Lauren Cook, Ph.D, EIT





EDUCATION

2014 - 2018 Doctor of Philosophy

ADVISORS: CONSTANTINE SAMARAS, JEANNE M. VANBRIESEN Civil & Environmental Engineering Carnegie Mellon University

2011 - 2012 Master of Industrial Engineering

Energy and Economics Program
Institute Français du Petrole (IFP School)

2006 - 2010 Bachelor of Science

Civil & Environmental Eng., Water Resources University of Maryland

EMPLOYMENT HISTORY

CURRENT, SINCE APRIL 2021 (DUEBENDORF, SWITZERLAND)

Dept of Urban Water Management Swiss Federal Instit. of Aquatic Science & Tech. (Eawag) *Group Leader*

On-going **interdisciplinary collaborations** with ecologists, biologists, landscape architects, and social scientists to improve multifunctionality of green stormwater infrastructure

JAN 2019–MAR 2021 (DUEBENDORF, SWITZERLAND)
Dept of Urban Water Management, Eawag

Post-doctoral Fellow

Transdisciplinary collaboration with ETH Zürich and industry specialists to gain expertise for experimental design on solar panels, green roof vegetation, energy balance modelling

AUG 2014–DEC 2018 (PITTSBURGH, USA) Dept of Civil & Environmental Eng., Carnegie Mellon Univ. **Doctoral Researcher**

Visiting researcher at the National Center for Atmospheric Science **Interdisciplinary collaboration** with the RAND corporation

AUG 2012–AUG 2014 (NEWARK, DE, USA) Air Liquide Industrial Gases, Research & Development **Research Associate**

Oral and written communication results of supply chain optimization model to a non-expert and international audience

MAY 2010–AUG 2010 (COLLEGE PARK, MD, USA) Dept of Civil & Environmental Eng., Univ. of Maryland *Water Resources Research Assistant*

Supervisor: Professor Emeritus Richard McCuen

MAIN RESEARCH AREAS

Blue-green stormwater infrastructure; Climate resilience; Urban sustainability; Performance based design; Multifunctionality

AWARDED FUNDING AS PI

2022 SNSF Synergia Funding, 411,095 CHF No. CRSII5 213584

> PAPPUS: Plants and People in Urban Systems Primary Investigator

2021 SNSF Project Funding, 583'864 CHF No. 20002_204790

> BETTER: Blending design and dEcision-making for mulTi-funcTional bluE-green infRastructure Primary Investigator

Blue-Green Biodiversity (BGB), 520'000 CHF
Joint Eawag-WSL Funding Initiative
Blue-Green Stormwater Infrastructure Meets
Biodiversity in the City [Benefit]

2019 Eawag Postdoctoral Fellowship, 2-year funding

Ouantifying the co-benefits of distributed

stormwater and energy infrastructure

Post-doctoral researcher

FELLOWSHIPS & AWARDS

Primary Investigator

2018 **Postdoctoral Fellowship Recipient**Swiss Fed. Instit. Aquatic Science & Tech. (Eawag)

2018 **3rd Place Student Presentation** *Universities Council on Water Resources Conference*

2016 **Best Student Poster Award** 8th Annual Sustainability Conference, Pittsburgh

2016 Outstanding Teaching Assistant Award Carnegie Mellon Civil & Environ. Eng.

2016 - **John and Claire Bertucci Fellowship** 2017 *Carnegie Mellon Civil & Environ. Eng.*

Campaia Mallan Dana Fallayyahin

2014 Carnegie Mellon Deans Fellowship Carnegie Mellon Civil & Environ. Eng

2012 - Tuck Foundation Scholarship

2013 Institute Français du Petrole (IFP School)

COMPUTER & COMMUNICATION SKILLS

| LANGUAGES | English (Native), French (Bilingual), German (Level B2), Spanish (Limited | SOFTWARE | SWMM, AutoCAD, Microstation, ArcGIS, Tableau, HECRAS, Microsoft Office, LaTeX |
|-----------|--|-----------|---|
| | Working Proficiency), Mandarin (Basic) | MODELLING | Hydrologic simulation, Linear |
| COMPUTER | Python, MATLAB, Visual Basic | EXPERTISE | programming, Statistics & uncertainty |
| LANGUAGES | GAMS, LINGO, Command Line | | |

