ROB E. CARPENTER

Human Resource Development Soules College of Business The University of Texas at Tyler 3900 University Blvd. Tyler, TX 75799 Tel: 903-530-1700

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Business email: <u>rec@rlventures.com</u>

SUMMARY

I am a seasoned healthcare executive and educator with over 25 years' experience in developing, managing, and assimilating health care companies. My principal strengths lie in advancing growth models, fostering asset development, and employing pragmatic country logic to ensure sustainable and impactful business strategies. I am passionate about driving innovation and empowering healthcare solutions that positively impact communities and transform patient care. I am currently founder and CEO of Advanta Genetics, a highly complex clinical and research laboratory accredited by the College of American Pathologists specializing in infectious disease molecular testing and next generation sequencing technology and cofounder of Scienetix, a bioscientific company centered around products to optimize molecular genomic laboratory workflows.

EDUCATION

Ph.D. Human Resource Development (2020)

Concentration: Organizational Change and Development

The University of Texas at Tyler, Tyler, Texas

Soules College of Business

Dissertation: Team-Based Effects on Individual Human Capital: A Proxy for

Organizational Performance

M.B.A. Master of Business Administration (2014)

Specialization: Healthcare Management

The University of Texas at Tyler, Tyler, Texas

D.C. Doctor of Chiropractic (1995)

Parker University, Dallas, Texas

Texas License: 6841

B.S. Human Anatomy (1992)

Parker University, Dallas, Texas

BUSINESS EXPERIENCE

Founder and Chief Executive Officer-Advanta Genetics, LLC, 2011 - Present

10935 CR 159

Tyler, Texas 75703 CLIA: 45D2063134 CAP: 8863194 DEA: RA0543125

www.aalabs.com

ACADEMIC EXPERIENCE

TEACHING

Executive in Residence: The University of Texas at Tyler

Soules College of Business

2023- Present

Adjunct Professor: The University of Texas at Tyler

Soules College of Business

2020-Present

Adjunct Professor: The University of Texas at Tyler

School of Medicine, Department of Medical Education

2023-Present

Instructor of Record:

Supervision (HRD 4301), 3 credits. Designed to provide supervisors the opportunity to acquire knowledge with respect to their relationship to management, employees, unions, and special personnel. Emphasizes activities associated with production, quality, control, personnel training, materials, equipment, records, and reports. The University of Texas at Tyler, Tyler, Texas

Summer 2020 Rating: 4.5 (*n*=11) Summer 2021 Rating: 4.5 (*n*=8)

Seminar on Organizational Change and Development (HRD 6336), 3 credits. An advanced doctoral seminar that introduces students to the field of Organization Development (OD), an area of practice and research in Human Resource Development (HRD). Students are exposed to the history, philosophies, theories, techniques, and applications of OD through readings, in-class discussions, case activities, and self-reflection exercises. The University of Texas at Tyler, Tyler, Texas

Spring 2022 Rating: 4.75 (*n*=4) Spring 2023 Rating: 4.38 (*n*=8)

Research Seminar in Human Resource Development (HRD 6391), 3 credits. An advanced doctoral seminar that introduces contemporary topics in human resource development. Students are exposed to methods to develop a manuscript for submission to a peer-reviewed journal. Students conduct rigorous manuscript review using review criteria and begin to understand the parts of a manuscript and how they fit together to support each other to create a quality publication. The University of Texas at Tyler, Tyler, Texas

Summer 2022 Rating: 5.00 (*n*=7)

Talent Management and Development (HRD 6388), 3 credits. An advanced doctoral seminar that introduces foundations of research and applications of talent management and development. Emphasis is placed on research perspectives, methodology, and theoretical framework employed by HRD practitioners in developing HRD/M and career development strategies to improve firm performance. The University of Texas at Tyler, Tyler, Texas

Fall 2022 Rating: 4.91 (*n*=11)

Fall 2023 Rating:

