaching Science Pre-Service Teachers.* Web Seminar.
- Domjan, H. and Kirksey, J. (2015)** *Take a Ride on the Wet & Wild Water Cycle.* R.T. Garcia Early Childhood Winter Conference. Houston, TX.
- Domjan, H. (2014)** *Professorship.* Career Day Speaker, Oakland Elementary.
- Domjan, H. (2014)** Engineering, Science and Technology Council of Houston Leadership Conference. *Building a Successful and Sustainable SEFH, Science and Engineering Fair of Houston.*
- Domjan, H. and Wong, S. (2013).** *Got Energy?* Conference for the Advancement of Science Teaching, Houston, TX.
- Wong, S., **Domjan, H.,** and Golabbakhsh, Y. (2013). *Using Ping Pong Balls and Poppers to Teach Energy.* Conference for the Advancement of Science Teaching, Houston, TX.
- Wong, S. and **Domjan, H. (2013).** *Mentor-mentee dialogues: Cultivating the development of beginning science teachers of diverse students.* Conference for the Advancement of Science Teaching, Houston, TX.
- Domjan, H. and Teresa Phillips. (2013).** *Inquiry Minds Want to Know.* NSTA National Conference on Science Education, San Antonio, TX.
- Domjan, H. (2012).** Houston LASER Investing in Innovation (i3) Implementation Institute (HISD), *Science and Literacy.*
- Domjan, H. (2005).** *Inquiry Minds Want to Know!* Conference for the Advancement of Science Teaching, Houston, TX.

## **PROFESSIONAL EXPERIENCE**

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|----------------|---|
| 2022 - Present | Executive Director, UH STEM Center<br>Oversee executive, scholarly research/creative activities, financial, and education operations of the Center and has the responsibility for implementing its goals.   |
| 2021 - Present | Author, K-5 Science. Savvas Learning Company  |
| 2012 - Present | Clinical Associate Professor, University of Houston<br>College of Education, Department of Curriculum and Instruction<br>Currently instruct Science Method courses (ELED 4311/ELED 4312)  |
| 2016 - 2022    | Interim Executive Director, UH STEM Center<br>College of Natural Science and Mathematics<br>Oversee executive, scholarly research/creative activities, financial, and education operations of the Center and has the responsibility for implementing its goals. |

2015 - Present	Executive Director, Science and Engineering Fair of Houston, (SEFH) Direct activities that support one of the largest science fairs in the country. Ensure ongoing local programmatic excellence, rigorous program evaluation, and consistent quality of finance and administration, fundraising, communications, and systems; recommend timelines and resources needed to achieve the strategic goals.
2013 - 2015	Associate Director, Science and Engineering Fair of Houston, (SEFH) Organized and coordinated logistics for the academic program to ensure that a supportive system-maintained efficiency for all stakeholders.
2011 - 2012	Elementary Science Curriculum Specialist, Houston ISD Developed K-5 curriculum and assessments; provided professional development; managed external education field trip program (Houston Museum of Natural Science) Elementary Science Facilitator, Fort Bend ISD
2002 - 2010	Lead the development, implementation, monitoring and evaluation of K-5 curriculum and district assessments. Ensured collaborative teamwork between subject area coordinators, administrators and teachers focused on increasing student achievement goals.
2008	Edumatics Corporation, Web-enhanced curriculum writer Developed content writing and authored online science curriculum and assessment products.
2008	Project Invest Mentor, Fort Bend ISD Mentored first year teachers and provided and participated in professional development for mentee.
2001- 2002	Science Instructor, University of Houston Instructed pre-service teachers in science education using a variety of instructional modalities and strategies based on educational research.
2000- 2002	HU-LINC Science Trainer, HISD & University of Houston Planned and instructed course content for science educators' staff development correlated to science kit training and district needs.
1999-2000	Master Science Teacher, Baylor College of Medicine & HU-LINC, Instructed course content for science educators and collaborated with various districts to ensure success of implementation.
1999	Science Trainer, Fort Bend ISD Facilitated elementary teachers on kit based science instruction and district curriculum.
1998-2002	Instructor for New Teachers, Fort Bend ISD Developed, planned, and instructed a course for new teachers focused on effective instructional strategies classroom management, and content disciplines.
1997-2002	Fort Bend ISD Elementary School Teacher Taught fifth grade (all subjects) with experience in both blocked and self-contained formats.