TEACHING ACTIVITIES

Student Supervision

| Doctoral | Students |
|----------|----------|
|----------|----------|

| Student | Department | University | Project Title | Duration |
|--------------------------|--------------------|--------------|--|-----------|
| Yuxin Yin | Env. Engineering | EPFL | Evaluating the influence on microclimate of plant traits and assemblages in urban green space under current and future conditions | |
| Giovan Battista Cavadini | - Env. Engineering | ETH Zurich | Integrating water, heat and biodiversity performance of blue-green infrastructure in current and future Climate | 2022–2026 |
| Kilian Perrelet | Ecology | Univ. Zurich | Using eDNA to reveal aquatic and terrestrial community dynamics in the urban matrix | 2021-2025 |
| Mayra Rodriguez | QUEX Institute | U. Exeter | Spatial interactions between green infrastructure, shallow groundwater, and combined sewers systems influence urban drainage system resilience | |

MSc/BSc Students

| Student | Degree | University | Project Title | Duration |
|--------------------------|-------------|---|--|-------------|
| Ruixin Lu | MSc Thesis | ETH Zurich | Optimizing green roof substrates: A multi-criteria decision analysis approach to select the ideal recycled substrate | 2023 - 2024 |
| Ramon Luedi | BSc Thesis | ETH Zurich | Reuse of ground soil for green roof substrate – investigation of ideal properties for water retention | 2023 - 2024 |
| Marvin Trottmann | MSc Project | ETH Zurich | Evaluating the initial conditions of an experimental setup of photovoltaic green roofs | 2023 |
| Lina Hassoun | MSc Thesis | ETH Zurich | Integrating green and cool roof choices into rooftop solar energy modeling across varied climates and future scenarios | 2023 |
| Ruixin Lu | MSc Project | ETH Zurich | The effect of vegetation type on multifunctional green roof performance | 2023 |
| Taiqi Lian | MSc Thesis | ETH Zurich | Performance of stochastic rainfall generators with hydrologic simulation models | 2022 |
| Bettina Maurer | MSc Thesis | ETH Zurich | Decision analysis of green and cool roofs | 2021-2022 |
| Dawar Muktar Qureshi | MSc Thesis | TU Dresden | Adequacy of urban water Infrastructure under climate change | 2021 - 2022 |
| Giovan Battista Cavadini | MSc Thesis | ETH Zurich | Evaluating potential efficiency gains in rooftop solar panels placed on green roofs | 2019-2020 |
| Ines Malot | MSc Project | ETH Zurich Ecole de Mines de Paris | Does vegetation influence the hydrologic performance of green roofs? | 2020 |

Research Staff

| Name | Role | Project | Funding | Duration |
|------------------|-----------------------------------|-----------------|----------------|-------------|
| Oceane Inglard | Intern | Benefit | SWW Department | 2024 |
| Trang Nguyen | Post-doctoral researcher | BETTER | SNF Project | 2022-2024 |
| Andreas Dietzel | Post-doctoral researcher | Benefit | BGB Initiative | 2021-2024 |
| Noemi Buri | Research Assistant | PAPPUS | SNF Synergia | 2022 - 2024 |
| Louise Gogibu | Intern | Benefit | SWW Department | 2023 |
| Simon Sennhauser | Civil Servant | Benefit | SWW Department | 2023 |
| Ramun Bar | Civil Servant | Living Lab Bern | SWW Department | 2022 |
| Patrick Stettler | Civil Servant/ Research Assistant | Future Rainfall | SWW Department | 2021-2022 |

Teaching Assistant Experience

JAN 2018-MAY 2018 (PITTSBURGH, USA)

