
CURRICULUM VITAE

Jennifer K. Vanos, PhD

Assistant Professor
School of Sustainability
Julie Ann Wrigley Global Institute of Sustainability
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CONTACT INFORMATION

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EDUCATION

- 2012** **PhD, Atmospheric Sciences, with distinction**
University of Guelph, Ontario, Canada, School of Environmental Sciences.
Dissertation Title: “*Modeling outdoor thermal comfort of humans performing physical activity: applications to health and emergency heat stress preparedness*” (Chair: Dr. J. Warland)
- 2008** **B.Sc. (Env) Environmental Sciences, with distinction**
University of Guelph, Ontario, Canada, School of Environmental Sciences
Major: Earth and Atmospheric Sciences. **Minor:** Environmental Degradation.

POSITIONS HELD

- 2018–** **Arizona State University**
Assistant Professor, School of Sustainability
Senior Sustainability Scientist, Julie Ann Wrigley Global Institute of Sustainability
Affiliate Faculty, School of Geographical Sciences and Urban Planning
Graduate Faculty, Biological Design, Arizona State University
Graduate Faculty, Civil, Environmental and Sustainable Engineering
Honors Faculty, Barrett Honors College
Knowledge Exchange for Resilience Fellow
Affiliate Centers & Institutes: Urban Climate Research Center, Center for Smart Cities and Regions; Institute for Social Science Research
- 2018–2020** **Visiting Researcher, University of California San Diego,**
Scripps Institution of Oceanography
- 2017–2018** **Assistant Professor, University of California San Diego**
Joint Interdisciplinary Faculty Position in Climate and Human Health
Scripps Institution of Oceanography & the School of Medicine
- 2013–2016** **Assistant Professor, Texas Tech University**
Atmospheric Science Research Group, Department of Geosciences
Texas Tech Climate Science Centre Faculty Associate
Affiliate Faculty, National Wind Institute
- 2013** **Visiting Research Scholar, University of Miami**
Department of Geography and Regional Studies
- 2012** **Postdoctoral Fellow**
Environmental Health Sciences Research Bureau, Government of Canada, Health Canada

RESEARCH AND TEACHING INTERESTS:

Human Biometeorology, Environmental Health, Extreme Heat, Air Pollution, Bioclimatic Urban Design, Climate Change and Health, Adaptation, Urban Resilience, Sustainability and Health in Sport.

SCHOLARLY METRICS

Google Scholar: <https://scholar.google.com/citations?user=lkQilX8AAAAJ&hl=en>

	ALL	Since 2015
Citations	2,014	1,895
h-index	25	24
i10-index	44	43

BIBLIOGRAPHY

Summary: Since 2010, I have published 61 peer-reviewed publications, 20 as lead author, and five with student mentees as lead authors where I am corresponding author. I have also led one book chapter and co-authored three, and published 16 peer-reviewed short communications, methodsX papers, editorials, or brief reports.

1. REFEREED MANUSCRIPTS (*grad students, **undergrad students) [Impact Factor (IF) when published; ^denotes lead or corresponding authorship; NA - not yet available]

- [61] **Vanos, JK.**, Wright, M., Kaiser, A., Middel, A., Ambrose, H., Hondula, DM. Perceptions and performance of evaporative misters on outdoor thermal comfort. Submitted to *International Journal of Biometeorology*. Accepted Nov 15, 2020. 10.1007/s00484-020-02056-y. [IF (2019): 2.680]
- [60] **Vanos, JK.**, Baldwin, JW., Jay, O., Ebi, K. Projecting heat-health outcomes in a changing climate: Simplicity lacks robustness. *Nature Communications*, Accepted Nov 4, 2020. [IF (2019): 12.121]
- [59] Moamen, E., Nandini, R., Sorge, S., Webster, J., Merry, K., Angelica, C., Vecellio, D., Kruczek, C., Dowd, S., Ardon-Dryer, K; **Vanos, JK.**; San Francisco, M. Investigating the culturable atmospheric fungal and bacterial microbiome in West Texas: Implication of dust storms and origins of the air parcels. *FEMS Microbes*. In press. Accepted Oct. 28, 2020. [IF: NA]
- [58] Montebalanco, A., **Vanos, JK.**, LeRoy, S., Juarez, P. Garfin, G. Evaluation of a Maternal Health and Extreme Heat Exposure Training. *Journal of Social, Behavioral, and Health Sciences*. In press. Accepted Oct 25, 2020. [IF: 3.675 (5-year)]
- [57] Montebalanco, A., **Vanos, J.K.** Community-Based Maternal Health Workers' Perspectives on Heat Risk and Safety: A Pilot Qualitative Study. *Health Care for Women International*, Online. <https://doi.org/10.1080/07399332.2020.1803873>. [IF: 0.900 (2019)]
- [56] Lenzholzer, S., Carsjens, G., Brown, R., Tavares, S., **Vanos, JK.**, Kim, YJ., Lee, K. (2020) Awareness of urban climate adaptation strategies: An international overview. *Urban Climate*. 34, 100705. [IF: 3.834 (2019)]
- [55] Hosokawa, Y., Adams, W., Casa, DJ., **Vanos, JK.**, Cooper, E. Grundstein, A., Jay, O., McDermott, B., Otani, H., Raukar, N., Stearns, R., Tripp, B. Round Table on Preseason Heat Safety in Secondary School Athletics: Environmental Monitoring During Activities in Heat. *Journal of Athletic Training*, Accepted 7/20/20. In press. [IF: 2.478 (2019)]
- [54] Lenzholzer, S., Carsjens, G., Brown, R., Tavares, S., **Vanos, JK.**, Kim, YJ., Lee, K. (2020) Urban climate awareness and urgency to adapt: An international overview. *Urban Climate*. 33, 100667, <https://doi.org/10.1016/j.uclim.2020.100667> [IF: 3.834 (2019)]
- [53]^ **Vanos, J.K.**, Thomas, W.M., Grundstein, A.J., Hosokawa, Y., Lui, Y., Casa, D. (2020) A multi-scalar climatological analysis in preparation for extreme heat at the Tokyo 2020 Games. *Temperature*. Online: <https://doi.org/10.1080/23328940.2020.1737479> [IF: NA]

Refereed Manuscripts cont (*grad students, **undergrad students) [Impact Factor (IF) when published; ^denotes lead or corresponding authorship; NA - not yet available]

- [52]^ **Vanos, J.K.**, Grundstein, A. (2020) Variations in athlete heat loss potential between hot-dry and warm-humid environments at equivalent WBGT thresholds. *Journal of Athletic Training*. In press. DOI: 10.4085/1062-6050-313-19. [IF: 2.478 (2019)]
- [51] Downs, N., Baldwin, L., Parisi, A., Butler, H., **Vanos, J.K.**, Beckman, M.J., Harrison, S.L. (2019) Localised Variations in Ultraviolet Protection by Tree Shade: A comparative assessment of twenty-one shade trees for twenty-six Queensland municipalities, Australia. *Applied Geography*. 108, <https://doi.org/10.1016/j.apgeog.2019.05.006>. 74–82. [IF: 4.009 (5-year)]
- [50] Olsen, H., Kennedy, E., **Vanos, J.K.** (2019) Shade provision in public playgrounds for thermal safety and sun protection: A case study across 100 play spaces in the United States. *Landscape and Urban Planning*, 189, 200-211. <https://doi.org/10.1016/j.landurbplan.2019.04.003>. [IF: 5.441]
- [49]^ **Vanos, J.K.**, Vecellio, D.J., Kjellstrom, T. (2019) Workplace Heat Exposure, Health Protection, and Economic Impacts: A Case Study in Canada. *American Journal of Industrial Medicine*. 62, 1024-1037. DOI: [10.1002/ajim.22966](https://doi.org/10.1002/ajim.22966). [IF: 1.739]
- [48] Zhao, N., Lui, Y., **Vanos, J.K.**, Cao, G. (2019) Revisiting the estimations of PM_{2.5}-attributable mortality with advancements in PM_{2.5} mapping and mortality statistics: A case study of ischemic heart diseases. *Science of the Total Environment*. 666, 499-507. <https://doi.org/10.1016/j.scitotenv.2019.02.269>. [IF: 6.551]
- [47] Downs, N.J., Axelsen, T., Schouten, P., Igoe, D.P., Parisi, A., **Vanos, J.K.** (2019) Biologically effective solar ultraviolet exposures and the potential skin cancer risk for individual gold medalists of the 2020 Tokyo Summer Olympic Games. *Temperature*. Online. DOI: [10.1080/23328940.2019.1581427](https://doi.org/10.1080/23328940.2019.1581427). [IF: NA]
- [46] Hosokawa, Y., Casa, D.J., Trtanj, J.M., Belval, L.M., Deuster, P.A., Giltz, S.M., Grundstein, A.J., Hawkins, M.D., Huggins, R.A., Jacklitsch, B., Jardine, J.F., Jones, H., Kazman, J.B., Reynolds, M.E., Stearns, R.L., **Vanos, J.K.**, Williams, A.L., Williams, J.W. (2019). Activity Modification in Heat: Critical Assessment of Guidelines Across Athletic, Occupational, and Military Settings. *Int. Journal of Biometeorology*. 63(3): 405–427. [IF: 2.680] <https://doi.org/10.1007/s00484-019-01673-6>
- [45] Green, H., Baily, J., Schwarz, L., **Vanos, J.K.**, Ebi, K., Benmarhnia, T. (2019) Impact of heat on mortality and morbidity in Low- and Middle-Income Countries: a systematic review of the epidemiological evidence and considerations for future research. *Environmental Research*. 171, 80–91. <https://doi.org/10.1016/j.envres.2019.01.010> [IF: 5.715]
- [44] Cakmak, S., Hebborn, C., **Vanos, J.K.**, Crouse, D., Tjepkema, M. (2019) Traffic density and mortality risk in the 1991–2011 Canadian Census Health and Environment Cohort (CanCHEC). *Environment International*. 124 (16–24). <https://doi.org/10.1016/j.envint.2018.12.045>. [IF: 7.577]
- [43]^ **Vanos, J.K.**, Kosaka, E., Iida, A., Yokohari, M., Middel, A., Scott-Fleming, I., Brown, R.D. (2019) The Tokyo 2020 Olympic Marathons: Spectator Thermal Comfort and Health in the Face of Extreme Heat. *Science of the Total Environment*. 657, 904-917 <https://doi.org/10.1016/j.scitotenv.2018.11.447>. [IF: 6.551]
- [42] Zhao, N., Lui, Y., **Vanos, J.K.**, Cao, G. (2018) Day-of-week and seasonal patterns of PM_{2.5} concentrations over the United States: Time-series analyses using the Prophet procedure. *Atmospheric Environment*. 192, 116–127. <https://doi.org/10.1016/j.atmosenv.2018.08.050>. [IF: 4.037]

ASU (Aug 2018 –) above this line

- [41]^ Herdt, A.J.*, Brown, R., Scott-Fleming, I., Cao, G., MacDonald, M., Henderson, D., **Vanos, J.K.** (2018) Outdoor Thermal Comfort during Anomalous Heat at the 2015 Pan American Games in Toronto, Canada. *Atmosphere*. 9(8), 321. <https://doi.org/10.3390/atmos9080321> [IF: 2.397]

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- [40] Kosaka, E., Iida, A., **Vanos, JK.**, Middel, A., Yokahari, M., Brown, R. Microclimate Variation and Estimated Heat Stress of Runners in the 2020 Tokyo Olympic Marathon. (2018) *Atmosphere*. 9(5), 192. <https://doi.org/10.3390/atmos9050192> [IF: 2.397]
- [39] Kalkstein, AJ, Kalkstein, LS, Dixon, PG., **Vanos, JK**, Eisenman, DP. (2018). Heat/Mortality Sensitivities in Los Angeles During Winter: A Unique Phenomenon in the United States. *Environmental Health*. 17(45). [IF: 4.690]
- [38]^ **Vanos, JK.**, Middel, A., Poletti**, M., Selover, N. (2018). Pediatric Vehicular Hyperthermia: Heat Balance Modeling and the Role of Solar Radiation. *Temperature*. 5(23), 276-292. <https://doi.org/10.1080/23328940.2018.1468205> [IF: NA]
- [37] Cakmak, S., Hebbern, C., Pinault, L., Lavigne, E., **Vanos, J.K.**, Crouse, D., Tjepkema, M. (2018) Associations between long-term PM_{2.5} and ozone exposure and mortality in the Canadian Census Health and Environment Cohort (CANHEC) by spatial synoptic classification zone. *Environment International*, 111, 200–211. [IF: 7.943]
- [36] Joe, P., Belair, S., Bernier, N.B., Brook, J.R., Brunet, D., Bouchet, V. Burrows, W., Charland, J.P., Dehghan, A., Driedger, N., Duhaime, C., Evans, G., Frenette, R., Gultepe, I., Henderson, D., Herdt, A.,* Hilker, N., Huang, L., Hung, E., Isaac, G., Johnston, D., Jeon, CH., Klaassen, J., Leroyer, S., Lin, H., MacDonald, M., MacPhee, J., Mariani, Z., Reid, J., Robichaud, A., Rochon, Y., Sills, D., Shairsingh, K. Stroud, C., Su, Y. Taylor, N., Wang, J.M, **Vanos, J.K.**, Voogt, J., Wiechers, T., Wren, S., Yang, H., Yip, T. (2018) The Pan-American Games Science Showcase Project. *Bulletin of the American Meteorological Society*. 99 (5): 921–953. DOI: <https://doi.org/10.1175/BAMS-D-16-0162.1> [IF: 9.384]
- [35] McGregor, G.R., **Vanos, JK**. (2018) Heat: A Primer for Public Health Researchers. *Public Health*. 161, 138–146. <https://doi.org/10.1016/j.puhe.2017.11.005> [IF: 1.774]
- [34]^ Hardin, AW*. Lui, Y., Cao, G. **Vanos, JK**. (2018). Urban Heat Island Intensity and Spatial Variability by Synoptic Weather Type in the Northeast U.S. *Urban Climate*. 24, 747–762. [IF: 1.601]
- [33]^ Mc Kercher, GR*, **Vanos, JK**. (2018) Low-cost Mobile Air Pollution Monitoring in Urban Environments: A Pilot Study in Lubbock, Texas. *Environmental Technology*. 39(12):1505-1514. [IF: 2.213]
- [32]^ **Vanos, JK**. Herdt, LJ*. Lochbaum, M. (2017) Effects of Physical Activity and Shade on the Heat Balance and Thermal Perceptions of Children in a Playground Microclimate. *Building and Environment*. 126. 119-131. [IF: 4.539]
- [31] Allen, M, **Vanos, JK**, Hondula, DH, Vecellio, D, Knight, D, Mehdipoor, H, Lucas, R, Fuhrmann, C, Lokys, H, Lees, A, Tavares Nascimento, S, Lueng, A, Perkins, D. (2017) Supporting sustainability initiatives through biometeorology education and training. *International Journal of Biometeorology*. 61(1), 93–106. [IF: 2.577]
- [30] Kuras ER, Bernhard MC, Calkins MM, Ebi KL, Hess JJ, Kintziger KW, Jagger MA, Middel A, Scott AA, Spector JT, Uejio CK, **Vanos JK**, Zaitchik BF, Gohlke JM, Hondula DM (2017). Opportunities and Challenges for Personal Heat Exposure Research. *Environmental Health Perspectives*. DOI: 10.1289/EHP556. [IF: 8.309]
- [29] Graham, D. **Vanos, JK**, Kenny, NA, Brown, RD. (2017). Modeling the effects of urban design on emergency medical response calls during extreme heat events in Toronto, Canada. *International Journal of Environmental Research and Public Health*. 14(7), 778. [IF: 1.485]
- [28]^ Hardin AW*, **Vanos JK**. (2017). The influence of urban surface type on the absorbed radiation by a human under hot conditions. *International Journal of Biometeorology*. 62(1), 43-56. [IF: 2.577]

