

URBANA CITY COUNCIL APPLICATION FOR VACANCY IN WARD 2

Name: Joseph Edwards

Address: [REDACTED]

Telephone: [REDACTED]

Email Address: [REDACTED]

Employer: University of Illinois at Urbana-Champaign

Occupation: Teaching and Research Assistant

How long have you lived in Ward 2? 1.5 years

1. Why do you wish to serve on the Urbana City Council?

Urbana is a beautiful, diverse, and forward-thinking town, as a City Council Member, I want to continue and grow that legacy. Due to its adjacency to UIUC, a large portion of Urbana's residents are young University students, particularly in Ward 2. However, the composition of our city council does not reflect this demographic pattern. I will provide a voice for student residents to best advocate for the unique economic and social pressures our generation is facing, especially in light of the COVID crisis. On the City Council I continue the work Dr. Laut started in this seat by ensuring Urbana joins the Government Alliance on Race and Equity, but also move forward to actually practice the racial and community justice we would like to preach. I want to work with the Cunningham Township board to make rent assistance and other community programs more widely publicized and available. I will support continuing the sustainability work we do like bulk-solar purchasing and rain-barrel incentives. I will also work with Scott Tess to further promote the goals in our sustainability master plan and develop policy to help our community reach carbon neutrality as soon as possible. Urbana is an amazing community; I will bring more youth involvement and fresh ideas to our local governance.

2. Please list education, training, work experience, community involvement, service on municipal boards and commissions, or any other experience which has prepared you to serve on the Urbana City Council. Attach CV, if desired.

At UIUC I have previously served on over 15 committees and boards in areas ranging from campus sustainability to University governance to accessibility in the Student Code. This work within bureaucratic institutions at UIUC has given me keen insight on how to effectively create progress within a group and utilize previous policy to achieve future goals. As a Senator in the Illinois Student Government and University Senate (including as a representative on the Senate Executive Committee) I wrote and executed resolutions to create a landscaping master plan, increase transparency in sexual misconduct investigations, and promote housing security for students. As the President of Students for Environmental Concerns I pushed the University to divest from fossil fuels and create a more sustainable, socially conscious investment portfolio. As the Chair of the Student Sustainability Committee, I oversaw allocation and disbursement of ~\$1.5 million in campus sustainability grants and increasing our investments in community resilience and environmental justice programs. All of this work helped teach me how to work with diverse groups of stakeholders to achieve shared goals within large, sometimes confusing, political institutions.

Please see attached CV for additional information

3. What do you believe are the most important issues facing Urbana?

Community justice and sustainability are the biggest issues facing Urbana, particularly in light of the COVID-19 pandemic. This pandemic is hitting everyone hard, but the least privileged of us the hardest. Persons of Color and impoverished members of our community are more likely to have jobs or living situations that expose them to the disease and are more likely to spread it because of these circumstances. We must work to undo generations of discrimination based on racial and class lines to decrease the disproportionate share of society's burden these folks must carry. Our climate is warming because we are emitting too much carbon dioxide. This environmental carelessness also pollutes our community and poisons our neighbors, especially those from underrepresented communities. Due to the economic impact of COVID-19, investing in sustainability and the environment will be more difficult than ever, but it is also more critical now than ever. As a community we must reduce our carbon footprint, particularly from large institutions within our borders.

4. What do you believe are the most important issues facing Ward 2?

Ward 2 is mainly residential housing for students and families; to us economic and housing security weigh heavy on our minds in these difficult times. The ability of many of us to pay or rents, mortgages, or utility bills perilously hangs on factors largely outside our control. As a government, Urbana can work to ease some of this anxiety through providing more security to housing and utilities, especially energy and water as winter sets in. As a parent of a kid who is doing 100% of her schooling online, internet access is an essential amenity now as well. Urbana could work to make broadband internet access more accessible and affordable to all its residents to ensure students of all ages can complete school-work and achieve their education.

Please list three personal references:

Name

Occupation

Address

Phone

Name

Occupation

Address

Phone

Name

Occupation

Address

Phone

Signed:

Date: 11/30/2020

Please return completed application via email to CityClerk@urbanaillinois.us or by mail to:

Urbana City Clerk 400 S Vine St
Urbana, IL 61801

Joseph D. Edwards

Ph.D. Candidate, Program in Ecology, Evolution, and Conservation
University of Illinois at Urbana-Champaign (UIUC), Email: [REDACTED]
Phone: [REDACTED], Address: [REDACTED]

INTERESTS

Soil ecology, mycorrhizal fungi, biogeochemistry, microbial ecology, biodiversity-ecosystem function, plant-soil-microbe interactions, sustainability, environmental education

EDUCATION

Ph.D. Ecology, Evolution, and Conservation, UIUC Anticipated 2022, GPA:4.0
B.S. (with Highest Distinction) Integrative Biology, UIUC 2017, GPA: 3.75
Senior Thesis Title: Evaluating the role of biochar in mitigating nitrous oxide emissions related to microbial nitrification and denitrification activity in an Illinois maize fields
B.S. Natural Resources and Environmental Science, UIUC 2017, GPA: 3.75

PROFESSIONAL EXPERIENCE

Graduate Research and Teaching Assistant, UIUC 2017-present
Undergraduate Research Assistant, UIUC 2015-2017

