

RACIAL DIVERSITY IN PUBLIC GARDEN INTERNSHIPS

by

Alice Edgerton

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Approved:

Brian Trader, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved:

Eric H. Ervin, Ph.D.
Chair of the Department of Plant and Soil Sciences

Approved:

Mark Rieger, Ph.D.
Dean of the College of Agriculture & Natural Resources

Approved:

Ann L. Ardis, Ph.D.
Senior Vice Provost for Graduate and Professional Education

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A Small Needful Fact

Is that Eric Garner worked
for some time for the Parks and Rec.
Horticultural Department, which means,
perhaps, that with his very large hands,
perhaps, in all likelihood,
he put gently into the earth
some plants which, most likely,
some of them, in all likelihood,
continue to grow, continue
to do what such plants do, like house
and feed small and necessary creatures,
like being pleasant to touch and smell,
like converting sunlight
into food, like making it easier
for us to breathe.

- Ross Gay

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ABSTRACT

Public gardens are in dire need of emerging professional horticulturists. The lack of people of color in public horticulture means the profession is missing out on a large segment of the nation's talent and valuable perspectives and contributions to the profession. Internship programs are uniquely positioned to help fill the gap left by closing academic horticulture programs. Attracting and retaining public garden interns of color will help secure public horticulture's future.

Qualitative research interviews were conducted with nine public garden administrators and nine current or former public garden interns of color. Interviews explored administrator and intern perspectives on race and public horticulture and salient factors for internship success. Views and experiences of administrators and interns were analyzed with the goal of providing recommendations to create internship programs that better serve the needs of public gardens and interns.

Differences in programmatic structure, beliefs about the exclusive nature of public horticulture, and actions taken to diversify their programs existed between urban and rural garden administrators. Urban garden administrators were more likely than rural administrators to take actions to recruit and select interns of color, cohost internship programs with a partner institution, and have programs focused on job skills. Interns of color had positive experiences with internships and interest in public horticulture

careers. Interns were more likely than administrators to describe a racial division of labor at gardens. Interns reported their families did not understand their interest in horticultural careers, but were supportive of internships and assisted interns financially. Most administrators felt interns received a fair wage, but interns reported financial concerns during the internship.

To gain the full benefits of a racially diverse workforce, garden leadership must prioritize efforts to create inclusive public garden culture and connect people of color with internships. Potential strategies to attract interns of color include programmatic changes including a focus on job skills and community outreach, internships cohosted with partner organizations, and targeted recruitment and marketing. Strategies to increase emotional and material support for interns may increase intern satisfaction and promote job placement and retention for all interns, not just interns of color.

Keywords: Public gardens, horticulture, race, diversity and inclusion, internships, career development

Chapter 1

INTRODUCTION AND LITERATURE REVIEW

Public horticulture combines the art and science of growing plants with public outreach and engagement. It embodies many of the joys and the challenges of both the applied science of horticulture as well as the world of cultural nonprofits. As a part of the field of horticulture, public gardens face a deficit of educated, skilled and experienced people entering the profession (Darnell & Cheek, 2005; Enoch, 2014; Farr, 2014; Higgins, 2014.) As part of the world of cultural nonprofits, gardens strain to attract and retain racially diverse staff (Vincent & Klein, 2015; Raven, 2015; Redman, 2011). The lack of skilled horticulturists and the lack of racial diversity in public garden staff are two challenges of major concern for leaders in the industry (Martinelli, 2011; Redman, 2011).

The demographics of the United States are changing rapidly. From a nation that was 85% white in 1950, the United States is projected to be comprised of only 43% white by 2060 (Taylor P., 2014). Many areas of the country have already reached this level of racial diversity. Public gardens often struggle to appeal to diverse local audiences and be representative of their communities (Chung & Wilkening, 2011; Cole, 2011; Flanders, 2011), and the staff of public gardens is overwhelmingly white (Raven, 2015; Redman, 2011). Public gardens, like other American cultural and environmental

nonprofits, are already missing a large segment of their potential audience and the nation's talent, as well as the valuable experiences, worldviews, and contributions of people of color (Bonta & Jordan, 2007; Falk & Dierking, 2013). Unless gardens adapt to serve a wider population, they run the risk of becoming irrelevant (Bonta & Jordan, 2007; Falk & Dierking, 2013). Increasingly, grant making agencies are favoring organizations that show a commitment to diversity (Prinster, 2017). Thus, public gardens are missing important perspectives and opportunities for advancement.