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^denotes lead or corresponding authorship; NA - not yet available]

- [27] Grundstein, AJ, Knox, J, **Vanos, JK**, Cooper, E, Casa, D. (2017) American Football and Fatal Exertional Heat Stroke: A Case Study of Korey Stringer. *International Journal of Biometeorology*. 61(8), 1471-1480. [IF: 2.577]
- [26] Zhao, N., Cao, G., **Vanos, JK.**, Vecellio, DJ*. (2017) The Effects of Synoptic Weather on Influenza Infection Incidence: A Retrospective Study Utilizing Digital Disease Surveillance. *International Journal of Biometeorology*. 62(1), 69-84. [IF: 2.577]
- [25]^ McKercher, GR*, Salmond, JA, **Vanos, JK.** (2017). Characteristics and Applications of Small, Mobile Air Pollution Monitors: A Review. *Environmental Pollution*. 223, 102-110. [IF: 4.358]
- [24]^ **Vanos, JK**, McKercher, GR,* Naughton, K,** Lochbaum, M. (2017) Schoolyard Shade and Sun Exposure: Assessment of Personal Monitoring During Children's Physical Activity. *Photochemistry and Photobiology*. 93(4):1123-1132. [IF: 2.214]
- [23] Liu, Y, Zhao, N, **Vanos, JK**, Cao, G. (2017) Effects of synoptic weather on ground-level PM_{2.5} concentrations in the United States. *Atmospheric Environment*. 148, 297-305. [IF: 3.708]
- [22] Solis, P., **Vanos, JK.**, Forbis, R. (2017) The Decision-making / Accountability Spatial Incongruence Problem for Research linking Environmental Science and Policy. *Geographical Review*. 107(4), 680-704. [IF: 1.061]
- [21] Graham, A, Brown, RD, **Vanos, JK**, Kenny, NA. (2016) The relationship between neighbourhood tree canopy cover and heat-related ambulance calls during extreme heat events in Toronto, Canada. *Urban Forestry Urban Greening*. 20, 180-186. [IF: 2.113]
- [20] Cakmak, S, Hebbert, C, Crouse, D, Burnett, R. **Vanos, JK.** (2016). Ozone exposure and cardiovascular-related mortality in the Canadian Census Health and Environmental Cohort (CANCHEC) by Spatial Synoptic Classification Zone. *Environmental Pollution*. 214, 589-599. [IF: 5.099]
- [19] Cakmak, S., Hebbert, C, Cakmak, JD, **Vanos, JK.** (2016). The modifying effect of socioeconomic status on the relationship between traffic, air pollution, and respiratory health in elementary schoolchildren. *Journal of Environmental Management*. 177, 1-8. [IF: 4.010]
- [18] Dixon, PG., Allen, M., Gosling, SN., Hondula, DM., Ingole, V., Lukas, R., **Vanos, JK.** (2016). Perspectives on Synoptic Climate Classification and its Role in Interdisciplinary Research. *Geography Compass*. 10(4), 147-164. [IF: 2.161]
- [17]^ **Vanos, JK.**, Middel, A., McKercher, GR.*, Kuras, ER.,** Ruddell, BL. (2016). A Multiscale Surface Temperature Analysis of Urban Playgrounds in a Hot, Dry City. *Landscape and Urban Planning*. 146, 29-42. [IF: 4.563]
- [16] Karner, A., Hondula, DM., **Vanos, JK.** (2015). Heat exposure and vulnerability during non-motorized travel: Implications for transportation policy under climate change. *Journal of Transport & Health*. 2(4), 451-459. [IF: 2.050]
- [15] Hondula, DM., Balling, R., **Vanos, JK.**, Georgescu, M. (2015). Rising Temperatures, Human Health, and the Role of Adaptation. *Current Climate Change Reports*. 1(3), 144-154. [IF: NA]
- [14] Brown, RD., **Vanos, JK.**, Kenny, NA., Lenzholzer, S. (2015). Designing Urban Parks That Ameliorate the Effects of Climate Change. *Landscape and Urban Planning*. 138, 118-131. [IF: 3.654]
- [13]^ **Vanos, JK.** (2015). Children's Health and Vulnerability in Outdoor Microclimates: A Comprehensive Review. *Environment International*. 76, 1-15. [IF: 5.925]
- [12]^ **Vanos, JK.**, Kalkstein, LS., Sanford, TS. (2015). Detecting Synoptic Warming Trends across the US Midwest and Implications to Human Health and Heat-Related Mortality. *International Journal of Climatology*. 35(1), 85-96. [IF: 3.609]

Refereed Manuscripts cont (*grad students, **undergrad students) [Impact Factor (IF) when published; ^denotes lead or corresponding authorship; NA - not yet available]

- [11]^ **Vanos, JK.**, Cakmak, S., Kalkstein, LK., Yagouti, A. (2015). Association of weather and air pollution interactions on daily mortality in 12 Canadian cities. *Air Quality, Atmosphere, and Health*. 8 (3), 307-320. [IF: 2.324]
- [10] Cakmak, S., Weichenthal, S., Kauri, LM., Mahmud, M., Van Ryswyk, K., **Vanos, JK.**, Liu, L., Kumarathasan, P., Thomson, E., Vincent, R., Dales, R. (2014) Metal Composition of Fine Particulate Air Pollution and Acute Changes in Cardio-respiratory Physiology. *Environment Pollution*. 189. 208-214. [IF: 4.143]
- [9]^ **Vanos, JK.**, Hebbert, C., Cakmak, S. (2014) Risk assessment for cardiovascular and respiratory mortality due to air pollution and synoptic meteorology in 10 Canadian cities. *Environmental Pollution*. 185, 322-332. [IF: 4.143]
- [8]^ **Vanos, JK.**, Cakmak, S. Corben Bristow, C., Brion, V., Tremblay, N., Martin, SL., Sheridan, SC. (2013) Synoptic weather typing applied to air pollution mortality among the elderly in 10 Canadian cities. *Environmental Research*. 126, 66-75. [IF: 3.951]
- [7] Gosling, SN., Bryce, EK., Dixon, GP., Gabriel, KMA., Gosling, EY., Hanes, J., Hondula, DM., Liang, L., Mac-Lean, PAB., Muthers, S., Nascimento, ST., Petralli, M., **Vanos, JK.**, Wanka, ER. (2014) A Glossary for Biometeorology. *International Journal of Biometeorology*. 58(2): 277-308. [IF: 3.246]
- [6]^ **Vanos, JK.**, Cakmak, S. (2014) Changing air mass frequencies in Canada: Potential links and implications for human health. *International Journal of Biometeorology*. 58(2): 121-135. [IF: 3.246]
- [5] Hondula, DM., **Vanos, JK.**, Gosling, SN. (2013). The SSC: A decade of climate-health research and future directions. *International Journal of Biometeorology*. 58(2): 109-120. [IF: 2.104]
- [4]^ **Vanos, JK.**, Warland, JS., Gillespie, TJ., Slater, GA., Brown, RD., Kenny, NA. (2012). Human energy budget modeling in urban parks in Toronto, ON. and applications to emergency heat stress preparedness. *Journal of Applied Meteorology and Climatology*. 51(9): 1639-1653. [IF: 2.020]
- [3]^ **Vanos, JK.**, Warland, JS., Gillespie, TJ., Kenny, NA. (2012). Improved predictive ability of climate-human-behaviour interactions with modifications to the COMFA outdoor energy budget model. *International Journal of Biometeorology*. 56(6), 1065-1074. [IF: 2.590]
- [2]^ **Vanos, JK.**, Warland, JS., Gillespie, TJ., Kenny, NA. (2012). Thermal comfort modelling of body temperature and psychological variations of a human exercising in an outdoor environment. *International Journal of Biometeorology*. 56(1): 21-32. [IF: 2.590]
- [1]^ **Vanos, JK.**, Warland, JS., Gillespie, TJ., Kenny, NA. (2010). Review of the physiology of human thermal comfort while exercising in urban landscapes and implications for bioclimatic design. *International Journal of Biometeorology*. 54(4): 319-334. [IF: 1.813 (2010)]

2. REFEREED BOOK CHAPTERS

- [4] **Vanos, JK.**, Moyce, S., Lemke, B., Kjellstrom, T. Extreme Heat Exposure and Occupational Health in a Changing Climate. AGU Books, (2021) In: *Extreme Events and Climate Change: A Multidisciplinary Approach*. Editor: F. Castillo. Wiley. ISBN: [9781119413622](https://doi.org/10.1002/9781119413622).
- [3] Matthews-Triggs, N. **Vanos, JK.**, Ebi, K. (2019) [Climate Change and Cancer](#), In: *Cancer and Society A Multidisciplinary Assessment and Strategies for Action*. (pp 11–25). Editor: Bernicker, E.H. Springer.
- [2] Hosokawa, Y., Grundstein, A. J., **Vanos, JK.**, & Cooper, E. R. (2018). Environmental Condition and Monitoring. In *Sport and Physical Activity in the Heat* (pp. 147–162). Editor: Casa, D.J. Springer.
- [1] Orlandini, S., **Vanos, JK.**, Matzarakis, A., Massetti, L. Petralli, M. (2017) [Urban Forestry and Climate, in Handbook of Urban Forestry](#). Editors: Ferrini, F., van den Bosch, CK., Fini. A. Routledge.

3. REFEREED REPORTS, EDITORIALS, PROCEEDINGS, METHODS, & SHORT COMMUNICATIONS

- [16] Grundstein, A., **Vanos, JK.** There is no ‘Swiss Army Knife’ of thermal indices: the importance of considering ‘why?’ and ‘for whom?’ when modelling heat stress in sport. *British Journal of Sports Medicine*. In press. DOI: [bjsports-2020-102920](https://doi.org/10.1136/bjsports-2020-102920). [IF: 12.02]
- [15] Hosokawa, Y., **Vanos, JK.** Extreme heat & health at Tokyo2020ne: The need for scientific coalition across sectors. *In Press. Temperature*. <https://doi.org/10.1080/23328940.2020.1796241>. [IF: NA]
- [14] **Vanos, JK.** The Heat is on: Bracing for Impacts in Tokyo. *Temperature*. 7:1, 1–2, [10.1080/23328940.2020.1719625](https://doi.org/10.1080/23328940.2020.1719625). [IF: NA]
- [13] Downs, N. J., Butler, H. J., Baldwin, L., Parisi, A. V., Amar, A., **Vanos, JK.**, & Harrison, S. (2019). A site-specific standard for comparing dynamic solar ultraviolet protection characteristics of established tree canopies. *MethodsX in Applied Geography*, 6, 1683-1693. [IF: 4.009 (5-year)]
- [12] Ling, Y., Zhao, N., **Vanos, J.K.**, Cao, G. (2018). Visualizing changes in nationally averaged PM_{2.5} concentrations by an alluvial diagram. *Environment and Planning A*. 50(2) 259–261. [IF: 2.152]
- [11] Mehdipoor, H. **Vanos, JK.**, Zurita-Milla, R., Cao, G. (2017) Emerging Technologies for Biometeorology. *International Journal of Biometeorology*, 61(1), 81-88. [IF: 2.577]
- [10] Hondula, DM, Middel, AM, **Vanos, JK**, Herdt, A*, Kaiser, A. (2017) Urban Water Infrastructure for Cooling: Case Studies from Humid and Arid Cities. *Regions Magazine of the Regional Studies Association*, 206(1) 20-23. doi:10.1080/13673882.2017.11878969.
- [9] **Vanos, JK.** (2017) An Update from the Chair of the Students and New Professionals Group of the International Society of Biometeorology. Short Communication. *International Journal of Biometeorology*. 61(1), 89-92. [IF: 2.577]
- [8] Perkins DJ, **Vanos JK**, Fuhrmann C, Allen M, Knight D, Lee C, Lees A, Leung A, Lucas R, Mehdipoor H, Nascimento ST, Sheridan S, Spencer J (2017) Workshop Report: Enhancing the Teaching and Learning of Biometeorology in Higher Education. *Bulletin of the American Meteorological Society*. 98(9), ES239-ES242. [IF: 7.804]
- [7] Cocolo, S. **Vanos, JK.**, Kaempf, J., Scartezzini. Comfort Map, a dynamic visualization of children’s thermal sensation in the outdoor environment (2017). *In Proc: 21st International Congress of Biometeorology*. Durham University, England. Sept 2–5th, 2017. Full conference paper.
- [6] Hebborn, C., Cakmak, S., **Vanos, JK.**, Crouse, D., Blanco, C. Using spatial and land use regression models in investigating the modifying effect of socioeconomic status on the interaction between traffic, air pollution and asthma. Herwig Friedl, Helga Wagner (Eds). *Proceedings of the 30th International Conference on Statistical Modelling*. Linz Austria, July 6–10th, 2015. Conference paper.
- [5] **Vanos, J.K.** (2015). ISB News: From the Chair of the Student and New Professionals Group. *International Journal of Biometeorology*. 1-2. [IF: 3.246]
- [4] Collective Behaviors: From Cells to Society, 2014. Interdisciplinary Research Team Summaries from the 2012 National Academies Keck Futures Initiative Conference. Contributor to working group 2B. Hofmann, HA, Jasny, BR, Kumar, C. McGee, C. Munson, ZW, Shou, W, **Vanos, JK**, Vardavas, R. *National Academies Press*, ISBN 978-0-309-37347-0.
- [3] **Vanos, JK.**, Cakmak, S., Kalkstein, LK. (2013) Association of weather and air pollution interactions on daily mortality in 12 Canadian cities. *In proc: Longhurst and Brebbia (Eds). Conference on Modelling, Monitoring and Management of Air Pollution 2013: Ecology and the Environment*, 174. Sienna Italy, June 2013. Full Conference Paper.
- [2] **Vanos, JK.**, Linseman, ME., Spriet, LL., Warland, JS. (2011). Validation of predictive sweat rate and core temperature equations during intense exercise through application of the COMFA outdoor energy budget model. *In Proc: 19th International Congress of Biometeorology*. University of Auckland, New Zealand. Dec 4–8th, 2011. Full conference paper.
- [1] Perera, EM., Sanford, T., White-Newsome, JL., Kalkstein LS., **Vanos, JK.**, Weir, K. (2012). “[Heat in the Heartland: 60 Years of Warming in the Midwest](#)”. *Union of Concerned Scientists*. Cambridge Massachusetts. July 19th, 2012.

