Building leaders, organizations, & communities creating success & change by:

- Clarifying communication, reducing complexity, & communicating data •
- Bridging divides, creating connections, & including overlooked voices •
- Increasing accessibility, forging links others miss, & amplifying impact •

Awards & Recognition:

- NASA Fellowship: NASA funded research developing new shock forecasting, mitigation, & recovery field •
- Star of the North Fellowship: Intergovernmental leadership position improving Minnesota government •
- Government Innovation Award 3x: for inclusive innovation improving government that was recognized • 3 separate times for developing leaders, improving data systems, & building intergovernmental relationships
- Positive Happening Award: for engagement building intergovernmental relationships & resolving disputes •
- Achievement Award: for modernization improving state & county government performance & efficiency •
- Star Award: for transformation advancing Minnesota Department of Revenue's capacity & performance •
- Outstanding Instructor Award: for instruction elevating inclusion & student performance in STEM •
- National Public Radio Profile: 1st profile in series profiling communicating expertise to the general public •

Leadership, Engagement, & Research

- Project Management & Planning: Ran awarded research, teaching, business, project, & leadership teams. Created asset & goal balanced retention, development, data, leadership, & state & university wide programs.
- Public Speaking & Advocacy: Presented NASA, tax, education, science, economic, student, & other topics • to League of Minnesota Cities, 20,000 attendee conferences, students, executives, & other stakeholders.
- Talent Development: Trained & oversaw researchers, managers, & instructors. Fostered teamwork, buy-in, • & performance quality. Hired academic; business; city, county, & state government; & nonprofit leaders.
- Coding & Data Analysis: Identified items, analysis methods, & critical events in big data. Programmed • using FORTRAN, IDL, SDT, LabView, Python, C, XML, SAS, SQL, Visual Basic, MS Office, & more.
- Assimilation & Dissemination of Information: Quickly acquired, organized, & broke down taxes, code, ۲ economic indexes, NASA science, recruiting hurdles, & complex subjects so all could understand & act.
- **Communication:** Facilitated meetings, taught classes, & developed communication & training plans with • extensive engagement generating requests for initiatives & courses with equally successful communication.
- Interpersonal & Human Relations: Created academic, government, nonprofit, business, & cross sector • workgroups creating stakeholder buy-in, organizing more efficient teams, & facilitating goal progress.

Founder – Community Pandemic Response

Directed technology access, communication clarification, supply delivery, education, re-employment, & more

- Assisted essential workers, students, compromised group members, & others with Covid 19 societal changes •
- Created 0 cost technology & internet access empowering & engaging traditionally disadvantaged groups •
- Clarified regulations ensuring stakeholder buy-in enabling successful government & educational changes •
- Ensured appropriate media, government, & academic responses to both Coronavirus & protests for equality •

Co-Founder FOJBI – National Public Radio

Built program growing it from an idea to 1000s of members in the 1st year

- Expanded world experts' competencies & developed their communication, leadership & inclusion capacities •
- Engaged 1000s of students, researchers, instructors, communicators, & executives regardless of career level •
- Developed story initiation, upskilling, social media, recruitment, employment, & inclusion strategies •

March 2020 – Present

April 2015 – Present

Coach & Consultant – AHCC

Developed leaders, communities, organizations, systems, & policy thru communication, leadership, & change:

- World Expo: Facilitated the 1st US World's Fair bid in >30 years connecting science & communication
- Tied academic institutions, businesses, governments, nonprofits, & media in joint purpose
- Changed federal law to allow bids 0
- Kansas State High School Activities Association: Managed tournaments of 1000s of competitors & staff • Judged rounds, critiqued strategies, & improved students' speaking 0
 - 0 Prepared students for college & careers
- Business Development: Bridged researchers, educators, students, & others into business founders •
 - Advised businesses across industries such as TLP, Draw It To Know It, & Weathervane Labs 0
 - Enabled 1st time business leaders by helping them with plans such as hiring, communication, & strategy 0
- Minnesota Government: Transitioned appointed & elected executives' plans from drawing board to reality ٠
 - Developed diverse leadership, economic, sustainability, education, water, labor, & other programs 0
 - Created public-private partnerships building the cross sector collaboration necessary for success 0
- Organizational Unity & Leadership: United 10s of cross sector organizations in joint leadership •
 - Integrated governments, academia, nonprofits, & businesses in mutual development of inclusive leaders
 - Created inclusive training & leadership paths leveraging interdisciplinary & cross sector principles
- Advising & Tutoring: Enabled necessary career skills, knowledge, & connections for students & researchers •
 - Created STEM success pathways for those from traditionally underrepresented backgrounds 0
 - Ensured education delivered on success promises especially for those from nontraditional backgrounds
- University of Minnesota: Advised executives on developing inclusive cross disciplinary programs & success ٠ o Grew interdisciplinary, instructor, educational, leadership, & retention programming for students & staff
 - Ran cross school & college newsletter connecting 100s across all University of Minnesota departments

Lead to Community Pandemic Response, National Public Radio FOJBI, Professionals holding Degrees, Make It. MSP., PhDs At Work, State of Minnesota, & University of Minnesota positions & continued involvement.

Executive Director – Professionals holding Degrees

November 2017 – March 2020 Built cross discipline world expert career facilitation & workforce development program for 1000s

- Connected members to universities, start-up generators, investors, governments, non-profits, & businesses •
- United 1000s of members to each other ensuring career success regardless of sector, field, or career pivot •
- Ensured all educational & demographic backgrounds saw fulfillment of education's social mobility promise •

Steering Committeeperson – Make It. MSP.

Ran economic & workforce development including Makers Hub, Newcomers Team, & MSP Hello programs

- Grew STEM, Professional of Color, & Transplant communities forging new economic development voices •
- Drew students, area's 2 largest employers, University of Minnesota, state government, & 100s of partners •
- Created unity among competing Fortune 500s, startups, governments, educational institutions, & non-profits •

Director – PhDs At Work

Developed cross field academic to workforce transition program for 100s of PhDs improving career options

- Created program recruiting thru cross sector networking, job opportunities, & improved skills understanding •
- Built interdisciplinary ties across sciences, humanities, & other fields thru common cross field knowledge •
- Ensured 100s of the world's leading experts improved the world thru work inside & outside academia •

January 2016 – March 2020

August 2002 – Present

January 2016 – December 2017

Star of the North Fellow – State of Minnesota

Directed executive development, taxation overhaul, & data projects reducing training time from years to days

- <u>Executive Development:</u> Championed inclusive interagency executive leadership development fellowship
 - Grew leaders' diversity creating majority women & traditionally underserved population fellowship
 - Increased fellowship applicants 10-fold, fellowships 2-fold, & participating agencies 2-fold yearly
 - Mentored 10s of interagency fellows yearly thru personal conversations & facilitated career growth
 - Prepared state & local government for retirement cliff thru new hiring, training, & leadership practices
- <u>Taxation Overhaul</u>: Deployed tax system fixing centuries old issues worth millions without disrupting filing
 Rebuilt <1/4th staffed technical, analysis, communication, & leadership teams on the fly enabling rollout
 - Oversaw 10s influencing 1000s impacting millions internationally across government, business, & more
 - Created new communication methods enabling >200 weekly outreach interactions by technical staff
 - Converted from 87 paper summaries to digital millions of records & 1000s of entries per record system
- <u>Data Projects:</u> Expanded data overhaul across state & local government, businesses, academia, & nonprofits
 - Built public-private partnerships & represented Minnesota Government within & outside government
 - Settled pre-existing multi-year legal disputes thru cross agency, government level, & sector engagement
 - Ensured equitable tax, health, employment, environmental, economic, transportation, & other policy
 - Created cross agency & sector forecasting, planning, & development system validating policy objectives

NASA Fellow – University of Minnesota

Directed science research, course instruction, instructor development, & leadership training advancing inclusion