In December 2013, leaders from across the horticulture industry issued a white paper declaring that “horticulture is under siege” (Meyer et al., 2013). The need for a larger pool of applicants for jobs in horticulture is evident. Enrollment in college level horticulture programs is at an all-time low, and horticulture degree programs themselves are disappearing (Darnell & Cheek, 2005). Undergraduate agriculture programs predominantly consist of white males, with a lack of people of color, particularly women of color (Talbert & Larke, 1995). Graduate level horticulture programs also have few students of color and do not represent the racial diversity of the general US population (Arnold, et. al 2014). The lack of people of color in public horticulture staff means gardens are missing out on 38.7% of the nation's talent (U.S. Census Bureau QuickFacts, 2016) as they already struggle to attract new horticulturists.

There is a gap between initial exposure to gardening, and public horticulture specifically, and the decision to pursue public horticulture as a career (Qiu, 2017). Adolescent involvement in gardens has been shown to build youth interest and awareness for public horticulture as a career (Tang, et.al, 2008). Public garden directors understand this; a 2010 study showed they believed attracting young people to careers in public horticulture was the most important benefit of youth programs (Purcell, et. al. 2010). Over 90% of zoos, aquaria and science centers already offer youth programming in support of science education (Sneider & Burke, 2010). There are many successful examples specifically intended for youth of color, such as the Association of Science-Technology Centers *YouthALIVE!* (Youth Achievement through Learning, Involvement, Volunteering, and Employment) initiative, intended to increase the involvement of youth of color in science centers and museums (Sneider & Burke, 2010). However, only 65.8% of public gardens offer adolescent programming, and only 28.9% of their programming is long-term¹ (Purcell et al, 2010). Long-term programs have been shown to have the greatest impact on both the garden as well as the program participants. More research on the lack of adolescent involvement in public gardens would help illuminate why this important bridge between childhood involvement and an internship is neglected.

¹ “Long-term” programming was defined as programming lasting a total of 7 days or more (Purcell et al, 2010).

Internships: Part of the Solution?

An internship is defined by the Oxford Dictionary as “The position of a student or trainee who works in an organization, sometimes without pay, in order to gain work experience or satisfy requirements for a qualification.” (Oxford, 2017). Public garden internship programs can provide an important springboard into the work force and prepare participants for careers at public gardens, and internships are becoming more popular as a prerequisite for employment (Trader et. al, 2014). They have the potential to fill the gap left by waning interest in academic horticulture programs. Public garden internships are also already widespread in the United States. A 2012 survey of members of the American Public Gardens Association showed that 63% of public gardens, arboreta, parks and nature centers had internship programs (Trader et. al, 2014).

In 2012, a joint study by the Chronicle of Higher Education and Marketplace found that experience was a more important factor to potential employers than academic background, with internships being the single most important factor when evaluating a candidate (Maguire, 2012). Internships provide individuals with a baseline of horticultural knowledge that is helpful, and sometimes necessary, for many positions available at a public garden, including gardener, greenhouse grower, landscape designer, plant curator, educator, researcher, administrator, and more.

Research on environmental organizations suggests they are not successfully using internship programs to find staff from underrepresented communities (Taylor D., 2014 b). The book *Intern Nation* explores the expanding and unequal world of internships. According to its author, Ross Perlin, internships are closely tied to colleges, and high school internship programs are generally located at wealthier, often private schools. According to research, 85% of public garden internships programs have at least some remuneration, with an average rate of \$9.93 an hour (Trader et. al. 2014), reinforcing the value of public garden internships for individuals looking to join the profession.