4. IN REVIEW

- [6] Kennedy, E., Olsen, H., **Vanos, JK.**, Vecellio, DJ., Desat, M., Richters, K., Rutledge, A., Richardson, GA. Reimagining spaces where children play: Developing guidance for thermally comfortable playgrounds in Canada. Submitted to *Canadian Journal of Public Health*, July 17, 2020.
- [5] Castillo, F., Mora, AM., Kayser, G., **Vanos JK.**, Hyland, C., Yang, A., Eskenazi, B. Environmental Health Threats to Latino Migrant Farmworkers. Submitted to *Annual Review of Public Health*, July 3, 2020.
- [4] Ebi, KL., Baldwin, J., Bell, J., Hondula, DM., Errett, NA., Hayes, K., Reid, C., Saha, S., Spector, J., **Vanos, JK.**, Berry, P. Extreme weather and climate change: population health and health system implications. Submitted to *Annual Review of Public Health*. July 1, 2020.
- [3] Jay, O. Capon, A., Berry, P., Broderick, C., de Dear, R., Havenith, G., Honda, Y., Kovats, S.R., Ma, W., Malik, A., Morris, N., Nybo, L., Seneviratne, S., **Vanos, JK.**, Ebi, K. Reducing the health impacts of heat extremes and hot weather: From personal cooling strategies to green cities. Submitted to *The Lancet*, Mar 10, 2020.
- [2] Ebi, K., Capon, A., Berry, P., Broderick, C., de Dear, R., Havenith, G., Honda, Y., Kovats, S.R., Ma, W., Malik, A., Morris, N., Nybo, L., Seneviratne, S., **Vanos, J.**, Jay, O. Hot weather and heat extremes: health risks. Submitted to *The Lancet*, Feb 29, 2020.
- [1] Murphy, K. Bruning, E. Schultz, CJ., **Vanos, JK.** Assessing Lightning Risk in Outdoor Vulnerable Environments. Submitted to *Weather, Climate, and Society*. Feb 21, 2020.

5. NON-REFEREED REPORTS, CONFERENCE PROCEEDINGS, AND EXTENDED ABSTRACTS

- [10] Kennedy, E., Olsen, H., Vecellio, DJ., **Vanos, JK.** (2020). Thermally Comfortable Playgrounds: A review of literature and survey of experts - Technical Report. *Health Canada and Standards Council of Canada*. https://www.scc.ca/en/system/files/publications/SCC_Playgrounds_Report_EN_WEB.pdf
- [9] Kalkstein, L.K., Sheridan, S.C. **Vanos, JK.** Insights into the health impacts of synoptic-scale climatology in two Korean cities: a retrospective analysis of morbidity. *American Meteorological Society Annual Meeting*, Atlanta, GA. Feb 2–7th, 2014. Extended abstract.
- [8] Brown, RD., **Vanos, JK.**, Kenny, NA., Lenzholzer, S. Designing Urban Parks that Ameliorate the Effects of Climate Change. *American Meteorological Society Annual Meeting*, Atlanta, GA. Feb 2014. Extended abstract.
- [7] **Vanos, JK.**, Kalkstein, LS., Sailor, D., Shickman, K., Sheridan, S. (2014). "[Assessing the Health Impacts of Urban Heat Island Reduction Strategies in the Cities of Baltimore, Los Angeles, and New York](#)". Report. *Global Cool Cities Alliance*. July 3, 2014.
- [6] Kalkstein, LS., Sailor, D., Shickman, K., Sheridan, SC., **Vanos, JK.** (2013). "[Assessing the health impacts of urban heat island reduction strategies in the district of Columbia](#)". Report: *Global Cool Cities Alliance/District Department of the Environment*, Los Angeles, Oct 2013.
- [5] Kalkstein, L.K., Sheridan, S.C., **Vanos, J.K.** (2013). "The impact of a human induced climate change upon three Korean cities and a retrospective evaluation of morbidity within these cities" Collaborative agreement - National Institute of Meteorological Research & Applied Climatologists, Inc. Nov 2013.
- [4] **Vanos, JK.**, Kalkstein, LK., Sanford, T., White-Newsome, JL., Perera, LM. Detecting warming trends in the U.S. Midwest using a synoptic climatologically approach. *American Meteorological Society Annual Meeting*. Austin, TX. Jan. 6–10th, 2012. Extended Abstract.
- [3] **Vanos, JK.**, Slater, GA., Warland, JS., Brown, RD., Kenny, NA., Gillespie, TJ. (2011) Modelling spatial variations in energy budgets of humans exercising in outdoor urban recreational parks and spaces. *American Meteorological Society Meeting*. Seattle, WA. Jan 2011. Extended Abstract.
- [2] **Vanos, JK.**, Warland, JS., Kenny, NA., and Gillespie, TJ. (2010). Modelling skin temperature of a human exercising in an outdoor environment. In Proc: Brebbia, C. et al. (Eds). *The Sustainable City VI: Urban Regeneration & Sustainability*. Apr 14-16, 2010. La Coruna, Spain. Full Conference Paper.
- [1] **Vanos, JK.** (2008) Modelling air pollution in Beijing for the 2008 Olympic Summer Games. *Studies by Undergraduate Researchers at Guelph (SURG)*. 1(2): 26-34.

RESEARCH SUPPORT

SUCCESSFUL GRANTS. *denotes Lead PI.**1. ACTIVE RESEARCH GRANTS**

Healthy Urban Environments, Maricopa Association of Governments (\$49,639, **Co-PI**), “HydroHat”, PI: Rachna Nath, High School Teacher (CUSD) May 2020–Dec 2021. Internal to ASU.

Healthy Urban Environments, Maricopa Association of Governments (\$21,900, **Co-PI**), “HeatReady Schools”, PI: Adora Shortridge (student); Co-PIs: Melissa Guardaro, David Hondula (ASU). May 2020–May 2021. ASU Internal.

Healthy Urban Environments, Maricopa Association of Governments (\$25,000, **Co-PI**), “*Heat Map for Decision Making*” Lead PI and Co-PI: Paul Cosea, Ariane Middel, David Hondula, Katja Brundiers (ASU). ASU Internal.

National Endowment of the Arts (\$246,049 (ASU Portion \$25,000; **Co-PI**)), “*SunBLOCK*” Lead PI: City of Phoenix, Co-PIs: David Hondula, Melissa Guardaro, Paul Coseo (ASU).

Herberger Institute for Design and the Arts (\$10,000, **Co-PI**), “*Green STEAM Studios: Designing Agential Ecologies for Wonder, Curiosity, and Interconnectedness through School Gardens.*” Lead PI: Steven Zuiker (ASU). Co-PI: Cala Coats (ASU). ASU Internal.

***Global Sports Institute** (\$14,500, **PI**), “*Air Quality Sensing to Support Athlete Health & Participatory Action in South Phoenix*”. Co-Is: Marta Berbes, Amy Frazier (ASU). Jan 2020–Jan 2021. ASU Internal.

Global Sports Institute (\$18,000, **Co-PI**), “*Warming up and Cooling down study*”, PI: Floris Wardenaar (ASU). Jan 2020–Jan 2021. ASU Internal.

***BlueGreen Alliance** (\$33,945, **PI**), “*Assessing Passive Mitigation Strategies of Roadside Air Pollution in Children’s Outdoor Urban Environments*” Co-I: Braden Kay, City of Tempe. Sept 2019–Dec 2020.

Tromp Scientific Foundation (\$30,346, **Co-PI**) “*Investigating Knowledge Gaps and Technology Opportunities for Sensing the Health Effect of Weather and Climate Change – Netherlands Workshop*” Lead PI: Hamed Mehdi-Poor, University of Twente. June 2019–Jul 2020.

***Healthy Urban Environments Pilot Grant**, Maricopa Association of Governments (\$50,000, **PI**), “*Enhancing Children’s Health and Well-being through Nature-based Environmental Designs in Outdoor Playspaces: A Pilot Study in South Phoenix.*” May 2019–Dec 2020. Internal to ASU.

***UC-Mexus Research Program, 2018** (\$25,000, **Co-PI**) Extreme Heat and Migrant Workers: Enhancing Health Resilience and Productivity. Co-PI & Co-Is: Armando Sanchez Vargas (Universidad Nacional Autónoma de Mexico) Federico Castillo (UC Berkeley), David Lopez-Carr (UC Santa Barbara). 2018–2020.

***Research Programs on Migration and Health, PIMSA, 2018** (\$25,000, **Co-PI**) Agricultural Productivity and Worker Health: The Hidden Costs of Extreme Heat. **Co-PI** and **Co-Is**: Armando Sanchez Vargas (Universidad Nacional Autónoma de Mexico) Federico Castillo (UC Berkeley), David Lopez-Carr (UC Santa Barbara). 2018–2020.

2. PREVIOUSLY AWARDED RESEARCH GRANTS

Pew Charitable Trusts (\$49,986, **Co-PI**) Health Impact Project, Tempe. PI: Paul Coseo (ASU); Co-PIs: Dave Hondula, Ariane Middel (ASU); Braden Kay (City of Tempe). 2019–2020.

National Institutes of Health, 2018 (\$12,016,207, **Co-I**) Urban Air Pollution and Alzheimer's Disease: Risk, Heterogeneity, and Mechanisms (1P01AG055367-01A1), **PIs**: J. Chen and C. Finch (University of Southern California). UCSD Portion: \$2,196,607, The VETSA Longitudinal MRI Twins Study of Aging (5R01AG022381-15). PIs and Co-Is: William Kremen, Carl Franz (UC San Diego) 2018–2022.

***Knowledge Exchange for Resilience** Fellows Program (\$15,000, **PI**), Arizona State University. 2018-2019.

Schmidt Foundation, 2018 (\$50,000, **Co-PI**) “*Winning the Game against Heat for Middle Class Phoenicians through Knowledge Exchange*” **PI:** Patricia Solis (ASU); **Co-PIs:** Libby Wentz, David Hondula, Erik Johnston (ASU). Dec 2018–Aug 2019.

***Institute for Social Science Research, ASU** (\$7,950, **PI**) “*Advancing Methods to Assess Individual-level Ultraviolet Radiation Exposure During Physical Activity*”. Jan–Dec 2019. Internal to ASU.

Agnese Nelms Haury Program in Environment and Social Justice, 2017 (\$53,517, **Co-I**) “*Hot Spots for Heat Resilience in Border Cities: A pilot Study in El Paso, TX*”. **PI and Co-Is:** Gregg Garfin, Sarah LeRoy (University of Arizona), Adelle Montebancho (University of Texas El Paso).

***UC Planetary Health Center of Excellence, 2017** (\$10,000, **PI**) “*The hidden health costs of extreme heat exposure to outdoors workers in the California Central Valley*”. **Co-Investigators:** Michael Wehner (Lawrence Berkeley National Laboratory); Federico Castillo (UC Berkeley).

Herberger Research Council and APS Endowment for Sustainable Design Research, 2017–2018 (\$10,796, **Co-PI**) “*Cool Roofscapes @ the Solar Lab: Thermal Performance of Cool Roof Strategies in Hot Arid Climates*” **PI and Co-I:** Paul Coseo (ASU), Ariane Middel (ASU)

***Marine Sciences Academic Senate Grant Application, 2017–2018** (\$6,700, **PI**) “*Children’s Exposure to Ultraviolet Radiation during Physical Activity: Influence of Sensor Type and Site Design*” **Lead-Investigator** (UC San Diego)

***Institute of Public Health, UC San Diego, 2017–2018** (\$35,000, **PI**). “*Improving the cost-effectiveness of wearable biosensors for environmental health studies*” **Co-I:** Todd Coleman (UCSD).

***Tromp Scientific Foundation** (\$15,000, **PI**) “*Enhancing the Teaching and Learning of Biometeorology in Higher Education*” **Co-Investigators:** Cameron Lee (Kent State University), Jeremy Spencer (University of Akron), Rebekah Lucas (University of Birmingham), David Hondula (Arizona State Univ), Michael Allen (Old Dominion University), Chris Fuhrmann (Mississippi State University).