Dept of Civil & Environmental Engineering, Carnegie Mellon University

Teaching Assistant, Climate Change Adaptation, Prof. Constantine Samaras 🕊 @csamaras

JAN 2015-2017 (3 SEMESTERS) (PITTSBURGH, USA)

Dept of Civil & Environmental Engineering, Carnegie Mellon University

Teaching Assistant, Water Resource System Engineering, Prof. and President Emeritus Jared Cohon

Presentation Tackling Diverse Student Backgrounds Before, During, and After Class at the 2016 Teaching & Learning Summit, CMU

MAY 2010-DEC 2010 (PITTSBURGH, USA)

Dept of Civil & Environmental Engineering, University of Maryland

Course Assistant, Simulation & Design of Experiments, Prof. Steven Gabriel

Guest Lectures

| University | Department | Course | Hours | Years |
|-----------------|-----------------------------|---|-------|------------|
| Villanova Univ. | Civil & Environmental Eng. | Surface Water Hydrology | 3 | 2023 |
| ETH Zurich | Integrated Building Systems | Indoor Environment, Resources & Safety (066-0420-00L) | 9 | 2020-2022 |
| Villanova Univ. | Civil & Environmental Eng. | Data Analysis for Engineers | 3 | 2021 |
| Marmara Univ. | Civil & Environmental Eng. | Special Topics in Environmental Engineering | I | 2021 |
| Carnegie Mellon | Civil & Environmental Eng. | Intro to Civil & Enviro. Eng. (12-100) | 3 | 2017, 2018 |
| Carnegie Mellon | Civil & Environmental Eng. | Climate Change Adaptation (12-749) | 2 | 2016, 2018 |
| Carnegie Mellon | Civil & Environmental Eng. | Intro to Sustainable Eng. (12-712) | 3 | 2016, 2017 |
| Carnegie Mellon | Information Systems | IT & Environmental Sustainability (67-353) | I | 2017 |
| Carnegie Mellon | Civil & Environmental Eng. | Water Resource Systems Engineering (12-657) | 20 | 2015-2017 |

Summer Schools

AUGUST 2023 (DAVOS, SWITZERLAND)

Blue-Green Summer School

Lecture, Multifunctional blue-green infrastructure in cities

1.5 hour class given to primarily ecology MSc and PhD students, including group work to design a multifunctional blue-green infrastructure site in a city

Training and Leadership

| 2019 | Leadership in Academia Training | 2016 | Bias Busters Training |
|------|---|------|--|
| | Fix the Leaky Pipeline Program, ETH Zürich | | College of Engineering, Carnegie Mellon University |
| 2017 | Future Faculty Program Completion | | |
| | Fherly Center for Teaching Excellence, Carnegie Mellon University | | |

OUTREACH, SERVICE, AND KNOWLEDGE TRANSFER

Committees and Professional Memberships

| 202I- | Advisory Board, Fachplan Regenwasser im Siedlungsraum, Entsorgung + Recycling, Stadt Zurich |
|-----------|--|
| 202I- | Leadership team member, European Infrastructure and Climate Network (ICNet Europe) |
| 2019-2021 | Board Member, Eawag Postdoctoral Association (EPSA), Eawag |
| 2017-2018 | Advisory Board, RAND Corporation Pittsburgh Pilot Study on Resilient Stormwater Infrastructure |
| 2016–2021 | Member, Infrastructure and Climate Network (ICNet) |
| 2016–2019 | Member, American Geophysical Union (AGU) |
| 2016-2018 | Board Member, Environmental & Water Resources Institute (EWRI) Graduate Student Chapter, Carnegie Mellon |
| 2015–2018 | Member, American Society of Civil Engineers (ASCE) |
| 2014-2016 | Civil & Environmental Engineering Department Representative, Graduate Student Association, Carnegie Mellon |
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Organization of Conferences and Workshops