HONORS AND AWARDS

- Clark Soil Biology Graduate Student Award, Soil Science Society of America, \$3000, 2020
- Francis M. and Harlie M. Clark Summer Fellowship, UIUC School of Integrative Biology, \$5000, 2020
- Summer Research Award, UIUC Program in Ecology, Evolution, and Conservation, \$1000, 2020
- Francis M. and Harlie M. Clark Research Support Grant, UIUC School of Integrative Biology, \$875, 2019
- List of Teachers Ranked as Excellent by Their Students for NRES 219, Fall 2018 and NRES 102, Fall 2019, UIUC
- Grant to construct stream quality monitoring stations for agricultural pollutants on UIUC Farm watershed, UIUC Student Sustainability Committee (\$100,000), 2018
- Travel Grant, UIUC Program in Ecology, Evolution, and Conservation Biology, \$600, 2018
- Robert H. Davis Distinction Award, UIUC School of Integrative Biology, \$750, 2017
- Outstanding Senior Award, UIUC Dept. of Natural Resources and Environmental Sciences, \$250, 2017
- Warren K. Wessel Award Finalist, UIUC College of Agriculture, Consumer, and Environmental Sciences, \$500, 2017
- Summer Undergraduate Research Fellowship, UIUC Office of Undergraduate Research, \$2500, 2016
- Fred S. Bailey Senior Leadership Award, University of Illinois YMCA, \$5000, 2016

PUBLICATIONS

Edwards, J.D., Pittelkow, C.M., Kent, A.D, & Yang, W.H. (2018) Dynamic biochar effects on soil nitrous oxide emissions and underlying microbial processes during the maize growing season. *Soil Biology and Biochemistry*. 122: 81-90.

MANUSCRIPTS IN PREPERATION

Edwards, J.D., Yang, W.H., & Yannarell, A.C. Novel plant-soil-feedback mechanism demonstrated in forest invasion. In preparation for submission to *Plant and Soil*

Edwards, J.D., Cook, A.M., Yannarell, A.C., & Yang, W.H. Biological invasion disrupts forest nitrogen economy. In preparation for submission to *New Phytologist*.

PRESENTATIONS

Edwards, J.D., Dalling, J.W., Kent, A.K., Yang, W.H. (2020) Dominant mycorrhizal type influences microbial community plant soil feedback in montane tropical forests *Ecological Society of America Annual Meeting*. 06 Aug 2020. (Poster Presentation)

Edwards, J.D., Yannarell, A.C., & Yang, W.H. (2019) Exploitation of fungal nutrient economy by invasive plant jeopardizes future soil productivity in forests *Ecological Society of America Annual Meeting*. 15 Aug 2019. (Oral Presentation)

Edwards, J.D., Yang, W.H., & Yannarell, A.C. (2018) Garlic mustard (*Alliaria petiolata*) disrupts fungal nitrogen economy in forests. *Ecological Society of America Annual Meeting*. 08 Aug 2018. (Poster Presentation)

Edwards, J.D., Pittelkow, C.M., Yang, W.H., & Kent, A.D. (2016) Impacts of biochar on nitrogen cycling microbial communities and nitrous oxide emissions. *ASA – CSSA – SSSA National Conference*. 07 Nov 2016. (Poster Presentation)

TEACHING AND MENTORSHIP

- **Teaching Assistant**, NRES 219, Principles of Ecosystem Management (Fall 2018)
Developed and taught lessons on ecosystem ecology and biogeochemistry for over 60 students
- **Teaching Assistant**, NRES 102, Intro to Environmental Science (Fall 2019)
Independently developed and taught interactive lessons on environmental justice, communicating about climate change, and UIUC campus sustainability for over 70 students
- **Teaching Assistant**, IB 150, Intro to Organismal Biology (Spring 2020)
Responsible for independently leading 80 students in discussion sections exploring course material
- **Primary Instructor**, Illini 4-H Summer Academy, “Exploring Ecosystem Services”, UIUC, 2019
Independently developed week-long program for 20 high school students to explore pathways to a future in environmental science through the ecosystem services concept
- **Environmental Sciences Instructor**, College of Agriculture, Consumer and Environmental Sciences Research Apprenticeship Program, UIUC, 2017 & 2019
Independently designed three-week, full day program introducing high school students from communities under-represented in science to environmental science research, culminating in a student-led group research project to design a functional storm water retention system that promotes ecosystem services
- **Mentor**, Xiangyu Zhang (International Research Exchange Student) and Ally Cook (Undergraduate Research Assistant)
Was the primary mentor on Ms. Cook’s successful application for a \$2,500 Undergraduate Research Support Grant

LEADERSHIP ACTIVITY

- **Student Liaison**, Ecological Society of America Biogeosciences Section, 2019-present
- **Reviewer** for *Environmental Earth Science*, *Environmental Science: Processes and Impacts*, *Land Development & Degradation*
- **Student leader** for Sustainability and Governance on UIUC campus:
 - **Chair**, UIUC Student Sustainability Committee, 2018-present
Presided over student-run funding board that allocates over \$1.4 million annually generated from student green fees. Personally led restructuring to promote sustainable justice and education projects relative to campus infrastructure and solicit greater student involvement in campus sustainability
 - **Student Member**, PEEC Graduate Admission Committee, 2019-present
 - **Senator**, Illinois Student Government and Urbana-Champaign Campus Senate, 2017-2019
 - **Member**, Senate Executive Committee, Committee on Committees, and Conference on Conduct Governance, 2018-2019
 - **Student representative**, Agriculture and Land Use Sustainability Working Advisory Team (2016-2019), Illinois Climate Action Plan Working Group (2016-present), Resilient Landscapes Strategy Commission (2018-present), and Illinois Sustainability Council (2019-present)
 - **President**, Students for Environmental Concerns, UIUC, 2016-2017
 - **Chair**, Student Sustainability Leadership Council, UIUC, 2016-2017
- **Member** Ecological Society of America (2017-present), American Geophysical Union (2018-present), American Association for the Advancement of Sciences (2017-present), Mycological Society of America (2020-present)