PUBLICATIONS AND RESEARCH

REFEREED JOURNAL ARTICLES

- Carpenter, R. E., Tamrakar, V., Almas, S., Sharma, A., & Sharma, R. (2023). SARS-CoV-2 next generation sequencing (NGS) data from clinical isolates from the East Texas Region of the United States. *Data in Brief*, 49, 109312. https://doi.org/10.1016/j.dib.2023.109312
- Almas, S., Carpenter, R. E., Rowan, C., Tamrakar, V., Bishop, J., & Sharma, R. (2023).
 Advantage of Precision Metagenomics for Urinary Tract Infection Diagnostics. Frontiers in Cellular and Infection Microbiology, 13, 1221289.
 https://doi.org/10.3389/fcimb.2023.1221289
- Haidusek-Niazy, S., Huyler, D., **Carpenter, R. E.** (2023). Mentorship reconsidered: A case study of K-12 teachers' mentor-mentee relationships during the COVID-19 pandemic. *Social Psychology of Education*. https://doi.org/10.1007/s11218-023-09788-w
- Carpenter, R. E., Tamrakar, V., Almas, S., Sharma, A., Rowan, C. & Sharma, R. (2023). Optimization of the Illumina COVIDSeqTM protocol for de-centralized, cost-effective genomic surveillance. *Practical Laboratory Medicine*. 34, e00311. https://doi.org/10.1016/j.plabm.2023.e00311. This research has been highlighted by the Centers for Disease Control (CDC) in: Public Health Genomics and Precision Health Knowledge Base (v8.3). https://phgkb.cdc.gov/PHGKB/amdClip.action?action=archive&date=02/09/2023
- **Carpenter, R**, Long, M., & Robbins, B. (2023). Plasma drug testing for D and L isomers of amphetamine and methamphetamine by liquid chromatography mass spectrometry with a range of 2.5 to 1000 ng/mL. In *International Journal of Laboratory Hematology 45*, 29-29. New Jersey, USA: Wiley.
- Almas, S., Carpenter, R.E., Singh, A., Rowan, C., Tamrakar, V.K., Sharma, R. (2023). Deciphering microbiota of acute upper respiratory infections: A comparative analysis of PCR and mNGS methods for lower respiratory trafficking potential, *Advances in Respiratory Medicine*, 91(1), 49–65. https://doi.org/10.3390/arm91010006
- Robbins, B., **Carpenter, R. E.**, Long, M., Perry, J. (2023). Quantifying 64 drugs, illicit substances, and D- and L- isomers in human oral fluid with liquid-liquid extraction. *Open Journal of Medical Sciences*, *3*(1), 1–38. https://doi.org/10.31586/ojms.2023.591

- Robbins, B., Long, M., Perry, J., & Carpenter, R. E. (2023). Analysis of D- and L- isomers of (meth)amphetamine in human K2EDTA plasma. *Journal of Biomedical and Life Sciences*, 3(534), 1-12. https://doi.org/10.31586/jbls.2023.534
- Silberman, D., Aguinis, H., & **Carpenter, R. E.** (2022). Using extreme pedagogy to enhance entrepreneurship education. *Entrepreneurship Education and Pedagogy*, *0*(0). https://doi.org/10.1177/25151274221144218
- Carpenter, R., Sharma, R., Brown, E., Vine, T. (2022). ID043. Deciphering the microbiology of respiratory infection using precision metagenomics analysis (2022). In *Abstracts, The Journal of Molecular Diagnostics*, 24(10) S1-S154. https://doi.org/10.1016/S1525-1578(22)00284-7.
- Robbins, B., **Carpenter, R. E.,** Long, M. & Perry, J., (2022). A human oral fluid assay for D-and L- isomer detection of amphetamine and methamphetamine using liquid-liquid extraction. *Journal of Analytical Methods in Chemistry*. (vol. 2022) Article ID 4819599, 1-9 https://doi.org/10.1155/2022/4819599.
- **Carpenter, R. E.,** Sadia, A., Brown, E., Vine, T., Sharma, R. (2022). COVIDSeqTM as laboratory developed test (LDT) for detection of SARS-CoV-2 variants of concern (VOC). *Archives of Clinical and Biomedical Research*, 6(6), 954-970. https://doi.org/10.26502/acbr.50170309
- **Carpenter, R. E.,** Silberman, D., Coyne, L. & Takemoto, J. (2022). Enhanced numeracy skill following team-based learning in United States pharmacy students: a longitudinal cohort study and social practice view. *Journal of Educational Evaluation for Health Professionals*, 19(29), 1-8. https://doi.org/10.3352/jeehp.2022.19.29
- Carpenter, R. E., Tamrakar, V., Chahar, H., Vine, T., & Sharma, R. (2022). Confirming multiplex q-PCR use in COVID-19 with next generation sequencing: Strategies for epidemiological advantage. *Global Health, Epidemiology and Genomics*, (vol. 2022) Article ID 2270965, 1-10. https://doi.org/10.1155/2022/2270965
- **Carpenter, R. E.,** Silberman, D., & Takemoto, J. (2022). The student engagement effect of teambased learning on student pharmacists. *American Journal of Pharmaceutical Education*, 86(5), 8567, 395-401. https://doi.org/10.5688/ajpe8567
- **Carpenter, R. E.** (2022). An autoethnographic reflection of adult learning and paternal grief. *Adult Learning*, *33*(2), 71-81. https://doi.org/10.1177/10451595221074
- Silberman, D., **Carpenter, R. E.,** Cabrera, E., and Kernaleguen, J. (2022). Organizational silofication: Implications in grouping experts for organizational performance. *Development and Learning in Organizations: An International Journal*, *36*(6), 15-18. https://doi.org/10.1108/DLO-10-2021-0193
- **Carpenter, R. E.,** Silberman, D., & Takemoto, J. (2021). Transforming prescription opioid practices in primary care with change theory. *Health Services Insights*, *14*, 1-8. https://doi.org/10.1177/11786329211058283
- **Carpenter, R.,** McWhorter, R., Donaldson, S., Silberman, D., & Maffei, S. (2021). Working against the clock: A model for rural STEMI triage. *Health Services Insights*, *14*, 1-8. https://doi.org/10.1177/11786329211037521