2023-2025 Workshop Organiser, VSA-Wassertage 2025

2017 Conference Organiser, Teaching and Learning Summit

Carnegie Mellon University, Pittsburgh, USA

2015–2016 Co Program Organiser, SUCCEED Summer Prog. for High School Students and Teachers

Carnegie Mellon University, Pittsburgh, USA

Conference Session Chairing

JUNE 2024 Session Co-Chair, Climate change impacts and projections

International Conference on Urban Drainage, Delft, Netherlands

JUNE 2024 Session Convener and Chair, Enhancing Urban Biodiversity through Blue-Green Infrastructure: A Multidisciplinary Approach

World Biodiversity Forum, Davos, Switzerland

Invited Seminars and Presentations

MARCH 2022 Seminar, Adapting urban areas to a more extreme climate using blue-green infrastructure

Colloquium in Climatology, Climate Impact and Remote Sensing, Geographics Institute, University of Bern, Bern, CH

NOVEMBER 2021 Conference, Planning urban drainage systems for climate change

Fachtagung: Regenwasser und Abwasser im Klimawandel, Zurich, CH

OCTOBER 2021 Conference, Adapting to more extreme precipitation in Switzerland: Where, why, how?

AQUA 360: Le Congres Suisse Sur L'eau de la SSIGE et du VSA, Bellinzona, CH

AUGUST 2021 Workshop presentation, Who is responsible for urban heat mitigation through green infrastructure?

European Infrastructure and Climate Network Seminar Series, Online (Link to slides)

MARCH 2021 Seminar, Evaluating the performance of vegetated and reflective roofs to cool cities and increase solar panel yield

Environmental & Water Resources Institute, Carnegie Mellon Graduate Student Chapter, Pittsburgh, PA, USA / Online

JULY 2017 Lunch Seminar, Incorporating NA-CORDEX Output into Intensity Duration Frequency Curves

US National Center for Atmospheric Research (NCAR), Boulder, CO, USA

Public Engagement

MAY 2024 (ZURICH, CH)

Cafe Scientifique

Speaker, "Multifunctional blue-green infrastructure in cities – a paradox of choice?"

Informal presentation open to the general public where anyone can participate in the discussion of current scientific issues Link to website

SEPT 2023 (DUBENDORF, CH)

2023 Eawag InfoTag: Wasserforschung für nachhaltige Entwicklung, EMPA Dubendorf Campus **Speaker**, "Werkzeuge für klimaresiliente Städte"

Spoke to stakeholders in the water sector as part of Eawag's annual outreach to the local community Link to program

MARCH 202I (ZURICH, CH / ONLINE)

2020-21 Graduation Ceremony, Environmental Engineering, ETH University *Keynote Speaker, "Keep calm: This is only your first step"*

Spoke to the 2019 and 2020 graduating classes from ETH Environmental Engineering about my career path, alluding to uncertainties, choices and future steps relevant for young engineers Link to speech

OCT 2015-APR 2016 (CENTRAL VALLEY, PA, USA)

Scientist in the Classroom Pilot, National Center for Science Education Scientist in Environmental Engineering

An initiative to engage high school students in controversial topics like climate change and coal plant air and water pollution

Peer-Review

REVIEW FOR JOURNALS Climatic Change; J. Infrastructure Systems; Sustainable and Resilient Infrastructure; Energy Efficiency;

International J. Climatology; Frontiers in Water; Urban Water Journal; Blue-Green Systems; J. Hydrology Environmental Challenges; J. Sustainable Water Inf.; Building and Environment; Water Resources Research;

Environmental Science and Pollution Research

REVIEW FOR CONFERENCES World Environmental and Water Resources Congress

REVIEW FOR PROPOSALS US-Israel Bi-National Agricultural Research and Development Fund

Peer-Reviewed (21, citations: 479, h-index: 11)