National Science Foundation, 2015–2019 (\$12,000,000, contributor to ASU component, \$1,191,572), Sustainability Research Networks. “*The Urban Water Innovation Network (U-WIN): Transitioning Toward Sustainable Urban Water Systems*” **Principal and Co-Investigators:** Mazdak Arabi (Colorado State University), Matei Georgescu (Arizona State University).

National Wind Institute, 2015 (\$39,714, **Co-PI**) “*Establishment of a Joint Atmospheric Sciences-National Wind Institute Research Electronics Lab at Texas Tech University.*” **Principal Investigator:** Eric Bruning.

***Oak Ridge Associated Universities, 2014–2016** (\$10,000, **PI**). “*Real-time intra-urban air quality monitoring through the use of mobile platforms.*” **Ralph E. POWE Junior Faculty Enhancement Award.**

Tromp Scientific Foundation (\$15,000, **Co-PI**). “*1st SNP International Conference on Synoptic Climatology*” **Co-PIs:** Simon Gosling (University of Nottingham), David Hondula (ASU).

3. PENDING RESEARCH GRANTS

Canadian Institutes of Health Research (CIHR) (\$925,000, **Co-I**), “*Investigating the impacts of school ground design on children’s behaviour and mental health: a multi-method, pre/post, quasi-experimental study of a school ground undergoing transformation.*” **Principal and Co-Investigators:** Rainham DG, Collyer C, Gilliland J, Johnson S, Stone M, Villeneuve P. Fall 2020 Project Grant Competition.

***National Science Foundation** (\$674,000, **PI**), “*CAREER: Coupling Climate and Human Health Models to Build Pathways to Extreme Heat Resilience*”, Submitted Aug 7, 2020.

Robert Wood Johnson Foundation (\$584,886, **Senior Personnel**), **Climate Data & Public Health Faculty and Fellow** “*Cool Kids, Cool Places, Cool Futures: Community-based, arts-enhanced, and youth-focused approach for equitable urban cooling and emergency management*”, Submitted May 2020.

FEMA (\$1,498,994, **Co-PI**) “*>100° Firefighters project: Adaptation strategies for health & performance.*” **Lead PI:** Floris Wardenaar (ASU; **Co-PIs:** Jeff Burgess (UofA), Pauline Davies (ASU). Submitted May 29, 2020.

National Science Foundation (\$3,600,000, **Senior Scientist**) “*CoACT: Convergence for Advancing Coproduced Transformations*” Lead PI: Erik Johnston. Co-PIs: Thad Miller, Mark Roseland (ASU). Submitted Feb 3, 2020.

Awarded Research Funding Support: Other

Marine Sciences Seed & Travel Grants (2017), Scripps Institution of Oceanography, **UC San Diego**, \$9,100.
International Research and Development Seed Grant, **Texas Tech University** (\$3,000), 2016.
Proposal Support Program: **Texas Tech University** (\$5,600). Vice President for Research. 2014, 2016.
Post-Doctoral Award: Robert Gilbert Post-Doctoral Two-Year Fellowship (\$96,000). Department of Geography, **Queen’s University, Canada**. 2013–2015. *Declined*.
Visiting Fellowship (\$7,000 AUD): School of Geography, Planning and Environmental Management at **University of Queensland, Australia**. March 2013. *Declined*.
Post-Doctoral Fellowship: National Science & Engineering Research Council (NSERC) Visiting Fellowship at a Canadian Government Laboratory (\$47,234), **Post-Doctoral Research Fellow. Health Canada**, Environmental Health Science Research Bureau, 2012–2013.
Course Funding: **Summer Institute for Climate and Health Participant: International Research Institute for Climate and Society** (\$5,000). Columbia University, Earth Institute. Palisades, NY, USA. May, 2011.
Graduate Scholarship: **Alexander Graham Bell Canada-National Sciences and Engineering Research Council** (\$105,000). PhD Candidate, School of Environmental Sciences. 2010–13. Accepted 2010–2011.
Ontario Graduate Scholarship (\$15,000), William Campbell Award, **PhD Student**, 2010–2011.

SPECIAL AWARDS, HONORS, SCHOLARSHIPS, & EVIDENCE OF MERIT

American Meteorological Society, Board on Environment and Health, Outstanding Early Career Award, 2020
Maricopa County, Climate Change and Health Champion, Research Champion, 2019
University of Guelph Gryphon Athletics Hall of Fame, 2005 Women’s Cross Country Team, Inducted 2018
Tromp Scientific Award, International Society of Biometeorology, 2017
Marine Sciences Travel Research Fund Awardee, UC San Diego, 2017
Ralph E. POWE Junior Faculty Enhancement Awards, Oak Ridge Associated Universities, 2014
National Academy of Sciences Keck Futures Initiative. Invited Participant, 2014.
National Science and Engineering Research Council (NSERC) Visiting Fellowship at a Canadian Government Laboratory – Health Canada, Environmental Health Science Research Bureau, 2012–2013
Alexander Graham Bell Canada Graduate Scholarship, National Sciences and Engineering Research Council (NSERC), 2010–2013.
Colloquium on Climate and Health, National Centre for Atmospheric Research (NCAR), Selected Attendee, NCAR Foothills Laboratory, Boulder, CO, USA. 2013.
Canadian Institute of Health Research (CIHR) Science-Policy Fellowship, 2011, Declined.
School of Environmental Sciences, Dean’s Graduate Scholarship, 2011
Summer Institute for Climate and Health, Course Scholarship, *International Research Institute for Climate and Society, CIPHA*. Columbia University, Earth Institute. Palisades, NY, USA. 2011
Taffy Davidson Memorial Travel Scholarship, University of Guelph, 2011
William Campbell Ontario Graduate Scholarship, Ontario Agriculture College, 2010–11
School of Environmental Sciences, PhD Graduate Scholarship, 2010–2011
Latornell Graduate Travel Scholarship, 2011
School of Environmental Sciences, Graduate Scholarship, 2008, 2009

Environment Canada Atmospheric and Meteorological Supplement, 2008
Land Resource Science Achievement Scholarship, 2008
Four-Year Honour Award, University of Guelph Gryphon Athletics, 2008
Canadian Interuniversity Women's Team Champions, Track & Field, 2008
University of Guelph, Program of Environmental Sciences, Dean's Honour List
Canadian Meteorological & Oceanographic Society Scholarship, 2007
Academic All Canadian, 2004/05, 2005/06, 2006/07, 2007/08, 2008/09
Ontario Agriculture College Academic Excellence Award, 2005
W. Penri Morris Memorial Entrance Scholarship, 2004
University of Guelph Entrance Scholarship, 2004
Chatterson/MacDonald Memorial Award for Academics and Athletics, 2004
Dr. Donald Thompson Physics Award, 2004
Dr. William F. Hutton Academic Award, 2004
Nova Chemicals Proficiency & Citizenship Award, 2004
Rotary Club of Forest Science Award for proficiency in all sciences, 2004
St. Clair Conservation Award for community environmental stewardship, 2004
Female Athlete of the Year Award, 2004
Overall Athletic and Academic Achievement Award, 2004

PROFESSIONAL PRESENTATIONS

INVITED SEMINARS, PRESENTATIONS, PANELS, WORKSHOPS

Invited Panelist, "*Climate Change, Health, Sustainability*", Virtual Panel, Arizona Green Chamber of Commerce & American Solar & Roofing. Oct 16, 2020.

Invited Panelist, "[*Climate Change and the Future of Arizona*](#)", Virtual Panel, Arizona Republic, Sept 24, 2020.

Invited Webinar Speaker, "Play it S.A.F.E.TM Playground Safety for Everyone", Children's Safety Network Webinar, in collaboration with the National Program for Playground Safety, May 26, 2020.

Invited Panelist, "The Health Impacts of a Changing Climate", Vitalyst Health Foundation, Phoenix, AZ, Jan 2020.

Invited Panelist, "*Climate Change in Arizona: Global Connections & Cause for Concern*", Climate 2020 Seven Generations for Arizona, Flagstaff, AZ. Nov 15, 2019.

Invited Speaker, "*Children's Microclimates and Health: Mitigating Heat & Air Pollution through Measurement & Design*", University of New South Wales, Oct 31, 2019.

Invited Speaker, "*Children's Microclimates and Health: Mitigating Heat & Air Pollution through Measurement & Design*", University of Sydney, Sydney, Australia, Oct 29, 2019.

Keynote Address, co-author, Ebi, K., Vanos, JK. "Incorporating Climate Change in Skin Cancer Prevention Interventions". 4th International Conference on UV and Skin Cancer, Toronto, Canada, May 2018.

Invited Workshop Presentation, "*UV Measurement: Applications for Physical Activity & Design of recreational spaces*", 4th International Conference on UV and Skin Cancer, Toronto, Canada, May 1, 2018. (Presentation for the National Cancer Institute: "*Sun Safety and Skin Health in Youth and Young Adulthood Physical Activity: More than Just a Little Sunscreen*").

Invited Seminar Speaker, Arizona State University, School of Sustainability, "*Healthy Spaces in Hot Places*", Tempe, AZ, Oct 2017.

- Invited Seminar Speaker, University of Tokyo, Department of Urban Engineering, “*Bridging Human Health and Urban Climatology with Personal Heat Exposure Research*”, Tokyo, Japan, Aug 1 2017.
- Invited Speaker, Children's Health and the Environment Workshop & Symposium: Moving Research to Action for Healthy Kids, “*Biometric evaluation of the health impacts of children's environmental exposure*”, Western University, London, Ontario, Canada. June 2017.
- Invited Speaker, UC San Diego Institute of Public Health Seminar Series, “*Bridging Human Health and Urban Climatology with Personal Heat Exposure Research*”. May 2017.
- Invited Webinar Speaker, American Society of Landscape Architects, “*Children’s Heat and Radiation Exposures in Playgrounds and the Role of Bioclimatic Design*”, May 2017.
- Invited Panelist, Expert Panel & Discussion: Hidden Threats in Public View, Exertional Heat Stress Working Group, Eagle Pharmaceuticals, Feb 2017.
- Invited Speaker, University of Washington Center for Health and the Global Environment – Protecting Population Health from Climate Variability and Change, “*Advances in Understanding Personal Heat Exposures*” Jan 2017.
- Invited Keynote Speaker, “*Promotion of Urban Health and Environmental Equity in a Changing Climate*”, Conference entitled Behind the Perspective – Better Water, More Jobs: Health, Mental Health, and Environmental Equity, Justice, & Sustainability in Underserved Communities, Texas Tech University, Nov 19, 2016.
- Invited Seminar, Department of Geography, Western University, London, Ontario, Canada. “*Scales of Influence for Urban Heat Mitigation & Human Thermal Comfort*” Aug 4, 2016
- Invited Seminar, Graduate School of Public Health, Seoul National University, Seoul, South Korea. “*Climate Adaptation in the City: Heat Mitigation and Health*” June 16, 2016.
- Invited Seminar, National Center for Agricultural Research, Seoul National University, Seoul, South Korea, “*Climate Adaptation in the City: Heat Mitigation and Health*”. Jun 12, 2016.
- Invited Seminar, Obesity Research Cluster, Texas Tech University “*Heat Vulnerability and Urban Areas: Microscale Heat Mitigation for Improved Health and Safety*” Mar. 10, 201.
- Invited Symposium Speaker, Landscape Design Department Symposium, Wageningen University, Wageningen, Netherlands. “*A Multiscalar Thermal Analysis of Urban Playgrounds Seeing Urban Playgrounds Through a New Lens*” May 28th, 2015
- Invited Speaker, HEAT Conference, Pufendorf Institute, Lund University, Lund, Sweden. “*Heat in Cities: Spatial and Social Dimensions*” May 19–20th, 2015.
- Invited Seminar, Geography Seminar Series, Geosciences Dept, Texas Tech, “*Seeing Urban Areas Through a New Lens: Principles of Outdoor Bioclimatic Design Applied to Human Health*” (Oct 31, 2014).
- Invited Workshop Talk, International Congress of Biometeorology - Students and New Professionals Workshop, Cleveland, Ohio, “*My Three R’s of Undergraduate Teaching*” Sept 2014
- Invited Panelist, Texas Tribune Festival, Texas Tribune, Austin, TX. Panel: “TCEQ vs EPA,” National. Sept 2014
- Invited Panelist, American Meteorological Society Student Conference “*Conversations with Professionals*” Phoenix, AZ. Jan 2014
- Invited Talk, Climate Science Center Seminar Series, Texas Tech University, “*Sensing the invisible: Viewing microclimates from a new perspective*” May 2014
- Invited Conference Talk, ‘Imagine San Antonio’, Public Policy Institute for Research, Education, Discussion, and Implementation. San Antonio Environmental Challenges Conference, San Antonio, TX. “*Heat, Human Health, & Ozone: How do these relate to Urban Sustainability in San Antonio?*” Feb 2014
- Invited Seminar Talk, Department of Geography, Texas A&M University. “*Bioclimatology and Health*” Nov 2014
- Invited Seminar Talk, Department of Geosciences, Texas Tech University. “*Human Bioclimatology and Health*” Mar 2013

Invited Seminar Talk, Department of Geography and Regional Studies, University of Miami, Colloquium Seminar Series. “*Human Bioclimatology and Health*” Mar 2013

Invited Seminar Talk, Department of Environmental Sciences, University of Virginia. Atmosphere Series Seminar: “*Human Biometeorology Applied to Energy Budget Modeling, Bioclimatic Urban Design, and Heat Health*” Feb 2013

CONFERENCE PRESENTATIONS AND POSTERS (*presenter underlined*)

Vanos, J.K., Grundstein, A. “Variations in athlete heat loss potential between hot-dry and warm-humid environments at equivalent WBGT thresholds”, *American Meteorological Society Conference*, Boston, MA, Jan 2020.

Henning, A.* Vanos, J.K. “Wearable Ultraviolet Radiation Exposure Sensors for Research and Personal Use” *Biomedical Engineering Sciences National Conference*, Philadelphia, PA. Oct 16–20th, 2019. Poster Presentation.

Vanos, J.K., Wright, M., Hondula, D.M., Ambrose, H., Middel, A. “Motivations to use water for thermal comfort: the influence of evaporative mister systems on thermal comfort in outdoor eateries.” *UTCI Conference*, Warsaw, Poland. May 2019. Oral Presentation.