Although paid internships offer a more feasible option for a wider cross section of the public, a survey of over 27,000 college students done by Intern Bridge in 2012 found students with family incomes under \$40,000 are more likely to have unpaid internships with nonprofits than students with family incomes over \$40,000 (Gardner, 2010). Research shows that inability to afford unpaid internships was one of the main barriers identified by individuals of color interested in working for environmental organizations (Taylor D., 2014 b). Internships are rarely on the radar for the 70% of Americans who do not graduate from college (Perlin, 2011). In addition, unpaid internships actually have a significant negative effect on salary compared with students who took paid internships, or entered the workforce directly (Holford, 2017).

As documented by P. Taylor (2014), individuals without savings or families that are unable to support them financially will either miss out on the opportunities internships

offer for career advancement, or accrue debt. Wealth is sharply divided along racial lines in the United States (Shin, 2015), which means people of color have less opportunity to participate in internships than white people. Because participation in one or more internships is one of the main factors employers consider when hiring (Maguire, 2012), this inequity has serious consequences for both candidates who have not completed an internship and public gardens seeking a more diverse workforce.

Why the Lack of People of Color in Public Horticulture?

Human connection to plants and the environment can seem so obvious it is unworthy of study (Relf, 1992). However, not all groups see these connections in the same way. An individual's decision to pursue a public garden internship is not made in a vacuum. History, race, gender, and culture all play a part in shaping attitudes towards nature and plants (Finney, 2014). There are many excellent texts that illustrate a variety of racial and ethnic groups' particular histories and conceptions of nature and horticulture, such as a Native American spiritual connection to the land, a Latino experience with migrant labor, and an African American experience of sharecropping or tenant farming. Horticulturist Sherry Santifer says, "My aunts didn't understand my going into horticulture... I think it was the idea that for African Americans, at one point you had to work in the fields" (Higgins, 2005). Public garden administration, mostly comprised of white people, would benefit from a greater understanding of

some of the cultural meanings and connections that interns of color have towards nature and horticulture.

People of color are often portrayed as uninterested in nature or environmental issues (Taylor, 2007). It is important to recognize that the mainstream idea of what “counts” as environmentalism or horticulture is largely defined by a white, middle-class audience, and this viewpoint can marginalize or make invisible the experiences of people of color (Finney, 2014). Uneven distribution of resources means urban communities of color have less access than white communities to green space. What is considered environmental involvement by mainstream culture often includes activities such as hiking, bird-watching, or visiting national parks (Taylor, 2008). Studies by the National Parks Service have shown there is a lack of racial diversity in both park visitation as well as park hiring practices (Finney, 2014; Taylor, 2007). The barriers involved with visiting a national park include inadequate leisure time for recreation and limited access to transportation. There is also a history of discriminatory policies affecting the ability of those who live in cities, often people of color, to connect with nature. When Robert Moses, a government official who designed the New York City parks system, planned the underpasses leading to large parks outside the city, he deliberately made the underpasses too low for buses to pass through, directly restricting outdoor access for millions of New Yorkers (Caro, 1974).

Despite these barriers, studies show people of color are aware of and willing to support environmental issues, often at levels higher than white people (Bonta & Jordan, 2007; Mohai, 2003; Taylor, 2007). African-Americans are just as likely to be members of an environmental group as white people are, but they are more likely to be a part of a more local, grassroots group than a large organization like the Sierra Club (Mohai, 2003). The environmental justice movement addresses critical issues often tied to race, class, and power (such as pollution or public health), and are relevant in the lives of many people of color. The subset of environmental justice organizations has a higher percentage of minority staff (77.8%) than environmental organizations as a whole (14.8% minority staff) (Taylor, 2014). This involvement and interest in environmental issues indicates there is an untapped pool of potential public garden interns of color.