- I. Cavadini, G.B., Rodriguez, M., Nguyen, T., and **L. Cook** (2024). Can blue-green infrastructure counteract the effects of climate change on combined sewer overflows? Study of a swiss catchment. *Environmental Research Letters*. doi:10.1088/1748-9326/ad6462
- 2. Cavadini, G.B., Rodriguez, M., and **L. Cook** (2024). Connecting blue-green infrastructure elements to reduce combined sewer overflows. *J. Environmental Management*. 365, 121465 (15 pp.), doi:10.1016/j.jenvman.2024.121465
- 3. Perrelet, K., Moretti, M., Dietzel, A., Altermatt, F., and **L. Cook** (2024). Engineering blue-green infrastructure for and with biodiversity in cities. *npj Urban Sustainability*. 4(1), 27, doi:10.1038/s42949-024-00163-y
- 4. Dietzel, A., Moretti, M., and L. Cook (2024). Shrinkage-based Bayesian variable selection for species distribution modelling in complex environments: an application to urban biodiversity. *Ecological Informatics*. 81, 102561 (9 pp.), doi:10.1016/j.ecoinf.2024.102561
- 5. **Cook, L.**, Good, K., Moretti, M., Kremer, P., Wadzuk, B., Traver, R., and V. Smith (2024). Towards the intentional multifunctionality of urban green infrastructure: a paradox of choice? *npj Urban Sustainability*. 4(1), 12 (13 pp.), doi:10.1038/s42949-024-00145-0
- 6. Rodriguez, M., Cavadini, G.B. and **L. Cook** (2024). Do baseline assumptions alter the efficacy of green stormwater infrastructure to reduce combined sewer overflows? *Water Research*. 253, 121284 (12 pp.), doi:10.1016/j.watres.2024.121284
- 7. Rodriguez, M., Fu, G., Butler, D., Yuan, Z., and L. Cook (2024). The effect of green infrastructure on resilience performance in combined sewer systems under climate change. *J. Environmental Management.* 353, 120229 (12 pp.), doi:10.1016/j.jenvman.2024.120229
- 8. Liu, H., Kong, F., Yin, H., Cook, L., Huang, J., Lensky, I. M., and T. Tan (2024). Substrate microorganisms can be an ideal tool for improving green roof sustainability. *Urban Forestry and Urban Greening*. 91, 128179 (11 pp.), doi:10.1016/j.ufug.2023.128179
- 9. Maurer, B., Lienert, J., and **L. Cook** (2023). Comparing PV-green and PV-cool roofs to diverse rooftop options using decision analysis. *Building and Environment*. 245, 110922 (15 pp.), doi:10.1016/j.buildenv.2023.110922
- 10. Rodriguez, M., Fu, G., Butler, D., Yuan, Z., and **L. Cook** (2023). Global Resilience Analysis of Combined Sewer Systems Under Continuous Hydrologic Simulation. *J. Environmental Management*. 344, 118607 (11 pp.) doi:10.1016/j.jenvman.2023.118607
- II. Tan, T., Kong, F., Yin, H., Cook, L., Middel, A., and S. Yang (2023) Carbon dioxide reduction from green roofs: A comprehensive review of processes, factors, and quantitative methods. *Renewable and Sustainable Energy Reviews* 182. doi.10.1016/j.rser.2023.113412
- 12. Probst, N., Bach, P.M., Cook, L., Maurer, M., and J. P. Leitao (2022) Blue Green Systems for urban heat mitigation: mechanisms, effectiveness and research directions. *Blue-Green Systems* 4 (2): 348–376. doi.10.2166/bgs.2022.028
- 13. Cavadini, G.B. and **L. Cook** (2021) Green and cool roof choices integrated into rooftop solar energy modelling. *Applied Energy* 296. doi.10.1016/j.apenergy.2021.117082
- 14. **Cook, L.** and T. Larsen (2020) Towards a performance-based approach for multifunctional green roofs: An interdisciplinary review. *Building and Environment* 107489. doi.10.1016/j.buildenv.2020.107489
- 15. **Cook, L.,** McGinnis, S., and C. Samaras (2020) The Effect of Modelling Choices on Updating Intensity Duration Frequency Curves and Stormwater Infrastructure Designs for Climate Change. *Climatic Change* doi.10.1007/s10584-019-02649-6
- 16. **Cook, L.,** Samaras, C., and J.M. VanBriesen (2019) Using Rainfall Measures to Evaluate Hydrologic Performance of Green Infrastructure Systems under Climate Change. *Sustainable and Resilient Infrastructure* doi.10.1080/23789689.2019.1681819
- 17. **Cook, L.**, Samaras, C., and J.M. VanBriesen (2018) A Mathematical Model to Plan for Long-Term Effects of Water Conservation Choices on Dry Weather Wastewater Flows and Concentrations. *J. Environmental Management.* 206C, 684 697. doi.10.1016/j.jenvman.2017.10.013
- 18. Cook, L., Anderson, C.J., and C. Samaras (2017) A Framework for Incorporating Downscaled Climate Output into Existing Engineering Methods: Application to Precipitation Frequency Curves. *J. Infrastructure Systems*. 23 (4). doi.10.1061/(ASCE) IS.1943-555X.0000382
- 19. Fischbach, J.R., Siler-Evans, K., Wilson, M., Tierney, D., **Cook, L.**, and L. May (2017) Resilient Stormwater Management in Allegheny County and the Pittsburgh Metropolitan Region: A Pilot Study. Santa Monica, Calif.: RAND Corporation, RR-1673-MCF, 2017
- 20. Marchetti, P.A., Gupta, V., Grossmann, I.E., **Cook, L.**, Valton, P.M., Singh, T., Li, T., and J. Andre (2014) Simultaneous Production and Distribution of Industrial Gas Supply-chains. *Journal Computers & Chemical Engineering*. 69, 39-58. doi.10.1016/j.compchemeng.2014.06.010
- 21. Cook, L. and R. McCuen (2013). The Hydrologic Response of Solar Farms. *Journal Hydrologic Engineering*. 18(5), 536-541. doi.10.1061/(ASCE)HE.1943-5584.0000530

