

#### Clotilde Pierson, Ph.D.

Assistant Professor in Architectural Engineering School of Civil and Construction Engineering Oregon State University Owen 305, Corvallis, OR 97331

e: clotilde.pierson@oregonstate.edu

**p:** +1 (541) 737-5976

w: https://clotildepierson.com/

3/31/2022

# Ph.D. Position at the irradiantlab ipRGC-influenced light responses of building occupants from daylight

The **irradiant** (Laboratory of Integrated Research on Daylighting) led by Dr. Clotilde Pierson has an open position for a Ph.D. candidate starting on-site in Corvallis (OR) in Fall 2022.

The mission of the laboratory is to advance knowledge of daylighting in buildings to enhance people's health, well-being, and performance, while minimizing energy consumption. We rely on insights from different disciplines to further understand how our natural and built habitat affects our indoor visual environment, and how, in turn, our indoor visual environment affects us, the building occupants. Our long-term goal is to translate fundamental knowledge about human responses to light and the need to reduce energy consumption into strategies for the development of a more sustainable built environment and innovative daylighting solutions.

## Research Project

Besides enabling us to see, light induces behavioral and physiological responses – the so-called ipRGC-influenced light (IIL) responses – in humans. These responses include but are not limited to the regulation of our body internal clock (circadian rhythm) and the alteration of our alertness level. To optimize the design of our built environment in relation to these responses, appropriate recommendations and guidelines need to be put forward. Because research on IIL responses is still in its infancy, most of the knowledge of these responses is based on studies conducted at night under controlled electric lighting conditions. The goal of this project is to study the IIL responses of building occupants under realistic daylight conditions. The main approach for this project is expected to be through user studies.

### The Candidate

#### Required:

- Bachelors or Masters (preferred) degree in Architectural Engineering, Architecture (with a technical focus), or other STEM majors
- Knowledge or background in one or more of the following fields: (day)lighting and photometry; biology or neuroscience; psychology; physics, mathematics, or statistics
- Enthusiasm for multidisciplinary research
- Strong writing and communication skills

### Preferred:

- Experience in laboratory or field studies with human subjects
- Experience in IEQ instrumentation and sensing
- Experience with setting up local and cloud-based data acquisition
- Experience in surveying participants
- Experience in statistical data analysis and data science
- Familiarity with the R, MATLAB, or Python programming languages

If you work with us, you can expect that we will provide mentorship and resources, and invest time and energy to help you achieve your goals. By the same token, you will be expected to bring your own passion, ideas, ambition, and skills to the table.

OSU—and especially the **irradiant** ob, commits to inclusive excellence by advancing diversity, equity, and inclusion in all that we do. We particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQI+ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community.

## **Apply for This Position**

Please submit your application via the <u>online form</u>. Review of applications will begin immediately; interested applicants are encouraged to apply as early as possible, and by May 15, 2022, at the latest. Email follow-up after the submission of the application is not needed and shortlisted applicants will be contacted via the email they provided in the application form. Additional supporting information may be requested upon review.

Application material, to be combined in the following order into ONE PDF file and submitted through the online form:

- 1. (required) Cover letter (or personal statement) detailing relevant experience, your interests, and how they fit with the **irradiantlab** and the research project
- 2. (required) CV
- 3. (required) A one-page (two-page max.) research proposal/vision document for the research project
- 4. (required) Transcripts of Records
- 5. (required for *international* applicants only) English language test score
- 6. (optional) GRE test score
- 7. (required) Names and contact information of three references
- 8. (optional) Publication sample (such as a conference or journal paper) with a cover page clearly detailing your contributions to the paper

### **Additional Information**

The appointment is expected to start on September 1, 2022. Earlier/later start dates can also be discussed. Information about the School of Civil and Construction Engineering can be found <a href="here">here</a>, and for future graduate students <a href="here">here</a>. Oregon State University, as one of the largest land-grant institutions in the U.S., is located in Corvallis, Oregon, which has been ranked as the <a href="here">11th</a> best place to live in the U.S.