## **AWARDS/HONORS**

2022	Gold Distinction Collegiate Advertising Award-DEI in STEM Webinar Panelist, CCOE
2019	The President's Volunteer Service Award
2017	University of Houston Energy Fellow
2004 - 2006	New Teacher Panel of Experts, Fort Bend ISD
2001 - 2002	Science Lead Teacher, Fort Bend ISD
1999 - 2000	District Textbook Committee Presenter
1999	Texas State Book Adoption Committee Member
1998 - 1999	Sallie Mae First Class Teacher Award, Fort Bend ISD

## **UNIVERSITY SERVICE**

2021-2024	Appointed to UH Teaching Excellence Award Committee via Provost Office
2022	College of Education NTT Promotion Committee,
2021	College of Education PHD Qualifying Examination Reviewer
2021- 2022	CUIN Master's Degree Program Committee
2020- 2022	CUIN NTT Promotion Committee
2019- 2020	Clinical/Research Promotion Committee
2017- 2019	Undergraduate Committee
2013, 2019	Candidacy Paper and Dissertation committee member
2013- 2014	University of Houston, College of Education- Secretary for C & I Faculty Meetings,
2014	Search Committee Member for Community Health Positions (2 Tenure; 1 Clinical)
2012- 2019	Proctor Doctoral Comprehensive Examinations
2013 -Present	Science and Engineering Fair of Houston Director

## **RELATED EXPERIENCE**

Science and Engineering Fair of Houston (SEFH) Educator Symposium, 2016- Present  
Directed STEM professional development for secondary educators in 23 counties with a focus on science and engineering research projects. Both in person and online modalities were deployed.

Science and Engineering Fair of Houston, Associate and Executive Director (SEFH) 2013-Present  
Managed the academic program that encompasses 23 counties and 117 school districts within the regional area which hosts ~1100 7<sup>th</sup>-12<sup>th</sup> grade students in 17 STEM fields.

Hosted NASA High School Aerospace Scholars to showcase the University of Houston and facilitate student engagement in STEM activities, 2019.

Facilitated Astronaut Community Day on the University of Houston campus for XXXII Planetary Congress, 2019

Sally Ride Science, District Administrator, 2011

Sally Ride Science professional training was organized for Houston Independent School District elementary teachers.

Super Science Saturday Conferences for Houston Independent School District, Coordinator, 2011

Developed and planned Pre-Kindergarten to 5<sup>th</sup> grade Super Science Saturday Conferences that provided science professional development for the Houston Independent School District as well as surrounding districts.

Smithsonian-NSRC U. S. Department of Education Laser i3 Research Project in Houston Independent School District, Co-Facilitator, 2011

Supervised and monitored the collaboration between various regions that participated within the grant in addition to the effectiveness of the program within the Houston Independent School District.

## **CANDIDACY STUDENT COMMITTEE MEMBERSHIP**

Casi Montalto, (2022). Secondary Students' Religious Beliefs and the Nature of Science.

Golabbakhsh, Yunes. (2019). A brief history of inquiry – from Socrates to standards.

Desiree Heyns. (2013). Ecological knowledge and middle school African American students in an urban Texas classroom.

## **DOCTORAL STUDENT DISSERTATION COMMITTEE MEMBERSHIP**

Yunes Golabbakhsh. (PhD, Curriculum and Instruction, 2021). The Effect of Climate Change Instruction on the Environmental Knowledge, Attitudes, Concerns, and Responsibilities of Pre-Service Teachers.

Lionnel Ronduen. (EdD, Curriculum and Instruction, 2017). Understanding preservice teacher's visual conceptions of STEM education.

Tuhin Dey. (EdD, Curriculum and Instruction, 2017). Understanding the faculty perceptions and challenges of flipped classrooms and an urban University.

Desiree Heyns. (EdD, Curriculum and Instruction, 2012). Ecological knowledge and middle school African American students in an urban Texas classroom.

## **GRANT PROPOSALS**

Cougar Initiative to Engage (CITE), Mars Rover Explorers, (PI, 2023) (\$15,000)

Cougar Initiative to Engage (CITE), UH STEM Outreach Squad (UHSOS), (PI, 2022) (\$33,250)

Olvera, N., (PI), Alarcon, J., Domjan, H., Consuelo, A. (Co-Investigators). GEAR 2022. Bounce into the STEM Zone (\$40,000).

AISL, Innovations in Development Project: BOUNCE (Behavior Opportunities Uniting Nutrition Counseling and Exercise) into the STEM Zone (Co-I, 2018; 2019; 2020, 2022)

Innovative Technology Challenges for Science, Technology, Engineering and Math, ITECH-STEM. Department of Defense. \$527,491. Bulent Dogan (CUIN), PI; Susie Gronseth (CUIN), Sara McNeil (CUIN), Jie Zhang (CUIN), Heather Domjan (CUIN), co-PIs.

