

### **JULIA ANN KRIEGH PhD AIA**



DESIGN As principal and founder of KRIEGH ARCHITECTURE STUDIOS | Design + Research, Julie Kriegh brings her clients' project goals to fruition while adhering to the values of sustainability, high-performance construction strategies, exceptional craft and attention to detail. These principles apply to custom single-family, multi-family, and residential community developments, as well as religious, medical, educational, and municipal facilities. She offers collaborative, teamoriented architectural services that result in custom designs that are aligned with her clients' project needs. As a passive house designer, Julie uses the PHPP energy modeling software to design and consult on net-positive energy buildings. As a researcher, Dr. Kriegh is currently engaged in research and consulting on low-embodied carbon building materials. KRIEGH ARCHITECTURE STUDIOS | Design + Research is a full service architecture firm offering design, permitting, construction documentation, energy modeling, construction observation, and

materials research. KRIEGH ARCHITECTURE STUDIOS' designs have won numerous awards including the **AARP** Livable Communities Design Award for the Vineyard Lane Community development in Bainbridge, WA.

PHILOSOPHY Julie and the KRIEGH ARCHITECTURE STUDIOS' team believe that the design of the physical environment and people's relationship with that environment are important factors related to energy conservation and climate action. In this regard, they understand that designing for the mutual benefit of people and planet is key. Their purpose and passion is to innovate, design for the future and create architecture that is—elegant, efficient, and environmentally responsive.

**RESEARCH** Dr. Kriegh is currently involved with several research initiatives at the University of Washington, Seattle. Working with a team of university researchers and industry partners on sustainability issues, Dr. Kriegh is focused on research investigating building and occupant performance on energy use and the use of IoT in residential settings. As a research scientist, she belongs to a consortium between UW, UA, Microsoft and Google researching the future of sustainable Data Centers. In addition, Dr. Kriegh is working with the UW Carbon Leadership Forum investigating carbon-storing materials for light industrial buildings of the future to advance Microsoft's goal to be carbon neutral by 2030 and carbon negative by 2050.

### **GRANT PROPOSALS**

NSF Sustainable Regional Systems Network: Simonen, Kriegh, Lee, Srubar, Magwood

NSF IoT Cyber Security: Beyer, Osburn, Kriegh

Finalist for 2030 Levers for Change: Carbon Leadership Forum team

Katerra: Understanding the relationship between carbon-storing materials and pro-environmental behavior. Kriegh and Sanders.

**TEACHING** The College of the Built Environments awarded Dr. Kriegh and two of her colleagues the 2020 Dean's Interdisciplinary Graduate Design Studio. This class is a year-long collaboration between UPenn, UA, UW, and Google to research and develop a Living Building Data Center and a 100% renewable community. Julie co-taught the 2018 Dean's Interdisciplinary Graduate Design Studio focused on mid-century modern housing, carbon lifecycle assessment, energy efficiency and eco-districts.

**PUBLICATION** Julie received a PhD from the University of Washington in 2018, where her research focused on high-performance buildings, building user behavior and environmental psychology. Her dissertation, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place Meaning, and High-performance Design, received the Environmental Research and Design Association's 2019 Certificate of Research Excellence Award and two American Institute of Architects Upjohn Research Initiative Grants. A synopsis is published on the EDRA CORE 2019 website. In 2020, the American Council for an Energy- Efficient Economy (ACEEE) will publish her paper on high-performance buildings and behavior.

**CONSULTING** Using our design and research knowledge we consult with organizations like the University of Washington Carbon Leadership Forum and with architectural and engineering firms. Dr. Kriegh is consulting on Passive House projects and materials that have low-embodied carbon. She is currently consulting in Mount Vernon on a municipal library project in this regard.