Song, K., Cenci, B. Kennedy, K., Olsen, H., **Vanos, J.K.** “Development and Validation of Playground Temperature Measurement Device”, *Biomedical Engineering Sciences National Conference*, Philadelphia, PA. Oct 16–20th, 2019. Poster Presentation.

Garfin, G., LeRoy, S. **Vanos, J.K.**, Montebancho, A. Juarez, P. Jones, H. Hot Spots for Heat Resilience in Border Cities. *American Meteorological Society Annual Meeting*, Phoenix, AZ. Jan 6–11th, 2019. Oral Presentation.

Vanos, J.K., Brown, R.D., Kosaka, E., Iida, A. Yokohari, M., Middel, A., Scott-Flemming, I. The Tokyo 2020 Olympic Marathons: Spectator Thermal Comfort and Health in the Face of Extreme Heat. *American Meteorological Society Annual Meeting*, Phoenix, AZ. Jan 6–11th, 2019. Oral Presentation.

Vanos, J.K., Coleman, T., Fahy, K., Tu, C., Aguilera-Rivera, M., Demolder, C. Impact of Design on Children's Personal Heat and Radiation Exposures during Outdoor Activity: A Case Study in San Diego, California. *International Conference on Urban Climates*, New York, NY. Aug 8th, 2018, Oral presentation.

Dixon, P.G., and **J.K. Vanos**, 2018: Thunderstorm Asthma in the USA: Are we missing an important signal? 20th Annual Conference, High Plains Chapter of the American Meteorological Society and National Weather Association, Hastings, Nebraska. Oral Presentation.

Vanos, J.K., Castillo, F., Wehner, M. Vecellio, D. The Hidden Health Costs of Extreme Heat Exposure to Outdoors Workers in the California Valley. *American Meteorological Society Annual Meeting*, Austin, TX. Jan 7–11th, 2018. Oral Presentation.

Vanos, J.K., C., Fahy, K., Tu, C., Coleman, T. Application of Personal Sensing Technologies to Examine the Influence of Design on Radiant Exposures in Outdoor Play Spaces. *UC San Diego Institute of Public Health Research Day*, La Jolla, CA, April 14, 2018. Poster Presentation.

Vanos, J.K., Coleman, T., Kim, Y.S., Demolder, C., Fahy, K., Tu, C. Adhesive-Integrated Flexible Electronic Sensors to Monitor Children's Thermal Exposures in Outdoor Environments. *American Public Health Association Annual Meeting*, Atlanta, GA. Nov 7th, 2017. Oral Presentation.

Hondula, D.M., Chavez, M., Harlow, J., Middel, A., Johnston, E.W., **Vanos, J.K.** Thermal Comfort and Shade Provision at City of Phoenix Bus Stops. *Association of American Geographers*, Boston, MA. April 5–9th, 2017. Oral Presentation.

Vanos, J.K., Brown, R.D., Kosaka, E., Iida, A. Yokohari, M. Projected Heat Stress along the 2020 Olympic Marathon Route in Tokyo, Japan and the Role of Microclimatic Design. *Association of American Geographers*, Boston, MA. April 5–9th, 2017. Oral Presentation.

Vanos, J.K., Herdt, A.J., Lochbaum, M. Characterizing the Energy Budgets of Children during Active Play

in Hot Weather through the use of Personal Sensing Devices. *American Meteorological Society Annual Meeting*, Seattle, WA, Jan 24th, 2017. Oral Presentation.

Vanos, J.K., Lochbaum, M. Thermal Comfort and UV Radiation in Schoolyards: Implications for Microclimatic Design and Physical Activity. *Active Living Research Conference*, Clearwater, FL. Feb 26–Mar 1, 2017. Poster Presentation.

Vanos, J.K., McKercher, G. Lochbaum, M. Connecting Children to their Environment and Health: Characterizing Exposures to Temperature and UVB Radiation During Active Play. *International Society of Environmental Epidemiology (ISEE)*, Rome, Italy, Sept 2016. Poster Presentation.

Lui, Y.*, Cao, G., **Vanos, J.K.** Exploring Geographic and Seasonal Variability of Weather Impact on PM_{2.5} Concentrations in the United States: A Spatial Synoptic Classification Approach. *American Association of Geographers*. San Francisco. March 29–31st, 2016. Oral Presentation.

Karner, A., **Hondula, D.**, **Vanos., J.K.** Heat exposure during non-motorized travel: Implications for transportation policy under climate change. *American Association of Geographers*. San Francisco. March 29–31st, 2016. Oral Presentation.

Vanos, J.K., Hardin, A. Heat Waves and the Urban Heat Island: Employing Citywide Observational Networks to Assess Spatiotemporal Variability of Air Temperature in the U.S. Northeast. *American Meteorological Society Annual Meeting*, New Orleans. Jan 13th, 2016. Oral Presentation.

Middel, A., **Vanos, J.**, Ruddel, B. Time-detrending Surface Temperature Observations from Mobile Transects: A Sensitivity Analysis. *American Meteorological Society Annual Meeting*, New Orleans. Jan 13th, 2016. Oral Presentation.

Vecellio, D., **Vanos, J.K.**, Quirring, S. A Comparison of Heat Indices for Quantifying Heat-Health Risk. *American Meteorological Society Annual Meeting*, New Orleans. Jan 12th, 2016. Oral Presentation.

Neely, K.* **Vanos, J.** Assessing the Impact of Climate on the Two Vectors of Chikungunya Virus and Dengue Fever in Brownsville, Texas. *American Meteorological Society Annual Meeting*, New Orleans. Jan 11th, 2016. Poster Presentation.

Vanos, J.K., Brown, R.D., Gillespie, T.J., Hardin, A. Capabilities and comparisons of instruments measuring exposure to outdoor radiation for utilization in environmental heat-health studies. *International Society of Exposure Sciences 25th Annual Meeting*. Henderson, NV. Oct 18–21, 2015. Oral Presentation.

McKercher, G.* **Vanos, J.K.** A Spatial Assessment of Urban Air Quality in a Growing City Using Innovative Portable Sensing Technologies. *International Society of Exposure Sciences 25th Annual Meeting*. Henderson, NV. Oct 18–21, 2015. Oral Presentation.

Vanos, J.K., **Middel, A.** **McKercher, G.R.**, Kuras, E.R., Ruddell, B.L. A Multiscale Thermal Analysis of Urban Playgrounds in a Hot, Dry City. *International Conference on Urban Climate*. Toulouse, France. July 21–24th, 2015. Oral Presentation.

Vanos, J.K., Brown, R.D., Gillespie, T.J., Hardin, A. Capabilities and comparisons of instruments measuring radiation for utilization within outdoor thermal comfort studies. *American Association of Geographers*, Chicago, IL. Apr 20–25th, 2015. Oral Presentation.

McKercher, G.* **Vanos, J.K.** A Spatial Assessment of Urban Air Quality in Growing Cities Using Innovative Portable Sensing Technologies. *American Association of Geographers*, Chicago, IL. Apr 20–25th, 2015. Poster Presentation.

Cakmak, S. **Hebbern, C.** **Vanos, J.K.**, Dales, R. Do Socioeconomics Influence Susceptibility to the Physiological Effects of Air Pollution. *Health Canada Science Forum*. Ottawa, ON, Canada. Feb 24–25, 2015. Oral Presentation.

Brown, R.D., **Vanos, J.K.**, McWilliam, W. The Value of Urban Biodiversity in Ameliorating Global Climate Change and Urban Heat Island Intensification. *GLI Conference, University of Tokyo*, Jan 2015.

Vanos, J.K. **Ruddell, B.**, Kuras, E., **Middel, A.** A Multiscalar Thermal Analysis of Urban Playgrounds. *American Meteorological Society Annual Meeting, Phoenix, AZ*. Jan 4–9th, 2015. Oral Presentation.

Hardin, A.* **Vanos, J.K.** Assessment of Biophysical Characteristics Over Various Urban Surfaces During

the Presence of Oppressively Hot Weather Types. *American Meteorological Society Annual Meeting, Phoenix, AZ. Jan 4–9th, 2014. Oral Presentation*

Karner, A., D. M. Hondula, D.M., **Vanos, J.K.** Connecting Transportation Scenarios and Extreme Heat Exposure in Urban Areas. *American Meteorological Society Meeting, Phoenix, AZ. Jan 4–9th, 2014.*

Grigorieva, E.A., Kalkstein, L., Sheridan, S., **Vanos, J.K.** Summer mortality and synoptic climatology in Khabarovsk. *International Congress of Biometeorology, Kent, OH. Sept 29–Oct 2, 2014. Oral Presentation.*

Vanos, J.K., Kalkstein, L.K., Sheridan, S.C., Kalkstein, A.J., Eisenman, D. Heat-Mortality Demographic Sensitivities in Los Angeles County and Potential Climate Change Impacts. *International Congress of Biometeorology, Kent, OH. Sept 29–Oct 2, 2014. Oral Presentation.*

Vecellio, D.J.* **Vanos, J.K.**, Hondula, D.M. Determining Synoptic Air Mass Modifications for Advance Health-Effect Preparedness. *International Congress of Biometeorology, Kent, OH. Sept 29–Oct 2, 2014. Oral Presentation.*

Hardin, A.* **Vanos, J.K.** Assessment of Localized and City-Specific Urban Heating in Four North-Eastern Cities Using Spatial Synoptic Classification. *International Congress of Biometeorology, Kent, OH. Sept 29–Oct 2, 2014. Oral Presentation.*

Graham, DA.* **Vanos, JK.**, Kenny, NA., Brown, RD. Census Tract-Level Outdoor Human Thermal Comfort Modelling and Heat-Related Morbidity Analysis During Extreme Heat Events in Toronto. *Canadian Society of Landscape Architects, Ottawa, ON, Canada. May 29–31st, 2014. Oral Presentation.*

Vanos, JK., Hardin, A. Localized Urban Heat Island Development and Associations with Air Pollution and Synoptic Weather. *World Weather Open Science Conference (WWOSC), Montreal, QC, Canada. Aug 18–21st, 2014. Oral Presentation.*

Vecellio, D.* **Vanos, JK.**, Hondula, DH. A Statistical Approach For Determining Synoptic Air Mass Modification. *American Association of Geographers, Tampa, FL. Apr 8–12th, 2014. Oral Presentation.*

Vanos, JK., Hardin, A. City-Specific Diurnal Variations in Urban Heat Island Development and Applications to Neighborhood Heat-Health Interventions. *American Association of Geographers, Tampa, FL. Apr 8–12th, 2014. Oral Presentation.*

Vanos, JK., Kalkstein, L.K., Sheridan, S.C. Insights into the health impacts of synoptic-scale climatology in two Korean cities: a retrospective analysis of morbidity. *American Meteorological Society Annual Meeting, Atlanta, GA. Feb 2–7th, 2014. Oral Presentation.*

Leachman, K.* **Vanos, J.** Examining Air Quality and Synoptic Meteorology from 2003-2013, in Houston, Texas. *National Conference for Undergraduate Research (NCUR), Kentucky, April 4, 2014. Poster.*

Vanos, JK., Hebbert, C., Cakmak, S. Risk assessment for cardiovascular and respiratory mortality due to air pollution and synoptic meteorology in 10 Canadian cities. *American Meteorological Society Annual Meeting, Atlanta, GA. Feb 2–7th, 2014. Oral Presentation.*

Brown, RD., **Vanos, JK.**, Kenny, NA., Lenzholzer, S. Designing Urban Parks That Ameliorate the Effects of Climate Change. *American Meteorological Society Annual Meeting, Atlanta, GA. Feb 2–7th, 2014. Oral Presentation.*

Linesman, M., **Vanos, JK**, Warland, J., Spreit, L. The effects of facing wind and ambient temperature on physiological responses to cycling at 75% VO_{2max} in highly-trained cyclists and triathletes. *Canadian Society for Exercise Physiology. Toronto, ON. Oct 16–18th, 2013.*

Grigorieva, EA., Kalkstein, LS., **Vanos, JK.** Development of the Spatial Synoptic Classification for extreme monsoonal climate of the Russian Far East. *International Geophysical Union, Kyoto, Japan. Aug 6–10th, 2013. Oral Presentation.*

Kalkstein, LS., **Vanos, JK.** Today's climate trends and tomorrow climate change: Some potential linkages in urban North America. *WISE (Weather Information Service Engine) 2013 International Workshop. Seoul, Korea. June 19–21, 2013. Oral Presentation.*

Vanos, JK., Kalkstein, LS., Sanford, T., White-Newsome, JL., Perera, LM. Detecting warming trends in the US Midwest using a synoptic climatologically approach. *American Meteorological Society Annual*

Meeting. Austin, TX. Jan. 9th, 2012. Oral Presentation.

Vanos, JK., Cakmak, S. Changing air mass frequencies in Canada: Potential links and implications to human health. *Health Canada Science Forum*. Ottawa, ON. Dec 3, 2012. Oral Presentation.

Vanos, JK., **Cakmak, S.** Changing air mass frequencies in Canada: Potential links and implications to human health. *Health Canada Science Forum*. Ottawa, ON. Dec 3, 2012. Poster Presentation.

Cakmak, S., **Vanos, JK.**, Bristow, C., Brion, V., Martin, S., Sheridan, S. Synoptic weather typing applied to air pollution mortality effects on the elderly in 10 Canadian cities. *Health Canada Science Forum*. Ottawa, ON. Dec 3, 2012. Oral Presentation.

Cakmak, S., **Vanos, JK.**, Bristow, C., Brion, V., Martin, S., Sheridan, S. Synoptic weather typing applied to air pollution mortality effects on the elderly in 10 Canadian cities. *Health Canada Science Forum*. Ottawa, ON. Dec 3, 2012. Poster Presentation.

Vanos, JK., Cakmak, S. Long-term influences of synoptic climatology and air pollution on daily mortality in 12 Canadian cities. *Canadian Association of Geographers*. Laurier University, Waterloo, ON. May 27 – June 1, 2012. Oral Presentation.

Kalkstein, LS., **Vanos, JK.** Our Cities are Warming: Is it Climate Change or the Urban Heat Island? *The Academy of Natural Sciences*. Drexel University, Philadelphia. April 17, 2012. Oral Presentation.