- **Carpenter, R. E.** (2021). Learning as cognition: A developmental process for organizational learning. *Development and Learning in Organizations: An International Journal*, *35*(6), 18-21. https://doi.org/10.1108/DLO-08-2020-0183
- Silberman, D., Carpenter, R., Takemoto, J., Coyne, L. (2021). The impact of team-based learning on the critical thinking skills of pharmacy students. *Currents in Pharmacy Teaching and Learning*, 13(2), 116-121. https://doi.org/10.1016/j.cptl.2020.09.008
- Carpenter, R. E., & Silberman, D. (2020). Veteran-civilian career identity conflict: What is human resource development's role? *New Horizons in Adult Education and Human Resource Development*, 32(3), 35-53. https://doi.org/10.1002/nha3.20287

REFEREED JOURNAL ARTICLES (UNDER REVIEW)

- McWhorter, R. R., Johnson, G., Delello, J. A., Young, M., & Carpenter, R. E. (revised; under 2nd review). We have talent: Mock team interviewing for undergraduate business courses. *Journal of Education for Business*. Manuscript submitted for publication.
- Coyne, L., McWhorter, R., Carpenter, R. E., & Stone, K. (under review). Adopting Virtual Reality for Education: Exploring Teachers' Perspectives on Readiness, Opportunities, and Challenges. *Interactive Learning Environments*. Manuscript submitted for publication.

BOOK CHAPTERS

- Silberman, D., & Carpenter, R. E. (in press). Professional Insights. In K. M. Camp (Ed.), *Strategies for Successful Healthcare Organizations*, Cognella Publishing.
- Haidusek-Niazy, S., & Carpenter, R. E. (2023) Examining the mentor-mentee dyad to understand the role of early career teacher stress created by Covid-19. In C. J. McCarthy & R. G. Lanbert (Eds.), Research on Teacher Stress: Implications for the COVID-19 Pandemic and Beyond. Information Age Publishing. ISBN: 979-8-88730-214-0
- **Carpenter, R.,** (2016). Diagnosis dad. In B. D. Beal, N. L. Nieberding, & H. Olson-Beal (Eds.), *As I see it: Personal essays about health care and health care reform in the United States* (pp. 103-106). ISBN-10: 1622881230. SFA Press.