Swiss Trade Journals

- 22. Perrelet, K., Moretti, M., Dietzel, A., Maurer, M. and Cook, L. (2023) Engineering blue-green infrastructure for and with biodiversity *Hotspot*
- 23. Smith, V., **Cook, L.**, and S. Oppliger (2023) Umsetzung blau-grüner Infrastruktur Weltweit. Was kann die Schweiz daraus lernen? *Aqua und Gas* 103(9) 16-24 link: Internal Eawag Repository
- 24. Schnorf, H., Bergamini, A., **Cook, L.**, and M. Moretti (2022) Revitalisierte Bäche leisten einen Beitrag zur städtischen Pflanzenvielfalt. Les ruisseaux revitalisés favorisent la diversité spécifique de la flore urbaine. *Natur und Landschaft. Nature et Paysage* 35-39. link: Internal Eawag Repository

Conference Proceedings

25. Olmstead, S., O'Connor, A., Samaras, C., **Cook, L.**, and B. Martinez-Pastor (2017) A Climate Engineering Assessment for Transportation Assets - Incorporating Probabilistic Analysis into Extreme Weather and Climate Change Design Engineering. Transportation Research Board 2017 Annual Meeting.

Under Review

- Hassoun, L. and L. Cook (In Revision). Global analysis of combined photovoltaic green and cool roofs under climate change. *Advanced Sustainable Systems*.
- 2. Lian, T., Rieckermann, J., Kim, D.K., and **L. Cook** (Under Review). Context-Specific Selection of Poisson Cluster Rainfall Models for Accurate Urban Hydrological Simulations. *Journal of Hydrology*.
- 3. Nguyen, T., Velasquez, P., Dietzel, A., and **L. Cook** (Under Review). Bias Correction of Precipitation from Convection-Permitting Models at the Point Scale: A Case Study in Switzerland. *Climatic Change*.