#### **EDUCATION**

- University of Washington, Seattle, PhD, Interdisciplinary Built Environments Program, Sustainability Track
- University of Washington, Seattle, Master of Architecture
- Duke University, Bachelor of Arts, Cum Laude
- Duke University, Marine Laboratory Coastal Ecology Studies

### **LICENSES and ACCREDITATIONS**

- Architect, State of Washington, 5999
- Certified International Passive House Designer | LEED Accredited Professional

## **MEMBERSHIPS | SERVICE**

- City of Bainbridge Island Green Building Task Force, 2020-2021
- City of Bainbridge Island Emergency Management Response Volunteer, 2021-present
- UW College of the Built Environments Strategic Plan, Climate Action Task Group, 2020-2021
- American Institute of Architects (AIA) Seattle and National Chapters, AIA Women in Design, current
- Passive House Northwest (PHNW) Board Member and Chair of Education Committee 2020-present
- Environmental Design and Research Association (EDRA) member
- The Society for Personality and Social Psychology (SPSP), 2020-2021 Conference Sustainability Committee
- Leadership Tomorrow, City of Seattle, class of 2000
- Urban Land Institute (ULI) member, past
- City of Bainbridge Island Planning Commissioner, two term commissioner, past
- Hyla Middle School, Board Trustee and Future Needs Strategic Plan Committee Chair, past

#### **PROFESSIONAL EXPERIENCE**

- Kriegh Architecture Studios | Design + Research, Seattle/Bainbridge, WA,
  - o Founder and owner, principal, architect, director of sustainable design + research, 2000-present
    - prefabricated, passive house, custom residential projects, multi-family development, custom residential, community facilities, master planning, research on energy use, and sustainable carbon storing data centers
- University of Washington College of Built Environments, Seattle, WA
  - o Dept. Architecture, lecturer, part-time instruction, 2020-present
  - o Dept. Architecture, Carbon Leadership Forum, research scientist, 2020-present
  - o Dept. Construction Management, research scientist, 2019-present
  - o Dept. Urban Design & Planning, affiliate instructor, 2017-2019
  - o Dept. of Landscape Architecture, Green Futures Lab, project manager, 2013-2016
- Weinstein A|U, Seattle, WA, associate architect, 1991-2000
  - o Project architect for: Temple De Hirsch East Side Sanctuary, School, Social Hall; SeaTac International Airport Departure Lobby renovations; New Holly Park Hope VI Housing; various single family residential projects
- Miller | Hull Partnership, Seattle, WA, project manager, 1989-1991
  - o Project design team/manager for: Port Townsend Community Center renovation
- NBBJ, Seattle, WA, technical team, 1986-1989
  - o Project technical team member for: Children's Hospital, San Diego, CA; Everett General Hospital MOB (now Providence); Malmstrom Airforce Base Health Clinic



### UNIVERISTY OF WASHINGTON RECENT TEACHING | REASEARCH EXPERIENCE

- 2020-2021 Affiliate Instructor, UW Dean's Interdisciplinary Studio, BE 405/505 co-teaching an interdisciplinary studio-Designing a Living Building Data Center and 100% Renewable Energy Community (**Kriegh**, Lee, & Whittington).
- 2020-2021 UW Research Scientist- Microsoft Carbon Storing Data Centers, through Carbon Leadership Forum, Department of Architecture, Director Kate Simonen chair Department of Architecture.
- Selected for 2020-2021 UW Research Scientist- Passive House Fundamentals leading an interdisciplinary class for professional architects, construction managers, and engineers through CERC, Department of Construction Management.
- 2019 Invited lecturer- Arch 588/592 Research Methods Professors Kate Simonen and Ann Huppert, lecture topic- Case Study Research Methods, CBE, University of Washington.
- 2018-2019 UW Affiliate Instructor, UW Dean's Interdisciplinary Studio, BE 405/505 co-teaching an interdisciplinary studio- Creating the 21<sup>st</sup> Century Neighborhood: Mid-century Modern to High Performance Buildings (Kriegh, Sterrett, & Simonen).
- 2015, 2018, 2019 Invited lecturer Human Experience Place, L ARCH 361/561, Professor Lynne Manzo, lecture topic-Encouraging Pro-environmental Behavior, CBE, University of Washington.
- 2015-2016 UW Green Futures Lab co-leaders **Kriegh** and Rottle for the Molbak's Garden and Home Garden Center. A detailed report and analysis records the background research, community process and design recommendations in Woodinville Vision 2035 | Town Center | Volumes 1, 2 and 3.
- 2015 Autumn University of Washington Department of Landscape Architecture co-instructors **Kriegh**, Rottle, & Heland for an interdisciplinary seminar: "Collaborative Planning and Design Seminar," Larch 498 C/598L, exploring methods in public participation for neighborhood, and urban design projects.
- 2013-2014 UW Center for Integrated Design Research project contracted by Burpee, PI, UW Green SEED Grant, UW Office of Sustainability, Building User Audit: Capturing Behavior, Energy, and Culture.
- 2013 UW Green Futures Lab Co-leader, **Kriegh** & Rottle instructing graduate students working with the City of Burlington on an urban planning team producing "Burlington at the Crossroads, Recommendations Report" creating alternatives with the Urban Land Institute for the downtown area of Burlington.
- 2013 UW Green Futures Lab Special Projects contracted by Urban Planning Professor Sterrett and Landscape Architecture Professor Rottle to create recommendations for a Form Based Code Standard for the City of Edmonds Westlake Special District through the Green Futures Lab.
- 2012-2013 University of Washington Research Assistant contracted by Professors Manzo, Ph.D. and Garshick Kleit, Ph.D. to lead field research, serve as a member of the statistical analysis team, and as a co-author for the final report: HOPE VI Redevelopment of Westpark Evaluation Report: Year IV.