- Science research: Built new NASA & European Space Agency (ESA) forecast, mitigation, & recovery field
 - \circ Ran research with impacts scaled at >10% global economy funded via grants with <10% award rates
 - Presented at conferences with >20,000 interdisciplinary science, policy, & media attendees
 - Developed 10s of undergraduate, graduate student, postdoc, staff, & faculty researchers
 - Managed my grant plus NASA, ESA, & NSF grants of professors on extended medical & family leaves
- <u>Course Instruction</u>: Taught engaging & awarded courses inverting underrepresented group demographics
 o Increased enrollments & attendance 5-fold while improving student achievement over a letter grade
 - Raised student performance multiple standard deviations as measured by other instructors' assessments
 - Flipped women's representation in introductory STEM courses from <15% to >85% of enrolled students
 - Raised most traditionally underrepresented backgrounds from underrepresented to 2-3x overrepresented
 - Instructor Development: Established instructor onboarding, retention, training, & development programs
 - Ran 20 instructor course improving 1000s of students' performance & instructors' teaching ability
 - Onboarded & trained 100s of undergraduate, graduate student, adjunct, staff & faculty instructors yearly
 - Mentored 10s of instructors per semester increasing mentored instructors' award recognition rate 3-fold
 - \circ Guided >1/2 of a teaching awards' recipients while mentoring ~10% of instructors eligible for the award
- <u>Leadership Training</u>: Grew interdisciplinary leadership program for students, staff, faculty, & administrators
 - Built science & policy program's membership, programming, & involvement thru 10-fold yearly growth
 - \circ Increased both average event attendance & number of offered events from ~2 per semester to ~2 per day
 - Enabled overrepresented leadership demographics for women & other typically underrepresented groups
 - Created & ran alumni program connecting graduate students, postdocs, & adjuncts to regional leadership

Researcher – Kansas State University

Initiated Department of Energy innovation, environment, & energy research while training 10s of researchers

Assistant Director of Human Resources – Wheeled Coach

Reduced payroll resources by 80%; improved production via cross department coordination; & directed payroll

July 2015 – June 2017

June 2007 – June 2015

May 2004 - May 2007

May 2003 – August 2003

Education:

Masters & Ph.D. (ABD)University of MinnesotaGraduate CertificatesBoston University, University of Colorado, University of AlabamaBachelors – Summa Cum LaudeKansas State University

Selected Leadership Workshops

- <u>Leadership</u>: Integrative Leadership | Facilitating Meetings that Matter | Strategic Effectiveness for Leaders
- <u>Professional Development</u>: Communication | Developing Collaborations | Creating Networks
- <u>Engagement</u>: Building Communities & Networks | Non-Profit Structures | Telling Your Story
- Legislative: Contributing to Policy Making | Engaging in the Legislative Process | Data Driven Legislation
- Policy Analysis: Negotiation Basics | Systems Thinking & Tools | Closing the Divide between Policy & Data
- <u>Presentation</u>: Building Better Presentations | Interacting with the Media | Your Life Online

Selected Publications & Presentations

- Hupach et. al., Minnesota Counties Computer Cooperative Conference, 2017.
- Hupach et. al., State Assessed Property Fall Forum, 2017.
- Hupach et. al., Minnesota Region 1 Tax Officials Meeting, 2016.
- Hupach et. al., Mid-State Computer Cooperative County Officials Meeting, 2016.
- Hupach et. al., Minnesota Counties Computer Cooperative Conference, 2016.
- Tang et. al., Geophysical Research Letters 40, no. 12 (2013): 2884-2890.
- Schreiner et. al., Solar Physics 288, no. 1 (2013): 291-309.
- Hupach et. al., American Geophysical Union Meeting, vol. 1, p. 2207. 2012.
- Tang et. al., American Geophysical Union Meeting, vol. 1, p. 2240. 2012.
- Hupach et. al., American Geophysical Union Meeting, vol. 1, p. 1842. 2010.
- Hupach et. al., Space Weather School, 2010.
- Tang et. al., Space Weather School, 2010.
- Ray et. al., Bulletin of the American Physical Society (2006).
- Ranitovic et. al., APS Atomic, Molecular and Optical Physics Meeting, vol. 1, p. 1083. 2006.
- Alnaser et. al., International Conference on Photonic, Electronic, & Atomic Collisions (ICPEAC), 2005.

Plus, multiple weekly University of Minnesota, state government, & local government presentations 2007-2017.