A 2013 members survey by the American Society for Horticultural Science found that horticultural professionals believed the most important barrier to students selecting horticulture as their career was lack of knowledge and awareness of horticulture and horticultural careers (Meyer, 2013). However, lack of familiarity with the specific term “horticulture” does not necessarily mean lack of familiarity with plants or environmental issues. A narrow definition of horticulture could also be a limiting factor for reaching qualified applicants. *Seed Your Future* is a promotional campaign led by horticulture professionals dedicated to improving the perception and promotion of horticultural careers (Seed Your Future, 2017). *Seed Your Future* conducted a

national phone survey in 2015 and found familiarity with the term “horticulture” had significant differences depending on racial/ethnic identity, income, and level of education. Seventy-six percent of people who self-identified as white were familiar with the term, compared to 49% of African Americans and 41% of Hispanic people. Fifty-four percent of people with incomes under \$50,000 were familiar with the term, compared to 78% of people with incomes over \$50,000. A higher level of education was also a significant indicator of familiarity with the term “horticulture”. Eighty percent of people with a college degree were familiar with the term, 71% of people with some college education, and 52% of people with a high school diploma or less than a high school diploma (Meyer et al., 2016).

There are numerous studies that document the importance of role models² to the career development of people of color, particularly role models that are the same ethnicity and/or gender as the employee (Bowman, 1995). Few people of color, particularly top leaders of color, currently work in public horticulture, which means people of color

² The terms “role model” and “mentor” are often used interchangeably, but for the purposes of this research, a role model refers to an aspirational figure, an example to be imitated, while a mentor refers to “an experienced and trusted person who gives another person advice and help” (Cambridge, 2017).

interested in a public horticulture career do not see people in the profession who look like them. In addition to a lack of role models working in public horticulture, the larger cultural messages about who belongs and who does not may affect an individual's decision to pursue public horticulture as a profession. A study of media images in mainstream magazines confirms there is "a racialized outdoor leisure identity" that portrays outdoor enthusiasts as young, strong, and white. "Black models are confined to urban and suburban environments while White models have exclusive domain over the Great Outdoors" (Martin, 2004). This lack of representation of people of color in nature in the press affects and reinforces the cultural perception of nature as a "white people thing" (Finney, 2014).

The Responsibility of the Institution

Museums and other cultural institutions such as public gardens are microcosms of a larger culture. They reflect the structures of power, privilege, and exclusion present across society (Coffee, 2008; Jennings & Jones-Rizzi, 2017). Nonprofit employees may be very committed to working for the good of society, but they are working within systems that "communicate messages of exclusion to people who have been objects of various forms of oppression over the centuries" (trivedi, 2015). These messages include whom the organization hires, whose research and history it elevates, and whom it portrays as its constituents. Without actively managing these messages and working to dismantle the structures of privilege that exist in the organization,

cultural institutions such as gardens will continue to be white dominated (Jennings & Jones-Rizzi, 2017). To achieve a more diverse public garden staff, administrators must actively work to make their gardens more inclusive.

Most nonprofit employees believe while their organizations claim to value diversity in the workplace, they do not back up these claims with action (Schwartz et. al, 2011; Thurman, 2011). Many organizations seeking diversity are actually interested in having people who look different, but think and act the same. Organizations are often unable to value cross-cultural perspectives when those perspectives do not fit the dominant paradigm (Garfias, 1989). Instead of defining racial diversity as simply having people who belong to a variety of identity groups, organizations that value the perspectives of people of color and incorporate them into the dominant workplace culture are able to take advantage of the true benefits of a diverse workplace, which include greater workplace efficiency and innovation (Thomas & Ely, 1996). A diverse and inclusive workplace that has a culture of trust and involvement is better able to retain not just employees of color, but all employees (Finley, 2015). Millennials³, the rising generation of public horticulture employees, are especially invested in working for racially diverse organizations (Finley, 2015; Fry 2016).

³ Millennials are defined by the Pew Research Center as people born between 1981 and 1997 (Pew, 2018).

Overall, museum staff do represent the racial diversity of the wider population, but the positions they hold are segregated. Leadership positions as well as jobs that relate to the educational or intellectual mission of the museum are majority white, and people of color are much more likely to hold positions such as a security guard or floor staff (Schonfeld & Westermann, 2015; ASTC-ACM 2011 Workforce Survey). The problem is so widespread that in the fall of 2015, New York City's Department of Cultural Affairs required all New York cultural institutions to submit surveys on the racial and ethnic diversity of their staff and how they are addressing staff diversity to be eligible for city funding (Vincent & Klein, 2015).