Vanos, JK., Kalkstein, LS. Detecting climate change in two large U.S. cities using a synoptic climatological approach. *American Association of Geographers*, Feb 24 – 28th, 2012. New York, NY. Oral Pres.

Vanos, JK. Climate trend analysis for heat wave warning and emergency dispatch calls in Toronto, Canada. *International Research Institute for Climate and Society, CIPHA*. Columbia University, Earth Institute. Palisades, New York. May 15-26th, 2011. Poster Presentation.

Vanos, JK., Slater, GA., Warland, JS., Brown, RD., Kenny, NA., Gillespie, T.J. Modelling spatial variations in energy budgets of humans exercising in outdoor urban recreational parks and spaces. *Canadian Meteorological and Oceanographic Society*. Ottawa, ON. June 5–9th, 2011. Oral Presentation.

Vanos, JK., Slater, GA., Warland, JS., Brown, RD., Kenny, NA., Gillespie, T.J. Modelling spatial variations in energy budgets of humans exercising in outdoor urban recreational parks and spaces. *American Meteorological Society Annual Meeting*. Seattle, WA. January 22 – 28, 2011. Oral Pres.

Vanos, JK., Warland, JS., Kenny, NA., Gillespie, TJ. Modelling skin temperature of a human exercising in an outdoor environment. *Canadian Meteorological and Oceanographic Society*. Ottawa, ON. May 31 – June 4, 2010. Oral Presentation.

Vanos, JK., Warland, JS., Kenny, NA., Gillespie, TJ. Modelling skin temperature of a human exercising in an outdoor environment. *The Sustainable City, 2010*. Wessex Institute of Technology. April 14 – 16, 2010. La Coruna, Spain. Oral Presentation.

Vanos, JK., Warland, JS., Gillespie, TJ., Kenny, NA. Modelling skin temperature of a human exercising in an outdoor environment. *Joint Annual Conference: Canadian Society of Agricultural and Forest Meteorology, Canadian Society of Agronomy, Canadian Society of Soil Science*. Guelph, ON. Aug 5 – 7, 2009. Oral Presentation.

Vanos, JK., Warland, JS, Gillespie, TJ, Kenny, NA. Modelling skin temperature of a human exercising in an outdoor environment. *International Gordon Research Conference, Radiation and Climate*. New London, NH, USA. July 4–10, 2009. Poster Presentation.

Award-Winning Student Presentations

Henning, A. **Vanos, JK.** Estimating Personal Ultraviolet Radiation Exposure During Outdoor Activities with Wearable Sensors. Urban Climate Research Center Poster event. ASU, Oct 2020. 1st Place Graduate Student Poster.

Meltzer, S., Broadbent, A., **Vanos, JK.**, Georgescu, M., Hondula, DM., Middel., AM. Impact of Trees on Urban Canyon Microclimate. UWIN Annual Meeting, Fort Collins, CO. 2018. 1st Place Student Poster.

McWest, L., Broadbent, A., **Vanos, JK.**, Georgescu, M., Hondula, DM., Middel., AM. Impacts of Urban Tree Canopy and Water Features on a Semi-Arid Thermal Environment, UWIN Annual Meeting, Fort

Collins, CO. 2018. 3rd Place Student Poster.

McKercher, G., Vanos, J. A Spatial Assessment of Urban Air Quality in a Growing City Using Innovative Portable Sensing Technologies, *American Meteorological Society Annual Meeting*, New Orleans. Jan 13th, 2016. Oral Presentation. Environment and Health Board Best Student Presentation Travel Award.

TEACHING AND STUDENT SUPERVISION

TEACHING

- Aug 2018–** **Assistant Professor, School of Sustainability, Arizona State University.**
Pathways to Sustainability (SOS 508), F20.
 Graduate Level, ~120 students.
Climate Change and Health (GPH 591/SOS 591), F18, F19, F20
 Graduate Level; Taught 3 times, ~10 students.
Community of Scholars (SOS 589), F18, Sp19, F19
 Graduate Level; Taught 3 times, ~15 students.
 Sustainability Synthesis (SOS 581), Sp19, Sp20
 Graduate Level; Taught 2 times, ~ 10 students.
- 2017–Aug 2018** **Assistant Professor, Scripps Institution of Oceanography / School of Medicine, University of California San Diego**
Environmental and Occupational Health (FPMU 130) W18; Sp17.
 Undergraduate Level; Taught 2 times, ~50–70 students.
Experiences in Oceanic and Atmospheric Sciences (SIO 60), F17.
 Undergraduate Level; Taught 1 time, ~20 students.
- 2013–2016** **Assistant Professor, Atmospheric Science, Department of Geosciences, Texas Tech University**
Weather, Climate, and Applications (ATMO 5302), F15
 Graduate Level; Taught 1 time, ~10 students.
Weather, Climate and Human Activities (ATMO 2301), F13, F14, F16, Sp16.
 Undergraduate Level; Taught 4 times, ~25 students.
Introduction to Atmospheric Sciences (ATMO 1300), Sp14, Sp15.
 Undergraduate Level; Taught 2 times, ~40 students.
- 2014–16** **Guest Co-Instructor, Umeå University, Sweden**
 Climate Change and Health Research Methods Two-week course
 Graduate/postdoc, research level; Taught 3 times (2014–2016).
Topics: Heat warnings, extreme heat, air pollution, climate change, instrumentation.
- 2010–Dec 2011** **Graduate Teaching Assistant, School of Environmental Sciences, University of Guelph**
Meteorology and Climatology (MET 2030) F10, W11, F11.
 Undergraduate Level; TA 3 times
Atmospheric Systems (ENVS 3160), W10
 Undergraduate Level; TA 1 time
- 2008–Dec 2011** **Graduate Teaching Assistant, Department of Geography, University of Guelph**
Geography of the Biophysical Environment (GEOG 1300), W09–11
 Undergraduate Level, TA 3 times
Geomorphology (GEOG 2000), F08, F09
 Undergraduate Level, TA 2 times

INVITED GUEST TEACHING & WORKSHOP LECTURES

- University of Twente**, “*Technologies and opportunities for sensing weather and air pollution*”, Enschedes, Netherlands. Dec 2019.
- University of Sydney, Journal Club**, Graduate Students, “*Use and misuse of the WBGT*”, Thermal Ergonomics Laboratory, Oct 25, 2019.
- Arizona State University**, Upward Bound Program for highschool students, “*Climate Change and Health*” Guest Lecture for Brian Grant & Madison West, June 27, 2019.
- Arizona State University**, College of Health Solutions, The Tokyo 2020 Olympic Marathons: Spectator Thermal Comfort and Health in the Face of Extreme Heat. Undergraduate class lecture for Floris Wardenaar, Feb 2019.
- UC San Diego**, Family Medicine & Public Health, “*Climate & Health*” Guest Lecture for Dr. Britta Larsen, April 2018.
- UC San Diego, Department of Chemistry**, “*Air Pollution & Health*” Guest Lecture for Kim Prather, Chemistry and Climate, June 1st, 2017.
- UC San Diego, FMPH**, Introduction to Public Health, “*Special Environmental Health Topic: Extreme Heat*” March 15, 2017.
- South Central Climate Science Center, Department of Interior**, Early Career Workshop, Texas tech University “*Using Microclimate Principles to Understand Health for Urban Heat Adaptation*” (June 22, 2016).
- Graduate Class Lecture, University of Texas at San Antonio** (URP 5453 Urban and Regional Sustainability) “*Climate Adaptation in the City: Urban Heat Island Mitigation and Health*” Virtual Lecture (Apr. 12, 2016).
- Graduate Class Lecture, Texas Tech School of Law**, “*Climate Science, Variability, & Impacts*” (Water Law), April 7, 2016.
- Graduate Class Lecture, Texas Tech University**, “*Working with Meteorological Data and Modeling Weather and Health Relationships*” (PUAD 5325), April 4, 2016.
- Undergraduate Class Lecture, Texas Tech University** (PUAD 3300: Political Science, Energy, Environment, and Society); “*Climate & Health: From Impacts to Adaptation*” (Mar 24, 2016).
- Graduate Class Lecture, Texas Tech University** (PUAD 5324: Political Science, Energy Climate, Sustainability); “*Climate & Health: Adaptation to Urban Heat and Air Pollution*” (Mar 23, 2015).
- Undergraduate Class Lecture, Texas Tech University** (ATMO 1300: Atmospheric Sciences); “*Climate Science: Observations, suspects, and our future*” (Nov 24, 2015).
- Graduate Class Lecture, Texas Tech University** (NRM 6002: Integrated Climate Response Modeling); “*From Large Scale Climate Change to Microclimates: How weather and climate impact the environment & ecosystems*” (Sept 23, 2015).
- Undergraduate Class Lecture, Emory College, Department of Environmental Sciences** “*Climate Science: Facts, Fiction, and what we can expect*” Virtual Lecture (Sept 3, 2015).
- Graduate Class Lecture, Texas Tech University** (PUAD 5334 Healthcare Policy & Administration) “*From impacts to adaptation: Children's health and vulnerability in outdoor microclimates*” (Apr 13, 2015)
- Undergraduate Class Lecture, Arizona State University** (PAF 494/GPH 494 Policy Informatics for Climate Change and Health). “*Seeing Urban Areas Through a New Lens: Why Urban Design Matters*” (March 19, 2015).
- Graduate Class Lecture, Texas Tech University** (PUAD 5322 Climate & Weather Risks & Hazards) “*Weather, Climate & Health: Human Response & Adaptation to Increasing Temperatures*” Mar 2015
- Graduate Class Lecture, Texas Tech School of Law**, “*Climate Science, Variability, & Impacts*” (Water Law), April 15, 2015.
- Graduate Class Lecture, University of Texas at San Antonio** (URP 5453 Urban and Regional Sustainability) “*Urban Sustainability and Climate Change: The Interconnectedness of our Urban Environment and Health*” Virtual Lecture (Mar 3, 2015)
- Undergraduate Class Lecture, Arizona State University** (GPH 213 Introduction to Climatology), “*Human Biometeorology and Heat Health*” (Feb 6, 2015)
- Undergraduate Class Lecture, Texas Tech University** (Honors Biology). “*Equatorial Climates & Weather: From large scale interactions to microscale impacts*” (Oct 14, 2014)

- Undergraduate Seminar Lecture**, Texas A & M University (Triple Digits and Two-a-Days: Exploring the Influence of Weather/Climate on Sports), *"Human Biometeorology and Sports"* (Sept 12, 2014)
- Undergraduate Class Lecture**, University of Miami (GEG 221 Introduction to Health & Medical Geography), *"Human Biometeorology Related to Climate and Health"* (Feb 28th, 2013)
- Undergraduate Class Lecture**, University of Guelph (MET 2030 Meteorology and Climatology) *"Modelling thermal comfort of humans performing physical activity: applications to health and emergency heat stress preparedness"* (Nov 12th, 2012)
- Undergraduate Class Lecture**, University of Guelph (MET 2030 Meteorology and Climatology), *"Human thermal comfort, energy budget analysis, and application"* (Sept 30th, 2011)
- Undergraduate Class Lecture**, University of Guelph (MET 3050 Microclimatology), *"Human energy budget modeling during exercise in outdoor urban spaces and application in bioclimatic urban design."* (Apr 4th, 2011)
- Undergraduate Class Lecture**, University of Guelph (MET 3050 Microclimatology), *"Human energy budget modeling during exercise in outdoor urban spaces and application in bioclimatic urban design"* (April 6th, 2011)

STUDENT SUPERVISION

Current Graduate Advisees (+=advanced to doctoral candidacy)

- Adora Shortridge, M.A. 2021, School Sustainability, Arizona State University (Co-Chair)
+Alyssa Henning, Ph.D. 2020, Biological Sciences, Arizona State University (Co-Chair)
Katrina Gerster, M.A., 2020, School of Geographical Sciences & Urban Planning, Arizona State University (Chair)
Florian Schneider, Ph.D. 2022, School of Sustainability, Arizona State University (Committee member)

Current Undergraduate Advisees

- William Walker, ASU School of Sustainability

Completed Graduated Theses and Dissertations (as Chair)

- Haven Guyer, M.A. 2020, School of Geographical Sciences & Urban Planning, Arizona State University (Co-chair)
Alexandria Herdt, M.S. 2017, Atmospheric Science, Texas Tech University; Awardee of the NSF East Asia Pacific Summer Institute (EAPSI), Seoul National University, South Korea.
Grant McKercher, M.S. 2016, Atmospheric Science, Texas Tech University
Kelly Neely, M.S. 2016, Atmospheric Science, Texas Tech University
Aaron Hardin M.S. 2015, Atmospheric Science, Texas Tech University
Daniel Vecellio, M.S. 2014, Atmospheric Science, Texas Tech University

Completed Graduated Theses and Dissertations (as committee member)

- Kelley Murphy, M.S. 2018, Atmospheric Science, Texas Tech University
Ying Lui, PhD. 2018, Geography, Texas Tech University
Aaron Flores, M.A. 2018, Geography, Texas Tech University
Andrew Collins, M.S. 2018, Atmospheric Science, Mississippi State University
Yun Soung-Kim, Ph.D. 2017, Bioengineering, University of California San Diego
Marina Gonzalez, M.A. 2016, Interdisciplinary Studies, Texas Tech University
Christian Nauert, M.S. 2015, Atmospheric Sciences, Texas Tech University
Drew Graham, Master of Landscape Architecture, 2012, School of Environmental and Rural Design, University of Guelph

Graduated Undergraduate Research Students:

ASU:

Jarod Kline, Engineering, Arizona State University, Barrett Honors Student, Committee Member, Barret Honors Thesis

Gianni Labato, Major: Earth and Space Sciences, Minor: Sustainability

UCSD & TTU:

Carl Demolder, Electrical Engineering, University of California San Diego (CRES Fellow, 2018)

Aaron Tam, Public Health, University of California San Diego (2018)

Weijia Qian, Neuroscience & Physiology, University of California San Diego (2018)

Christine Tu, Public Health, University of California San Diego (2018)

Aaron Barrel, Urban Planning, University of California San Diego (2017)

Chenhao Lu, Mathematics, University of California San Diego (2017)

Kaitlin Chen, Public Health, University of California San Diego (2017)

Lyndsie Slater, Atmospheric Science, Texas Tech University (2016)

Travis Reddick, Atmospheric Science, Texas Tech University (2016)

Derek Schaffenburg, Atmospheric Science, Texas Tech University (2016)

Elaine Keim, Atmospheric Science, Texas Tech University (2016)

Zing Zhou, Geosciences, Texas Tech University (2015)

Bethany Kuwitzky, Geosciences, Texas Tech University (2015)

Frank Karl, Geosciences, Texas Tech University (2015)

Kaitlin Leachman, Atmospheric Sciences, Texas Tech University (2014)

Additional Supervisory and Mentor Experience:

Manuel Herrera, NSF REU Urban Water innovations Network, Arizona State University, Summer 2019.