- 2012 University of Washington Teaching Assistant, BE 498 contracted by the Department of Architecture Joel Loveland to facilitate instruction by the International Passive House Academy.
- 2010-2011 University of Washington Special Projects contracted by Urban Planner Sterrett to co-create sustainable design alternatives for the Bainbridge Island Land Trust Hill Top property, Bainbridge, WA.

# RECENT SELECTED SUSTAINABILITY PROJECTS FOR KRIEGH ARCHITECTURE STUDIOS | DESIGN + RESEARCH

- Cove Road Cottage Passive, PASSIVE HOUSE, deep green retrofit, in design, Bellingham, WA
- Gig Harbor Residence, PASSIVE HOUSE PREFABRICATION, under construction, Gig Harbor, WA
- American Samoan United Church of Christ Social Hall, PASSIVE HOUSE feasibility study, Burien, WA
- Magnolia Residence Cottage Passive, PASSIVE HOUSE technology, deep green retrofit, Seattle, WA
- The CORK House on Olympus Beach, Passive House technology remodel, Bainbridge Island, WA
- Point Monroe CARRIAGE HOUSE, Floodplain Resilience, Passive House technology, new construction, Bainbridge, WA
- Sunny Hill Circle Residence with ground source heat pump and green roof technology, Bainbridge, WA
- Vineyard Lane Development AARP Award Winning Sustainable 45 unit, Multi-Family, with 5-Star Built Green
- Yonder- Community Retreat Center & Guest House, Bainbridge Island, WA
- Master Planning and Community Facilitation Projects:
  - o City of Woodinville 2035 Town Center Visioning Design (Molbak's Garden Center and UW Green Futures Lab)
  - o City of Burlington Town Center Recommendations (ULI and UW Green Futures Lab)
  - o City of Edmonds Special District Form Based Code (Jill Sterrett and UW Green Futures Lab)
  - o Community Land Trust Master Planning, MEND, Wenatchee, WA
  - o Community Land Trust Master Planning, FERNCLIFF VILLAGE, Bainbridge, WA
  - o City of Bainbridge, Winslow Tomorrow Town Center Visioning Project, Bainbridge, WA

## PROJECTS, AWARDS AND RECOGNITION FOR DESIGN FOR KRIEGH ARCHITECTURE STUDIOS | DESIGN + RESEARCH

- Vineyard Lane Multi-Family Development AARP Livable Communities Design Award
- Ferncliff Community Land Trust Affordable Housing- AIA recognition: What Makes it Green
- Vineyard Lane Multi-Family Development AIA recognition: What Makes it Green
- Northwest Home Magazine- featured project "Yonder"- Community Retreat Center
- Tour of Architects- featured project "Yonder" Community Retreat Center

# PROJECTS, AWARDS AND RECOGNITION FOR DESIGN with Seattle Firms NBBJ, Miller Hull, Weinstein A | U

- Temple de Hirsch Sinai- Merit Award in Faith & Form Magazine's Annual Award
- Temple de Hirsch Sinai- Merit Award for Excellence in Masonry Design, Masonry Institute of WA
- NewHolly Hope VI, Redevelopment- AIA Bronze Design Award
- NewHolly Hope VI, Redevelopment WA Council AIA Civic Design award of Merit
- Seattle Tacoma International Airport IES Seattle Chapter Award SeaTac Lighting Master Plan
- Seattle, Technogym USA Office and Showroom, Washington
- Port Townsend Community Center, Washington
- University of Washington Olympic Natural Resource Center- Seattle AIA Award of Merit
- Malmstrom Air Force Base Health Clinic, Montana