CONFERENCE PRESENTATIONS

A. CONFERENCE PRESENTATIONS (INTERNATIONAL/NATIONAL)

- Patole, S. R., McWhorter, R., & Carpenter, R. E. (2023, March). Exploring intelligent learning systems, artificial intelligence, and implications for organizational culture [Poster presentation]. Academy of Human Resource Development 2023 International Research Conference in the Americas, Minneapolis, MN, United States.
- Carpenter, R. E., Sadia, A., Brown, E., Vine, T., Sharma, R. (2022, November). *Deciphering the microbiology of respiratory infection using precision metagenomics analysis* [Poster presentation]. Association for Molecular Pathology (AMP) 2022 Annual Meeting & Expo. Phoenix AZ. https://amp22.amp.org/

- **Carpenter, R.E.,** Long, M., & Robbins, B. (2022, September). *Plasma drug testing for D and L isomers of amphetamine and methamphetamine by liquid chromatography mass spectrometry with a range of 2.5 to 1000 ng/ml* [Poster presentation]. International Society for Laboratory Hematology Conference, Bologna, Italy. https://www.islh.org/2022/index.php
- Silberman, D., Carpenter, R.E. (2022, July). *It's personal...not business: How organizational silofication impedes project performance* [Paper presentation]. 2022 Project Management in Practice Conference—Changes in Projects, Programs, and Portfolios. Boston University, Boston, MA. https://www.projectmanagementinpractice.com/session-details-june-14/
- **Carpenter, R.E.,** Vine, T., Sharma, R. (2022, May). *Application of qPCR-based SARS-Cov-2 variant detection to complement Next Generation Sequencing (NGS)* [Poster presentation]. 2022 American Association of Bioanalyses and College of Reproductive Biology Symposium, Austin, TX, United States, https://www.aab.org/aab/ConfAAB.asp
- Silberman, D., **Carpenter, R.E.,** Kernaleguen, J. (2022, March). What are the pandemic effects of leadership identity? [Poster presentation]. 28th Annual International Society for Research on Identity (ISRI) Conference, New Orleans, LA, United States. http://identityisri.org/conference/
- Silberman, D., Aguinis, H., **Carpenter, R. E.,** Kernaleguen, J. (2022, March). *Extreme pedagogy: An integrative approach for preparing business leaders* [Panel Discussion]. 64th Annual Southwest Academy of Management (SWAM) Conference, New Orleans, LA, United States. https://swaom.org/2022-in-new-orleans
- Silberman, D., Carpenter, R., Coyne, L., Takemoto, J. (2021, June). The impact of team-based learning on the critical thinking skills of pharmacy students [Poster presentation]. International Association of Medical Science Educators, 25th Annual Meeting, Virtual Conference. (Winner of Best Poster Presentation Award)
- Silberman, D., Carpenter, R., Coyne, L., Takemoto, J. (2021, March). *The impact of team-based learning on pharmacy student critical thinking skills* [Poster presentation]. Team Based-Learning Collaborative, 20th Annual Meeting, Virtual Conference. (Winner-best poster award)
- **Carpenter, R.,** Silberman, D., Sun, J., & Phan, A., (2020, May). *Caregivers of the Elderly: Perceived Encumbrances of Urinary Tract Infections* [Abstract presentation]. The 2020 East Texas Research Conference, Tyler, Texas, United States [Conference Canceled].
- Carpenter, R., Silberman, D., Sun, J., & Phan, A., (2020, May). A Need for Better Opioid Management: A Case Study of Morphine Equivalents [Abstract presentation]. The 2020 East Texas Research Conference, Tyler, Texas, United States [Conference Canceled].
- Silberman, D., Carpenter, R., Sun, J., & Phan, A., (2020, May). *Using Evidence-based Genetics in Cancer: A Study of Social Barriers and Challenges to Achieve Organizational Change in East Texas* [Abstract presentation]. The 2020 East Texas Research Conference, Tyler, Texas, United States [Conference Canceled].
- **Carpenter, R.,** Silberman, D. (2020, February). Where is the neuroscience in HRD? A peek into the midbrain [Paper presentation]. Academy of Human Resource Development 2020 International Research Conference in the Americas. Atlanta, GA, United States.