Jenna Rosales, NSF REU CAP LTER and ESA SEEDs mentor, Urban Water innovations Network, Arizona State University, 2019–2020.

Samuel Meltzer, NSF REU Student, Urban Water innovations Network, Arizona State University, Summer 2018 (co-mentor).

Lolya McWest, NSF REU Student, Urban Water innovations Network, Arizona State University, Summer 2018 (co-mentor).

Matthew Williams, *Engineers for a Sustainable World*, Mechanical Engineering, UC San Diego 2017–2018

Andres Espinoza, mentor for Continuing Umbrella of Research Experience (CURE) program, in conjunction with the Moore's Cancer Center, UC San Diego, 2017

Andrea Padilla, mentor for CURE program, in conjunction with the Moore's Cancer Center, UC San Diego, 2017

Michelle Poletti, Ecological Society of America, SEEDs (co-mentor), 2016

External Examiner, PhD Students:

Doctoral Dissertation Comprehensive Written & Oral Exam, Univ. of Calgary, Environmental Design, April 2020

Doctoral Dissertation Midterm Examination Committee, Umeå University School of Public Health, Epidemiology and Global Health Department Umeå, Sweden, May 2014.

SERVICE

ORGANIZED EVENTS (WORKSHOPS, CONFERENCES, PANELS)

Current/Ongoing

Organizing Committee, International Conference on Urban Climate, Sydney, Australia, 2019–2021.

Organizing Committee, 22nd International Congress on Biometeorology, Brazil, 2020.

Theme Committee, Changing North American Continent, American Association of Geographers, 2020 Annual Meeting.

Organizing Committee, 18th Annual Climate Prediction Applications Science Workshop (CPASW), Phoenix, AZ. 2019–2020

Past Events

Security and Sustainability Forum, Webinar Organizer, “[*Health Impacts of Extreme Heat*](#)”, May 14th, 2020.

Session Chair, “*Exertional Heat Illness and Health—From Heat Metrics and Predictions to Practice*” American Meteorological Society Annual Meeting, Boston, MA, 2020.

Conference Meeting & Working Group – “*Extreme Heat Side Meeting*”, American Meteorological Society Annual Meeting, Boston, MA, 2020.

Workshop Co-Organizer & Facilitator, 3rd International Conference for Students and New Professionals of the International Society of Biometeorology, University of Twente, Enschede, Netherlands. Co-organizer with Hamed Mehdi Poor, University of Twente. Dec 2019.

Scientific Committee & Session Chair - UTCI - Assessment & Measure in Human Bioclimatology, Warsaw, Poland, May 2019. Session Chair, American Meteorological Society Annual Meeting, Environment & Health Conference, Phoenix, AZ, Jan 2019

Co-Planning Chair and Discussant: UCSD Institute of Public Health, Technology & Public Health Event “*The Future of Public Health Research: Building Capacity for Precise, Networked, and Agile, Sociotechnical Systems through Design, Engineering, and Health Sciences*”, with Eric Hekler, 2018

Session Chair & Workshop Committee, Technology Panel, Exercise Science and Skin Cancer Prevention Expert Meeting - National Cancer Institute, Shady Grove, MD, Sept 2018

National Cancer Institute, Chair & Workshop Committee, Technology Panel, Exercise Science and Skin Cancer Prevention Expert Meeting - Shady Grove, MD, Sept 2018

Program Chair (three times), American Meteorological Society Annual Meeting, Environment and Health Conference. 2016, 2017, 2018

Session Chair, International Conference on Urban Climates, New York, NY. Aug 2017

Session Chair, 21st International Congress of Biometeorology, Durham, UK, Sept 2017

Program Committee, 21st International Congress of Biometeorology, Durham, UK, 2017

Workshop Co-Organizer & Facilitator, 2nd International Conference for Students and New Professionals of the International Society of Biometeorology, Old Dominion University, Norfolk, VA. Summer, 2016.

Organizer and Co-Chair, Weather, Climate, and Health I, II, III, IV. Association of American Geographers Annual Meeting, Tampa, FL. 2014

Steering Committee, Developing an Integrated Heat-Health Information System (NIHHIS) for Long-term Resilience to Climate and Weather Extremes in the El Paso-Juárez-Las Cruces Region. 2015.

Workshop (Invited), 11th Annual Conference on Advancing Teaching & Learning, Texas Tech University, “*How you learn impacts how you teach: Strategies to engage all learning styles in various settings*” Feb 2015.

Organizer and Co-Chair, Weather, Climate, and Health I, II, III, IV. Association of American Geographers Annual Meeting, Chicago, IL. Apr. 2015

HEAT Project, Collaborator & Speaker, Pufendorf Institute, Lund University, Lund, Sweden, May 2015

Conference Workshop Co-Organizer: Students and New Professionals Day, International Congress of Biometeorology, Kent, OH. Co-organizer with Grady Dixon. Sept 2014

Workshop (Invited Session) 10th Annual Conference on Advancing Teaching and Learning, Texas Tech University, “*Reversing the Roles in the Classroom: Teaching with Guided Participation for Student Led Learning*”, Conference Workshop (Feb 28th, 2014)

Workshop Co-Organizer & Facilitator, 1st International Conference for Students and New Professionals of the International Society of Biometeorology, Vindeln, Sweden, 2014

PROFESSIONAL SERVICE

Proposal Reviewer, Natural Environment Research Council, United Kingdom, March 2020

Student Poster Judge, Conference on Urban Climate, American Meteorological Society Annual Meeting, Boston, MA, Jan 2020

Invited Contributing Author, Intergovernmental Panel on Climate Change Sixth Assessment Report, 2019 Advisory Board, National Program for Playground Safety, University of Northern Iowa, 2018–

Medical and Science Advisory Board, Korey Stringer Institute, 2017–

Judge, Student presentations, Board on Environment and Health, American Meteorological Society Annual Meetings, 2017, 2018, 2019, 2020

Proposal Reviewer, National Science Foundation, Fall 2018

Executive Board Member, International Society of Biometeorology, North American Councilor, appointed 2017–2020

Vice Chair, American Meteorological Society, Board of Environment and Health, appointed Jan 2018–

Judge, Student presentations, American Association of Geographers Conference, Boston, MA. Apr 2017

Board Member, American Meteorological Society Board of Environment and Health, appointed 2015–

Chair, Students and New Professionals Group, International Society of Biometeorology, appointed 2014–2017.

Online Course Presenter, SC Climate Science Center, Managing for a Changing Climate, “[*Climate change and chronic diseases*](#)”, May 2016

Proposal Reviewer, German Federal Ministry of Education and Research (BMBF), Urban Climate Change Program, July 2015

Proposal Panel Reviewer, National Aeronautics and Space Administration (NASA), ROSES Solicitation on Health and Air Quality, Aug. 2014.

Book Chapter Reviews

Urban Climates, Ch. 13: “*The Climates of Humans*” by T.R. Oke, G. Mills, A. Christen, J. Voogt. 2014.

American Meteorological Society (AMS) “*Biometeorology for Application to Climate Variability and Change*” (2011) Springer. New York, USA.

Scientific Manuscript Reviews, 36 academic journals

(average ~10 reviews per year; ≥1 manuscript reviewed per journal for each year listed)

Climate and Weather Extremes (2020)

Environmental Research Letters (2020)

Frontiers (2019)

PloSOne (2018)

Journal of Geophysical Research (2018–2019)

Urban Forestry Urban Greening (2018)

Journal of the American Planning Association (2018)

Building and Environment (2011–2015, 2017, 2018)
International Journal of Climatology (2012, 2013, 2020)
International Journal of Biometeorology (2011–20)
International Journal of Environmental Research and Public Health (2015, 2017–18)
Temperature (2018–2020)
Anthropocene (2017)
Atmospheric Environment (2017)
Journal of the Air & Waste Management Association (2017)
Urban Greening and Urban Forestry (2016)
Science of the Total Environment (2016, 2019–20)
Environmental Health Perspectives (2016)
Geographic Review (2016)
Environmental Pollution (2016)
Urban Green Urban Forestry (2014–15)
PLoS One (2015–2016)
Environmental Health (2015)
Climate Research (2015)
Urban Climate (2015, 2019, 2020)
Energies (2015)
Environment International (2014)
Bulletin of the American Meteorological Society (2014, 2015)
Natural Hazards (2013)
Journal of Operational Meteorology (2013, 2014)
Journal of Applied Meteorology and Climatology (2013, 2014)
Journal of Environmental and Public Health (2013, 2015)
Journal of Applied Geography (2012)
Journal of Operational Meteorology (2013)
Environment International (2012, 2014)
Environmental Health Perspectives (2012)
Meteorologische Zeitschrift (Metzet) (2011)

Scientific Journal Editorial Boards & Guest Editor Roles

Editorial Advisory Board, *International Journal of Biometeorology*, 2014–present

Guest Field Editor, *International Journal of Biometeorology*, *Special Issue, Students & New Professionals*.
2019–2020

Guest Editor, Special Issue in the Journal *Temperature* – *Anticipating the Tokyo Olympics Games*,
<https://think.taylorandfrancis.com/tokyo-olympic-games/>

Professional Affiliations

International Society of Biometeorology; American Association of Geographers (*Climate Specialty Group*);
American Meteorological Society; International Association for Urban Climate.

ARIZONA STATE UNIVERSITY SERVICE

Faculty Advisory Committee, School of Sustainability, Aug 2020–

Faculty Editor, Resilience & Adaptation Sections, response to Request for Information from the House
Subcommittee on the Climate Crisis, Nov 2019.

Judge, Institute for Social Science Research, Poster Competition, 2020

Judge, Student Poster Competition, CAPLTER All Scientists Annual Meeting, Jan 2020

Ph.D., MA, MS Advisory Committee, School of Sustainability, 2019–2020 AY

Invited Panelist, Understanding and Managing Heat as a Critical Hazard, “*Heat as a Hazard*”, Julie Ann Wrigley Global Institute of Sustainability, October 2019.

Invited Speaker, “*Promoting Human Health in Urban Environments through measurement and Design*”, Arizona AMS Local Chapter, May 2019.

Invited Seminar Series Speaker, “*Promoting Health in Urban Environments through Measurement and Design*”, School of Geographical Sciences and Urban Planning, April 2019.

Undergraduate Advisory Committee, School of Sustainability, 2018–2019

UNIVERSITY OF CALIFORNIA SAN DIEGO SERVICE

Scripps Institution of Oceanography Educational Policy Committee, 2017–2018

Center for Engaged Teaching Member, UC San Diego, 2017–2018. Workshop Presenter, “Apps and Appetizers” – PollEverywhere classroom application (Jan 2018)

Center for Better Beginnings, Rady’s Children’s Hospital, UC San Diego, Invited Speaker, “*Children’s Personal Vulnerability to Extreme Heat and Radiation: an overview*”. March 16, 2018. San Diego, CA.

Diversity Speaker Series on Environmental Justice, Invited Speaker, UC San Diego, “*Hot Spots for Heat Resilience in Border Cities: A pilot Study in El Paso, TX*” June 2018.

Academic Review Ad Hoc, two committees, 2017-2018, Scripps Institution of Oceanography, 2017–2018

Faculty Search Committee, Scripps Institution of Oceanography, Oceans and Human Health, 2017–18

Co-Chair, Institute of Public Health (IPH), Technology and Health Working Group, 2017–18

Master of Applied Science Program, Invited Speaker, Scripps Institution of Oceanography, *Bridging Human Health & Urban Microclimatology with Personal Exposure Research*, La Jolla, CA, Sept 2017.

Climate Change and Health Speaker Series: Art and Science in Our Changing Climate, Invited Speaker and Panelist, *Personalizing Weather and Health Interactions Today and Tomorrow*, May 2017.

Planning Proposal Committee for new School of Public Health, UC San Diego, Department of Family Medicine and Public Health, 2017–2018

Triton Transfer Day Faculty Volunteer, Scripps Institution of Oceanography, 2017

TEXAS TECH UNIVERSITY SERVICE

Geoscience Research Day Poster Judge, Department of Geosciences, May 2016

Earth Day Texas, Multiple presentations and outreach to children’s and activists, April 2016

Faculty Search Committee, Assistant Research Professor, Atmospheric Science Observationlist, 2016

Faculty Search Committee, Assistant Research Professor, Numerical Weather Prediction, 2016

TECHSavvy Event for Girls in STEM, Workshop Volunteer, Texas Tech University, Feb 20th, 2016.

STEMfest for Girls in Science and Engineering, Department of Geoscience, Atmospheric Science Faculty organizer. Nov 6, 2015.

Undergraduate Project Faculty Director, Electrical Engineering, Senior Project Laboratory, EC4334, EC4333; 2014–present (two semesters of advising)

Undergraduate Project Organizer & Evaluator, “2015 South Central Climate Science Center Interns iButton Project” June 2015

Graduate Research Poster Competition Judge, Graduate School, April 2015

Member, West Texas Association for Women in Science, Technology, Engineering, Agriculture, Math, 2015–2016

Texas Tech University Women’s Club, 2014–2016

Atmospheric Sciences TTU Red Raider Football Games Weather Forecasting, 2013–2016

Teaching, Learning, and Professional Development Center, Texas Tech University: active participant and Conference Workshop Presenter (2014, 2015) for the Annual Conference on Advancing Teaching and

Learning. 2014–2016.