- Children's Hospital, San Diego, California
- Everett General Hospital Medical Office Building and Parking Garage, Washington
- Port Orchard, Group Health Cooperative Clinic, Washington

### **RESEARCH GRANTS and AWARDS ON SUSTAINABILITY**

- 2021 Team Finalist- 2030 Lever for Change with the UW Carbon Leadership Forum proposal: Building with Biomass
- 2019 EDRA Certificate of Research Excellence Award. Life Building Exchange: Investigating the Intersection of Pro-Environmental Behavior, Place Meaning, and High-Performance Design
- 2015 Precourt Fellow: Offered by Stanford's Precourt Energy Efficiency Center through the generosity of the Alfred P. Sloan Foundation, Behavior, Energy, Climate Change Conference (BECC), Sacramento, CA
- University of Washington Office of Sustainability | Campus Sustainability Fund, Encouraging Pro-Environmental Behavior Lecture by Dr. Linda Steg, May 2015 (coordinator, funded)
- 2014 UW SEED Research Grant on Sustainable Energy- Building User Audit Procedures
- 2014- 2015 The AIA Upjohn Scholars Initiative Research Grant Principal Investigator
- 2014- 2015 The Puget Sound Energy Survey Research Grant Principal Investigator

### **INTERVIEWS**

- Architecture Magazine: The Behaviorist: How buildings are used is as important as why. By William Richards for AIA Voices. http://www.architectmagazine.com/search?q=Julie+Kriegh, June 19, 2015
- Architecture Magazine: Flexing Forms: A focus on a user's agency in altering and shaping his or her environment defines the 2014 AIA Upjohn Research Initiative grant recipients, by Kim A. O'Connell for AIA Feature. http://www.architectmagazine.com/aia-architect/aiafeature/flexing-forms o, June 15, 2015

### **BOOK CHAPTERS | BLIND PEER REVIEWED PAPERS**

- LIFEBUILDINGX, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place Meaning, and High-performance Design (2020). American Council for an Energy-Efficient Economy (ACEEE) Summer Study, Pacific Grove, CA, Aug. 2020
- LIFEBUILDINGX, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place Meaning, and High-performance Design. 2019 EDRA Certificate of Research Excellence Award, on-line CORE publication <a href="https://www.edra.org/page/2019">https://www.edra.org/page/2019</a> core recipients
- On the Road to Smart Green Growth, authors **Julie Kriegh**, Nancy Rottle, Hillary Pritchett, and Cayce James. <u>Planning the Pacific Northwest</u>, Eds. Jill Sterrett, et al, APA Planners Press, Washington DC, 2015-2016
- Heather Burpee, **Julie Kriegh**, Aliresa Borhani, Carrie Sturts Dossick, Gina Neff, Building User Audit: Capturing Behavior, Energy & Culture, American Council for an Energy-Efficient Economy (ACEEE) Summer Study, Pacific Grove, CA, Aug. 2016
- Michael Gilbride, Joel Loveland, Heather Burpee, **Julie Kriegh**, and Chris Meek, Occupant-Behavior-Driven Energy Savings at the Bullitt Center in Seattle, WA," ACEEE Summer Study, Pacific Grove, CA, Aug. 2016



