

Creating and Sustaining Inclusive Workplaces: Beginning the Conversation

By Laxmi Ramasubramanian, PhD, AICP



- A technical expert enters a board meeting room, where a group of other technical experts are gathered. The secretary to take notes is finally here; we can get started, someone says.
- An executive director of a nonprofit begins to discuss the issue of diversifying recruitment strategies at a regular organizational meeting. Another colleague dismisses the suggestion by interrupting the director and states that there are more important matters that should be discussed that day.
- A graduate student presenting their findings at a professional meeting is verbally bullied by another attendee.

These vignettes highlight some challenges that women experience in their professional lives. Regrettably, these vignettes are not fictional. Even a casual search on twitter or another social media platform will confirm my observations and provide further evidence about the types of negative situational behaviors I have highlighted. Recognizing and addressing the challenges of diversity in the workplace is a collective responsibility for our field and profession. This means thinking and talking about diversity in the workplace in a serious way. It has to be much more than planning to recruit a few more women to join the team. In this short essay, I want to begin a conversation about creating and sustaining inclusive workplaces.

Some will argue that the geospatial sciences have had an egalitarian and inclusive history. It is true that women and people of color have been active and engaged in GIS research, teaching, and professional practice since we coalesced as a field in the early 1970s. Professional societies like URISA and large GIS companies like Esri have long recognized the need for and the value of diversity (not exclusively focused on demographic diversity alone).

However, women in the geospatial sciences continue to face a number of challenges that inhibit their professional development. I will discuss three challenges: 1) recruitment; 2) retention, and 3) identifying leadership opportunities.

Recruitment

Recruiting girls and women into science and technical fields like ours is a recognized challenge. This is a problem that needs to be addressed at the high school level. We need to work with a variety of partners to address the problem. Since geospatial sciences are not a designated subject within typical high school curricula, students connect with GIS through related fields like computer science or through applications courses in geography and urban planning. Many URISA members give generously of their time to work with students on their GIS projects and participate in other outreach

activities in their local communities such as the GISCorps. But, we must do more, way more!

Moving into the higher education landscape, introducing core geographic and GIS concepts and methods to undergraduate and graduate students is essential to our field remaining stable and sustainable. Increasingly, students have to acquire proficiencies in programming languages like R and Python as well as web-services architectures, not to mention proficiency in graphic communication in order to be effective in the workplace. There are different ways and venues to deliver this content. Our colleges and universities must partner with our professional societies to attract women to invest their time in these technical pursuits. While a great deal of attention is being paid to address the gap in Science Technology, Engineering, Mathematics (STEM) fields, the geospatial sciences often misses out because of our interdisciplinarity and our transdisciplinarity.

Retention

Recruiting talented women to study and become proficient in the geospatial sciences is the first step. All too often, women change fields, leaving the geospatial profession for careers in other areas that are more welcoming or perceived to be more welcoming. This problem is particularly relevant for those students who are contem-

Women in the geospatial sciences continue to face a number of challenges that inhibit their professional development.

plating careers in research whether it be in academia or industry. Advanced research careers often require specialized preparation and credentialing in the form of a PhD. We need to encourage women to pursue and complete their doctoral education so that we can continue to populate our research institutes and our higher education institutions with scholars who can develop new cutting edge research methods to advance our discipline. Good research and development is essential for our field to flourish. Although GIS and related technologies are now ubiquitous and invisible, new research investments and partnerships between industry and academia are needed to support new innovations. Many promising women graduate students do not pursue doctoral education or a career in research because of challenges that are related to their gender, rather than their talent or academic preparedness. Similarly, women entering professional workplaces are opting out because of a perceived

or real hostile work culture and climate. We are hurting our field if we do not address this retention gap¹ (Betancourt-Mazur et al. 2015).

Leadership

Thinking about the future, we need to encourage women to aspire and compete to achieve leadership positions. Without a doubt, we have several strong women leaders as role models in professional service (e.g., URISA) and as owners of small consultancies but we need to grow the number of women who are leaders in their fields in academia, government, larger companies, and the nonprofit sectors. I am heartened by the efforts of the groups like the **Women in GIS** group, now a non-profit organization.

I would like to close with a brief description of a program that several geospatial scientists from academia and industry are championing to *train and retain leaders in STEM-Geospatial Sciences (TRELIS)* with a particular focus on women engaged in academic research and teaching. With support from the National Science Foundation and in partnership with the University Consortium for Geographic Information Science, we plan to run leadership and capacity-development workshops to engage women in academia. We would like women in these workshops to think critically about challenges that inhibit them (and their peers) from achieving their personal and professional goals and to develop practical skills and strategies to address these challenges.

The first two-day workshop concluded in Madison, Wisconsin this past June. It was held in conjunction with the meetings of the

1 Betancourt-Mazur L, Albrecht J and N Huynh 2015. Women in GIS. URISA Journal, 27(2): 51-64.

[University Consortium for Geographic Information Science](#) and [AutoCarto](#). When we announced the call inviting participants, we were overwhelmed with the number of inquiries as well as completed applications. In practical terms, this meant that only one in three deserving applicants received an invite to participate in the workshop. But this is only a start. The first cohort of TRELIS Fellows is very energized and have spun off a new series of outreach and engagement activities. We anticipate that this snowball effect of engaging new cohorts of academic leaders will empower the next generation of women to become leaders in the geospatial sciences. For further information about TRELIS, please feel free to contact Professor Laxmi Ramasubramanian, PhD, AICP (laxmi.hunter@gmail.com)

There are many more questions and issues to consider. I hope that this essay stimulates a dialogue among the membership.

About the Author

Dr. Laxmi Ramasubramanian is a faculty member at Hunter College, the Past President of the University Consortium for Geographic Information Science, and a member of URISA. The views contained in this essay are hers alone.

Golden Clam Award Winner

Kara Utter, 2017 URISA Young Professional of the Year, recently won the Golden Clam Award from the Southwest Idaho GIS Users Group (SWIG). The Golden Clam is an award of merit passed on to an individual in the local GIS community to honor their efforts and dedication to the GIS profession and Southwest Idaho. **Congratulations Kara!!!**



The GLA is in demand —grab your seat early!



Details and registration forms for each program are [online](#).