DRK12, Empowering Novice Elementary Teachers: Contextualizing Ambitious Science Teaching for English Language and Literacy Acquisition (CASTELLA) (Collaborator, 2019)

DRK12, Contextualizing Science Inquiry: Leveraging Emergent Bilingual Students' Funds of Knowledge to Investigate Community-based Problems (Collaborator, 2019)

AISL, Innovative Technology Challenges for Science, Technology, Engineering, and Mathematics (ITECH-STEM) (Collaborator, 2019)

DRK12, Dialogic Inquiry of Socio-scientific Issues for Conceptual Understanding and Scientific Argumentation with English Language Learners (Collaborator, 2018)

DRK12, Language, Inquiry and Novel Knowledge in Science for English Language Learners (LINKS for ELLs) (Collaborator, 2018)

QEP Curriculum/Course Development Grant Program, "Utilizing action research to integrate creative writing in science" (2013).

HCC: Medium: The Action Dome-Determining Models for Immersive Collaborative Game-Based Learning in a Digital Dome (Co-PI), (2013).

## **HIGHER ED GRANT AWARDS**

Cougar Initiative to Engage (CITE), UH STEM Outreach Squad (UHSOS), (PI, 2022) (\$33,250).

## **GRANT ADVISORY ROLE**

NSF Robert Noyce Master Teacher Fellowship, University of Houston -Advancing Language Literacy with Relevant Investigations in Science Education (UH-ALL RISE), (Wong, S. PI,) (Domjan, H. Advisory Role, 2022).

## **GRANT AWARDS - SCIENCE & ENGINEERING FAIR OF HOUSTON**

2015, Houston Museum of Natural Science (HMNS) (\$20K); Chevron (\$15K), Air Liquide (\$10K), Phillips66 (\$10K), ExxonMobil (\$10K), Shell (\$10K), API (\$10K), Houston Geological Society (\$5K)

2016, Chevron (\$25K), Houston Museum of Natural Science (HMNS) (\$20K); Marathon (\$15K), Air Liquide (\$15K), Phillips66 (\$10K), ExxonMobil (\$10K), Shell (\$5K), SIM (\$10K)

2017, Benton Family Foundation (\$100K), Chevron (\$65K), Houston Museum of Natural Science (HMNS) (\$20K); Phillips66 (\$10K), ExxonMobil (\$10K), Shell (\$10K), SIM (\$10K), Shell (\$5K)

2018, Benton Family Foundation (\$100K), Chevron (\$125K), Houston Museum of Natural Science (HMNS) (\$20K); Phillips66 (\$10K), ExxonMobil (\$5), Shell (\$5K)

2019, Benton Family Foundation (\$150K), Chevron (\$125K), Houston Museum of Natural Science (HMNS) (\$20K); Phillips66 (\$10K), ManviTech LLC (\$10K), ExxonMobil (\$5), Shell (\$5K), CenterPoint Energy (\$2500K)

2020, Chevron (\$125K), Space Center Houston (\$25K), Houston Museum of Natural Science (HMNS) (\$20K); Phillips66 (\$10K), ExxonMobil (\$5), Shell (\$5K), CenterPoint Energy (\$5K)

2021, Chevron (\$100K), Space Center Houston (\$25K), Museum of Natural Science (HMNS) (\$20K), Phillips66 (\$10K), Regeneron International Science and Engineering Fair (\$10K), Shell (\$5K)

2022, Chevron (\$100K), Space Center Houston (\$25K), Houston Museum of Natural Science (HMNS) (\$20K); Phillips66 (\$10K), Shell (\$10K), Regeneron International Science and Engineering Fair (\$5K), CenterPoint Energy (\$5K)

## **PROFESSIONAL AFFILIATIONS**

- National Science Teachers Association, member
- Texas Science Education Leadership Association, member
- Houston Science Education Leadership Association, member
- Engineering, Science, and Technology Council of Houston, Assistant Secretary
- NSS North Space Society, Board Director
- Texas Science Engineering Fair Advisory, Board Member
- Lone Star Flight Museum Board of Education
- Association of Space Explorers Advisory Board

## **CERTIFICATIONS**

- Irlen Institute International (July 2022)
- Texas Teaching Certificate
- Principal (Grades EC-12)
- Elementary Self-Contained (Grades 01-08)
- Elementary Physical Education (Grades 01-08)