#### **REPORTS and BOOKLETS**

- Grow a Greener Data Center: sponsored by Google with the UW College of Built Environments (**Kriegh**, Lee, Whittington, Award, Aviv, Ida, June 2021)
- Carbon Storing Materials: sponsored by Microsoft with the Carbon Leadership Forum, UW College of Built Environments (Kriegh, Magwood, Srubar, Feb. 2021)
- Woodinville Vision 2035 | Town Center | Volumes 1, 2 and 3: Green Futures Lab UW, (Rottle, Kriegh, Aug. 2016)
- Building User Audit: Capturing Behavior, Energy, and Culture: Center for Integrated Design UW (Heather Burpee, Julie Kriegh, Aliresa Borhani, Carrie Sturts Dossick, Gina Neff, 2015)
- HOPE VI Redevelopment of Westpark Evaluation: Year IV. (Manzo, Kleit, Dugdal, Kriegh, Foster, 2013)
- Evergreen Sustainable Development Standards Website-Ferncliff CLT Eco-Charrette Report, (Kriegh, 2009–2010)
- Burlington at the Crossroads, Final Recommendations: Green Futures Lab UW (Rottle, Kriegh, et. al, Aug. 2013)
- City of Edmonds REVISIONING Westgate: A District Plan, Form-Based Code: Green Futures Lab UW (Sterrett, Rottle, **Kriegh**, et. al 2012)
- Bainbridge Island Land Trust Hilltop Property Master Planning, UW, Urban Planning (Sterrett, Kriegh, et. al, 2010)

## **RECENT PRESENTATIONS | INVITED TALKS**

- Presenter- Carbon Storing Materials, Carbon Leadership Forum, UW College of Built Environments (May & June 2021)
- Presenter- Current Research: Passive House Prefab, Carbon-Storing Materials, Transformative Materials, and Beyond Reciprocity | A Longhouse (2021). UW College of Built Environments, All College Meeting.
- Presenter- LIFEBUILDINGX, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place
  Meaning, and High-performance Design (2020). American Council for an Energy-Efficient Economy (ACEEE) Summer Study,
  Pacific Grove, CA, Aug. 2020
- Accepted Presentation- Green by Design. Passive House Northwest regional conference, Seattle, WA, March 2020
- LUCID Technologies Invited Panel Presenter- with Kristin Parineh (R&DE Sustainability, Stanford University), Kyle
   McDermott (CSF, University of Washington) and Sarah Diegnan (Lucid) The Role of Occupants in Behavior Change for
   Energy, Association for the Advancement of Sustainability in Higher Education (AASHE), Spokane, WA, October 2019
- Presenter- LIFEBUILDINGX, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place
   Meaning, and High-performance Design, Bainbridge Island Public Library Presentation, Bainbridge, WA, October 2019



- Accepted Presentation- LIFEBUILDINGX, Life Building Exchange: Investigating the Intersection of Pro-environmental Behavior, Place Meaning, and High-performance Design, International Conference Environmental Psychology, Southampton, England, September 2019
- Presenter- with Christopher Meek, Director, UW Center for Integrated Design, Occupant-Behavior-Driven Energy Savings at the Bullitt Center in Seattle, WA; American Institute of Architects, Women in Design, March 2019
- Presenter- LifeBuildingX | Modeling Possibility: Investigating the Intersections among Pro-environmental Behavior, Place
   Meaning, and High-performance Design. Society for Personality & Social Psychology (SPSP), Portland, OR, February 2019
- Invited Keynote presenter- with University of Washington College of Built Environments Graduate Students, Passive House Northwest (PHNW) Spring Conference, Portland, OR, February 2019
- Invited presenter- with Christopher Meek, Director, UW Center for Integrated Design, Occupant-Behavior-Driven Energy Savings at the Bullitt Center in Seattle, WA; American Council for an Energy-Efficient Economy (ACEEE) Summer Study, Pacific Grove, CA, August 2016
- Invited presenter- Building User Audit: Capturing Behavior, Energy, and Culture; American Council for an Energy-Efficient Economy (ACEEE) Summer Study, Pacific Grove, CA, August 2016
- Panel presenter- with Mike Fowler and Russ Weiser, Agile + Elegant + Passive House; Passive House Northwest (PHNW)
   Spring Conference, Seattle, WA, March 2015, and Alistair Jackson and Pat Park National Living Future Conference (ILFI),
   Portland, OR, May 2014
- Presenter- Building User Audit: Capturing Behavior, Energy, and Culture; Behavior, Energy, Climate Change Conference (BECC), Sacramento, CA, October 2015
- Panel presenter- with Lynne Manzo, Ph.D. and Linda Steg, Ph.D., Encouraging Pro-environmental Behavior: PEP, National Environmental Design Research Association (EDRA46) Conference, LA, CA, May 2015
- Invited presenter- People + Energy + Place; University of Groningen Department of Environmental Psychology research lab, Groningen, The Netherlands, August 2015