- **Carpenter, R.,** Mull, M., Silberman, D. (2020, February). *Your brain on work: The neuroscience of trust* [Poster presentation]. Academy of Human Resource Development 2020 International Research Conference in the Americas, Atlanta, GA, United States.
- **Carpenter, R.,** Silberman, D., Mull, M. (2020, February). *Attachment orientation and HRD: A psychoneuroimmunology view* [Poster presentation]. Academy of Human Resource Development 2020 International Research Conference in the Americas, Atlanta, GA, United States.
- Carpenter, R., Sun, J., Silberman, D. (2020, February). *Transforming Prescription Opioid Management with Change Theory: A Case Study* [Poster presentation]. Academy of Human Resource Development 2020 International Research Conference in the Americas, Atlanta, GA, United States.
- Silberman, D., Carpenter, R., Sun, J. (2020, February). *Building police effectiveness: Exploring the guiding blueprint of work design to reduce work stress* [Poster presentation]. Academy of Human Resource Development 2020 International Research Conference in the Americas, Atlanta, GA, United States.
- Silberman, D., **Carpenter, R.,** McWhorter, R. (2019, February). "Relate-Create-Donate": Exploring Team-Based Learning in a College of Pharmacy [Poster presentation] Academy of Human Resource Development 2019 International Research Conference in the Americas, Louisville, Kentucky, United States.

CURRENT DOCTORAL COMMITTEES SERVING ON

Howlett, Jeff, The University of Texas at Tyler, Soules College of Business Patole, Sanket, The University of Texas at Tyler, Soules College of Business

JOURNAL MANUSCRIPT REVIEWS

Adult Learning (2022, 2023)- Sage Publications
New Horizons in Adult Education and Human Resource Development (2021) -Wiley
Cogent Business & Management (2023)-Taylor & Francis

KEYNOTE ADDRESSES

Flip Your Scholarship Writing Switch (2023)
PhD Writing Retreat, Soules College of Business, The University of Texas at Tyler

INVITED SPEAKER

Driving Revenue with Scientific Equity (2023) Science and Society Symposium Quarterly Series: Technology Transfer The University of Texas at Tyler School of Medicine

Leadership in the Rehabilitation Sciences (2022, 2023)

Master of Occupational Therapy Program Department of Rehabilitation Sciences School of Health Professions University of Texas Tyler

Your All But Dissertation, Now What? (2022)

Lunch and Learn-Soules College of Business, The University of Texas at Tyler

On What to Know About AHRD Conference (2023) Lunch and Learn-Soules College of Business, The University of Texas at Tyler

INVITED PODCASTS

Life Science Success-Interesting discussions with cutting edge leaders https://www.lifesciencesuccess.com/sharma-carpenter/

FELLOWSHIPS

Follow, Carrick Brain Institute, Dallas, TX 1996-1998 Fellow, American Back Society, Oakland, CA 2002

MEMBERSHIPS

Academy of Management
Academy of Human Recourse Development
College of American Pathologists
American Clinical Laboratory Association
American Society of Microbiology
Clinical & Laboratory Standards Institute
Association for Diagnostics & Laboratory Medicine

AWARDS AND HONORS

Student of the Decade (2022) - Soules College of Business, The University of Texas at Tyler

APPOINTMENTS

Chair, Human Resource Development Advisory Council-Soules College of Business, The University of Texas at Tyler

Advisory Council-Soules College of Business, The University of Texas at Tyler

Advisory Board—Stewardship Council for the UT Tyler East Texas Entrepreneurship Center Blackstone Launchpad Group—2021

Advisory Board—Hibbs Institute for Business & Economic Research—The University of Texas at Tyler 2020-present

International Association for the Study of Pain Special Interest Group on Pain and Movement, 2002

Brain Injury Interdisciplinary Special Interest Group, 2003

National Directory of Spine Physicians, 2003

National Registry of Multidisciplinary Pain Practitioners, 2002

FOREIGN MEDICAL MISSIONS

The Peoples NO. 1 Hospital of Qujing, YunNan Province, China Missions, 2002

The Peoples NO. 2 Hospital of Qujing, YunNan Province, China, 2002

The Chinese Traditional Medicine Hospital of Qujing, YunNan Province, China, 2002

Hospital 9 De Julho, Porto Velho, Brazil, 2004