In Preparation

- 4. Dietzel, A., Moretti, M., Perrelet, K., and **L. Cook** (In Prep). Urbanisation exacerbates climatic risk to urban biodiversity. In prep for *Nature Climate Change*.
- 5. **Cook, L.,** Ort, C. and T. Larsen (In Prep). Experimental findings of bi-facial solar panels and green roofs? In prep for *Building* and Environment.

COMMUNICATIONS AT INTERNATIONAL CONFERENCES

- I. Dietzel, A.*, Moretti, M., Hersperger, A., and **L. Cook** (2024). *Oral: Urban biodiversity trends under scenarios of climate change and urbanisation* World Biodiversity Forum 2024, Davos Congress Center, Davos, CH, June 20, 2022.
- 2. Perrelet, K.*, Cook, L., Altermatt, F., and M. Moretti (2024). *Oral: Unveiling urban aquatic-terrestrial arthropod community structures with EDNA* World Biodiversity Forum 2024, Davos Congress Center, Davos, CH, June 20, 2022.
- 3. Maurer, B., Lienert, J., and **L. Cook.*** (2024). *Poster: Considering a range of criteria for sustainable roofs: solar panels, green roofs, or both?* World Biodiversity Forum 2024, Davos Congress Center, Davos, CH, June 19, 2022.
- 4. **Cook, L.***, Good, K., Moretti, M., Kremer, P., Wadzuk, B., Traver, R., and V. Smith (2024). *Oral: Designing green infrastructure for multifunctionality*. 16th International Conference on Urban Drainage 2024, TU Delft, Delft, Netherlands, June 11, 2024.
- 5. Nguyen, T.* and **L. Cook** (2023). *Oral: Downscaling of convection-permitting simulated precipitation for climate change adaptation.* EMS Annual Meeting 2023, University of Economics Bratislava, Bratislava, Slovakia, Sept. 7, 2023.
- 6. Rodriguez, M*., Cavadini, G.B. and **L. Cook** (2023). *Poster: The effect of model structure and assumptions on combined sewer overflows and green stormwater infrastructure.* NovaTech 2023, ISAR A, Lyon, France, June 6, 2023.
- 7. Cavadini, G.B.* and **L. Cook** (2023). *Oral: Blue Green Infrastructure in a future climate: is the reduction of combined sewer overflow possible?*. NovaTech 2023, ISARA, Lyon, France, June 5, 2023.
- 8. Cavadini, G.B.* and **L. Cook** (2023). *Oral: Blue Green Infrastructure in a future climate: can we reduce combined sewer overflows?*. European Geosciences Union 2023, Austria Center, Vienna, Austria, April 26, 2023.
- 9. Cook, L.*, Good, K., Moretti, M., Kremer, P., Wadzuk, B., Traver, R., and V. Smith (2023). *Poster: Towards the intentional, multifunctional design of green infrastructure*. European Geosciences Union 2023, Austria Center, Vienna, Austria, April 25, 2023.