Faculty Presenter, Osher Lifelong Learning Institute (OLLI), Texas Tech University, 2014

Geoscience Research Day Poster Judge, Department of Geosciences, May 2014

Faculty Volunteer Organizer, First Friday Art Trail for Lubbock, TX. Climate Science Center Exhibit “*West Texas: Our Changing Climate*” Urban Tech Studio, Texas Tech University. March 7th, 2015.

Faculty Search Committee, Climate & Remote Sensing New Hire, 2014–15

Monthly Seminar Series Organizer, Texas Tech University Climate Science Center, 2013–2016

Public/Community Research Talks: 2013–present

Aquarium of the Pacific, “*Hot Spots for Resilience: Tackling the Health Challenges of Extreme Heat from Global to Local*”, Long Beach, CA, Mar 2020.

San Diego County Childhood Obesity Initiative, Invited Speaker, “*Healthy Spaces in Hot Places: A San Diego County Perspective*”, San Diego, CA, Nov 2017.

Taste of Science San Diego, Invited Public Talk, “*Heat, Health, & Staying Cooling in Hot Cities*” Apr 2017

Science by the Glass South Central Climate Science Center, Invited Public Seminar, Texas Tech University “*Beating the Heat*” May 2016

PROBUS Club of Lambton Shores, Forest, ON, Canada. “*Climate, Humans, and Health: Facts, Fiction, and what we can expect*” July 2015

Maricopa County Public Health Department Seminars, Invited Seminar, Phoenix, AZ, “*Seeing Urban Playgrounds Through a New Lens*” Dec 2014

Osher Lifelong Learning Center, Lubbock, TX. “*A tale of two ‘ologies’ in the study of human health and climate*” April 2014

Miss Infinity Workshop for Girls, Keynote Speaker, Invited Speaker, University of Guelph, Ontario, Canada. “*Infinity and Beyond...! How I Became an Atmospheric Scientist*” (June 6th, 2013)

UNIVERSITY OF GUELPH (2004–2011)

2010–2012 **Graduate Student Committee, Vice President and Social Representative** School of Environmental Sciences, University of Guelph

2010–2012 **EcoHealth Club Representative**, University of Guelph: Secretary and Session Organizer, Discussion Facilitator: “*Maintaining urban health in a changing environment & climate*”

ADDITIONAL RELEVANT EXPERIENCE

1. PROFESSIONAL EXPERIENCE

2008–2011 **Graduate Research Assistant**, Work Study, Landscape Architecture – School of Environmental Design and Rural Development, University of Guelph

2007–2008 **Undergraduate Research Assistant**, Agrometeorology Research Group, School of Environmental Sciences (formerly Land Resource Science), University of Guelph

- Field and laboratory research in Agrometeorology
- Skillfully set up, maintained, and operated micrometeorological instrumentation including 3-D sonic anemometers, data logger systems, CO₂ analyzers, heat pulse probes, thermistors, thermocouples, LiCor systems, gas chambers, wires and cables

2005–2006 **Lab Analyst and Wastewater Treatment Facility Operator**, OMI-CH2M HILL International, Forest, ON. Canada

- *Lab Analyst, Plant Operator, Community Water Maintenance, Beach Water Testing*

EXTRACURRICULAR RECOGNITION AND ACTIVITY

1. PARTICIPATION IN COMMITTEES AND BODIES OUTSIDE UNIVERSITY COMMUNITY

- 2017–18** San Diego Run Club, Active Member
- 2013–16** West Texas Cycling Association, Active Member
- 2013** Doping Control Officer Assistant, Lacrosse World Cup, Oshawa, ON, Canada.
International Doping Tests & Management (IDTM).
- 2005–2013** **Track and Field Coach**, athletes aged 15–23
- 2009–13: Speed River Track & Field Coach, Jr. Sprints & Hurdles, Guelph, ON.
 - 2005–10 (Spring months): Assistant Coach, North Lambton SS, Forest, ON
- 2010–2012** **Teaching Assistant Advisory Council, University of Guelph**
- Communications Committee, Contributing author to “TAACTics” Newsletter
 - Conference Volunteer and Session Moderator (2010, 2011 conferences)
- 2010–2011** **Member of University of Guelph Cycling Club Racing Team**
- 2004–2011** **Competitive Track and Field Athlete**
- Member of Speed River Track and Field Club (2006 – 2010)
 - Member of the Guelph Gryphon’s Track and Field and Cross Country Team (2004–2010), 2008 National Track & Field Championship Team
 - Team Canada Athlete (2005), Jr. Pan American Games, 3000m Steeplechase
 - Team Ontario Member (2005), Canada Summer Games, 2000m Steeplechase
- 2007–2009** **Varsity Track and Field and Cross Country Teams Women’s Captain**
- 2006–2008** **Volunteer Youth Coach**, ‘Extreme Team’ and ‘Run and Read’, Guelph, ON

PROFESSIONAL DEVELOPMENT: WORKSHOPS AND SPECIALIZED TRAINING

1. COMMITMENT TO CONTINUED PEDAGOGICAL DEVELOPMENT AND EDUCATIONAL SKILLS

- 2017–2018** **Center for Engaged Teaching Member, UC San Diego**
- 2015** **Humanities Reading Groups Grant, Texas Tech University**
Awarded \$500 grant to convene faculty members across disciplines discussing the book “Flight Behavior” – a book that has significant impact upon culture, society, history, humanity, and/or the planet. Lead: Gary Elbow.
- 2013–2016** **Teaching, Learning, and Professional Development Center workshops,**
Texas Tech University
- Module I of the Faculty Proposal Development Event Series
 - TEACH Fellow Series: “How to Teach Critical Thinking”
 - “Spot-on Speaking: Improving Voice Dexterity in the Classroom”
 - “What the Best Teachers Do: Changes I’ve Made to My Teaching”
 - TEACH Fellow Series: “The Secrets to Our Success” (panel discussion)
 - “I Wondered How Much Students Could Learn in 1 Second”
 - Tenure Academy Participant, 2013, 2015
- 2010–2011** **Teaching Support Services, Graduate Student Workshops & Conferences,**
University of Guelph
Graduate Student Teaching Development Program, *Recognition of Participation* (2009–2011): Attended >12 hours of workshops aimed at developing pedagogical knowledge
- ePortfolio How-To Session (2011)
 - Student mental health and the classroom (2011)
 - Lesson Planning 101 (2011)
 - Grading and Giving Effective Feedback (2011)
 - Developing a Teaching Dossier (2011)

- Graduate Student University Teaching Conference, Univ of Guelph (2010)
- Preparing a Teaching Philosophy Statement (2010)
- An exploration of ethical principles for teaching in higher education (2010)
- Learning Theories: Experiential Learning (2010)

2. CONTINUING EDUCATION COURSES AND WORKSHOPS

- 2015** **Certified Playground Safety Inspector**, National Program for Playground Safety, University of Northern Iowa
- 2013–2014** **Faculty Proposal Development Program**, Texas Tech University
- 2008–2011** **Graduate Student Learning Initiative**, University of Guelph
- Introduction to 3D Analyst (ArcGlobe; ArcScene)
 - SPSS 6: Correlation and Regression
 - SPSS 5: Repeated Measures
 - SPSS 4: Two-way ANOVA and Split Plots
 - Geoprocessing in ArcGIS 10
 - Introduction to Spatial Statistics – ArcGIS 10
 - Introduction to Geostatistics – ArcGIS 9.x
 - Brain Food: Strategies for Completion
 - Brain Food: Data and Statistics for Graduate Research
 - Brain Food: Effective Research-Driven Writing
 - Using Google Earth for Research
 - Academic Presentation Skills for Graduate Students

3. SKILLS EXTENSION

- MATLAB Programming UCSD Extension, 2017
- MacHealth+ Learning Without Boundaries – “Extreme Heat” Module, 2012
- Statistics Society of Ottawa: Workshop on Multi-state models, 2012
- Statistics Society of Ottawa: Principles of Statistical Design, 2012
- LaTeX Typesetting– Utilization for thesis publication and manuscript submissions, with BibTeX citations, 2009–current
- MATLAB Instructional Course, Land Resource Science, Dr. Jon Warland
- Microclimatic instrumentation and datalogger programming
- Involving Human Participants in Research, University of Guelph, 2008
- Workplace Hazards Materials Information Systems (WHMIS), 2007
- National Coaching Certification Program, Level 1 (Theory, Technical, Practical); Track and Field, Level 2 (Theory, Practical, Technical (in progress)).

PUBLIC MEDIA

Radio Interview, KJZZ, [“Worse Air Quality In Phoenix Communities Of Color Could Mean Higher COVID-19 Risk”](#).

Interview, **GIOS Sustainability News**, [“ASU professor works to mitigate impact of extreme heat in Tokyo Olympics”](#), March 2020

Television Interview, **3 Op Reis** (Channel 3 Travel, Netherlands), [“Phoenix”](#), January, 2020

Interview, **New York Times**, [“As Phoenix Heats Up, the Night Comes Alive”](#), July 2019.

National Expert, Climate Matters in the Newsroom, **Climate Central**, [“When Outdoor Sports Become Risky”](#), Aug 2019.

Interview, Online News Outlet, **Boston Globe** [“On summer days, fun playground equipment can turn dangerously hot”](#), July 19, 2019.

Interview by **ASU Now**, [“Keeping Olympic Marathon Spectators Cool”](#), July 9, 2019.

- Interview, Online Publication, "[Next Olympics Marathon Course Has Dangerous "Hot Spots" for Spectators](#)", EOS Earth and Space science News, AGU. January 18, 2019.
- Interview, National Public Radio (NPR), "[Sweating For Science: Walkers Help Find Solutions To Urban Heat](#)", Sept. 30, 2018.
- News Story - [Good Morning America](#), "[How to Keep Kids Safe on Hot Playgrounds](#)", aired July 5, 2018.
- Press Release by ASU Now, UC San Diego Health Sciences, and Taylor and Francis News Room: "[Hot cars can hit deadly temperatures in less than one hour](#)" Covered by 95 news outlets worldwide in 112 stories, including The Today Show news segment, [ABC News](#), [The Washington Post](#), [Forbes](#), [USA Today](#). Full list of news on [Taylor & Francis Altmetric](#), with an Altmetric score of 1,028 (top 5% of all research outputs scored by Altmetric). Media articles written in 11 countries. *Awarded Top 10 Read Physical Science Journal Articles of 2018 in Taylor and Francis journals.*
- Interview, Online, [ClimateWire](#), [Here are 5 climate leaders to watch](#) April 18, 2018.
- Interview, Magazine (print & online), [UCSD Triton Magazine](#), [On the Record - The Heat is On](#) October issue, 2017.
- Interview, Online, [Climate Liability News](#), [Climate Change's Health Impacts Have a Growing Stockpile of Evidence](#), Aug 21, 2017.
- Television Interview, [ABC3340](#) Birmingham, Alabama. [Scorching hot playground equipment can cause burns](#). Aug 2017
- Interview & Video, Online, [Scripps Institution of Oceanography](#), [A Scientists Life, Interview and Video. Green Sports Blog](#), The GSB Interview: [Dr. Jennifer Vanos, Biometeorologist, Working at the Intersection of Green, Sports and Weather](#). Nov 29, 2016.
- [UGEC](#), [Viewpoints: Transforming desert playgrounds into urban oases](#). Jennifer Vanos & Robert Brown. Urbanization and Global Environmental Change, May 2016.
- Television Interview: [KCBD News, Lubbock, Texas](#). [Boiling Hot Playgrounds – TTU Researchers have a Solution](#). June 2016.
- Interview, Television: [KLBK News, Lubbock, Texas](#), [Playgrounds reaching dangerous temps during the summer](#). June 2016.
- Interview, Television: [FOX News, Lubbock, Texas](#) [Researcher calls for more shaded playgrounds](#). June 2016.
- Interview & Video: [Planet Experts at Earth Day Texas: Exclusive Video: Dr. Jenni Vanos Explains How Climate Affects Our Health](#), April 2016,.
- Interview & Video: [Planet Experts at Earth Day Texas: Earth Day Texas: Texting for Climate Action with Dr. Katharine Hayhoe & Jennifer Vanos](#), April 2016.
- Interview, Online, [Yale Climate Communications: Protecting Kids on Playgrounds in a Warming Climate](#). March 2016.
- Interview, Newspaper: [Daily Toreador Climate Science Center collaborates in research](#). Feb 24, 2016.
- Interview, [National Journal](#), [Cool Roofs](#), Dec 4, 2015.
- Online, [Science Daily](#), [Dangerously hot playground temperatures explored by researcher](#). Nov 11, 2016.
- Interview, Newspaper, [Lubbock Avalanche](#), [Texas Tech professor taking part in conference global warming](#). Dec 4, 2015.
- Online Article Interview, [Texas Tech Today](#). [Dangerously hot playground temperatures explored by Texas Tech researcher](#). Nov 11, 2015.
- Interview, Newspaper, [Texas Tribune](#). [Texas on Lonely Side of Battle Over Ozone Pollution](#). October 21, 2014.
- Interview, Online. [AFP \(Paris\) & Yahoo News](#). [Climate change: meteorologists preparing for the worst](#). August 21, 2014.
- Interview, Online - [Skymosity](#), [What is the relationship between weather conditions and people's mood?](#) July 23, 2014.
- Interview, Online - [Wallethub](#), [Cities with the Best and Worst Weather](#). July 16, 2014.

Television Appearance, **Dr. Nandi Show**. “Climate Change and Health”, live interview, multiple segments. <http://askdrnandi.com>. July 19, 2014.

Interview, Online, **weather.com**. [13 Ways Weather Affects Your Health — Without You Knowing](#). June 14, 2014.

Interview, Magazine, **OZY**. IPCC Report & NCA information, weather, health, disease. [Print](#). May 7, 2014.

Interview, Newspaper, **The Daily Toreador**. [Texas ranked No. 1 for amount of greenhouse gas emissions in nation](#). February 20, 2014.

Interview, Newspaper. **Pittsburgh Post-Gazette**. [Major weather swings can be harmful to our physical, mental health](#). January 8, 2014.