- 10. Perrelet, K.*, Moretti, M., and **L. Cook** (2022). *Oral: Engineering blue-green systems to improve biodiversity: A perspective and review.* World Biodiversity Forum 2022, Davos Congress Center, Davos, CH, June 27, 2022.
- II. Dietzel, A.*, Moretti, M., and L. Cook (2022). Oral: Quantifying the ecological performance of blue-green infrastructure. World Biodiversity Forum 2022, Davos Congress Center, Davos, CH, June 30, 2022.
- 12. Cavadini, G.B. and **L. Cook*** (2021). *Oral: Comparing rooftop choices for cooler cities and more electricity*. American Geophysical Union 2021 Fall Meeting, New Orleans, LA, USA, December 14, 2021.
- 13. **Cook, L.*** and T. Larsen (2021). *Oral: Performance based design of multifunctional green roofs.* International Conference on Urban Drainage (ICUD) 2021, Online, October 25, 2021.
- 14. Cavadini, G.B.* and **L. Cook** (2021). *Oral: Integrating sustainable rooftop choices into solar energy planning to quantify potential increase in photovoltaic yield.* CISBAT 2021, Lausanne, CH, September 8, 2021.
- 15. **Cook, L.*** VanBriesen, J.M., and C. Samaras (2020) *Poster: An Early Warning to Adapt Green Infrastructure.* 9th International Conference on Sewer Processes and Networks (SPN9), Musikkens Hus, Aalborg, DK, August 27, 2019.
- 16. Lopez-Cantu, T.*, **Cook, L.**, and C. Samaras (2019). *Oral: Robust Decision Making for Resilience*. American Geophysical Union 2019 Fall Meeting, Moscone Center, San Francisco, CA, USA, December 13, 2019.
- 17. Cook, L., VanBriesen, J.*, and C. Samaras (2019) Oral: Using Rainfall Measures to Evaluate Hydrologic Performance of Green Infrastructure Systems under Climate Change. American Geophysical Union 2019 Fall Meeting, Moscone Center, San Francisco, CA, USA, December 13, 2019.
- 18. Cook, L.* and T. Larsen (2019). *Oral/Poster: Multi-functional Green Roofs*. 2019 Eawag Symposium, Forum Chreisbach, Dubendorf, CH, September 12, 2019.
- 19. Cook, L.*, McGinnis, S., and C. Samaras (2018). *Oral: The Effect of Modelling Choices on IDF Curves and Stormwater Infr.*. University Council on Water Resources (UCOWR) 2018 Conference, Pittsburgh Marriott City Center, Pittsburgh, PA, USA, June 26, 2018.
- 20. Cook, L.*, Weinburg, R., Goradia, A., and C. Kolb (2018). Oral: Higher Highs, Lower Lows: Increased Variability within the Ohio River Basin. University Council on Water Resources (UCOWR) 2018 Conference, Pittsburgh Marriott City Center, Pittsburgh, PA, USA, June 26, 2018.
- 21. Cook, L.*, McGinnis, S., and C. Samaras (2018). Oral: Uncertainty in Adjustment Methods for Climate Updated Intensity-Duration-Frequency Curves. American Geophysical Union 2017 Fall Meeting, Ernest N. Moral Convention Center, New Orleans, LA, USA, Dec 12, 2017.
- 22. **Cook, L.***, Anderson, C.J., Samaras, C. (2017). *Oral: A Framework for Climate-Resilient Designs: Translating Extreme Precipitation Data from Climate Change Projections into Engineering Applications.* ASCE Congress on Technical Advancement 2017, Duluth Entertainment Convention Center, Duluth, MN, USA, Sep 11, 2017.
- 23. Cook, L.*, Anderson, C.J., Samaras, C. (2017). Oral: A Framework for Incorporating Downscaled Climate Output into Existing Engineering Methods: Application to Precipitation Frequency Curves. ISIE-ISST, University of Chicago, Chicago, IL, USA, Jun 28, 2017.
- 24. **Cook, L.***, Anderson, C.J., Samaras, C. (2017). *Oral: A Framework for Incorporating Downscaled Climate Output into Existing Engineering Methods: Application to Precipitation Frequency Curves.* Engineering Sustainability 2017, David L. Lawrence Convention Center, Pittsburgh, PA, USA, Apr 9, 2017.
- 25. Cook, L.*, Anderson, C.J., Samaras, C. (2016). Oral: Resilient and Reliable Infrastructure in an Uncertain Future Climate: A Framework for Updating Existing Engineering Applications with Climate Model Output. American Geophysical Union 2016 Fall Meeting, Moscone Center, San Fransisco, CA, USA, Dec 13, 2016.
- 26. Cook, L.*, Anderson, C.J., Samaras, C. (2016). Oral: Translating Extreme Precipitation Data from Climate Change Projections into Resilient Engineering Applications. 4th Annual Decision Making Under Deep Uncertainty (DMDU) Workshop, The World Bank, Washington, D.C., USA, Nov 16, 2016.

^{*}indicates presenter