Other professional fields have implemented diversity initiatives in a variety of ways. In her report "Diversity in Environmental Organizations", Dr. Dorceta Taylor profiled 16 different national environmental diversity initiatives, and found most have focused on pipeline activities such as internships (Taylor, 2014 b). There are diversity related internship initiatives in the museum world, such as the Smithsonian's Minority Internship Program. Some professional organizations such as MANNRS (Minorities in Agriculture, Natural Resources and Related Sciences), MELDI (Multicultural Environmental Leadership Development Initiative), and ELP (Environmental Leadership Program) help place their emerging professional members in internships and other avenues to advance their careers. In its 20-year existence, the Environmental Careers Organization placed over 3,000 students of color in internships in environmental organizations (Taylor, 2014 b).

Salient Factors for Success

In her article, “Lessons from the Field: Cultivating Nurturing Environments in Higher Education” Dr. Caroline Turner states “By creating nurturing practices, policies, and programs that help all to bloom where they are planted, we can contribute to the development of individuals who are confident, and, in turn, might help others to bloom where they are planted” (Turner, 2015). Mentorship is one such nurturing practice. Active, involved mentoring has been found to be important to students of color (Taylor, 2007), as well as to Millennial museum professionals (Barnett, 2017). Public garden internship programs are well positioned to facilitate mentoring relationships for their interns. Garden staff can serve as guides for interns and help them forge connections that will be crucial in their future careers. A 2017 study of racial diversity in public garden leadership showed the leaders of color found their relationships with their mentors to be an important factor in their success. Most participants had white mentors, and their cross-racial mentorship had a positive impact on their careers and lives (Qiu, 2017). Alternative mentorship models such as peer mentoring, group mentoring, organization to organization mentoring, and reverse mentoring (older workers learning from younger workers) can also be beneficial for protégés of color (Johnson, J., 2017). Research has shown that mentees, or protégés, of color have poorer quality mentoring experiences than their white counterparts (Thomas, 2001). More information about how public garden internship programs do or

do not foster intern/mentor relationships could help improve the quality of an intern's experience.

Family support is another important factor in an individual's career choices. Support, both tangible and emotional, from an individual's family may be a critical piece of an intern's decision to take an internship and their ability to succeed in that setting.

Traditional career counseling theory has focused on issues relevant to white, middle class, heterosexual males, but in recent years, more culturally sensitive career counseling theory has emerged that is better able to recognize issues relevant to the career choices of people of color (Leong & Hartung, 2000). One such issue is that of family support. In some cultures, career decisions are made in a more collectivist manner; the individual is making a decision that affects not just them, but their family as well (Leong & Hartung, 2000). Tangible support can include housing or an allowance while participating in the internship. A greater understanding of how and to what extent the intern's family supports the internship could potentially allow internship administrators to design programs that meet intern needs to a greater extent.

ECO (Environmental Careers Organization) found environmental leaders associated the lack of staff of color with lack of qualified applicants and low salaries (Taylor, 2014 b). Similarly, focus groups conducted by the *Seed Your Future* campaign showed that 60% of professional horticulturists believe low pay and other financial concerns were reasons students would not choose horticulture as a career (Meyer et. al., 2016).

However, in another study conducted by ECO, there were a significant number of students of color qualified and willing to take jobs in the environmental field for salaries well within the expected range (Taylor, 2014 b). More data is needed to determine the extent to which the perception and/or reality of low pay in horticultural careers is a limiting factor to attracting qualified people of color.

Moving Forward

In 2016, the American Public Gardens Association formed a committee to develop and further principals and best practices for diversity and inclusion in public gardens (APGA, 2017). Diversity and inclusion were defined as key parts of organizational sustainability. The committee encourages first building a diverse and inclusive workplace culture, rather than beginning by attempting to change behaviors and attitudes of those outside the garden. As the committee's website states:

As social institutions, public gardens can inspire inclusion in communities by modeling inclusive practices and policies for all of their stakeholders, both internally and externally. A workforce that is representative of a public garden's community is aligned with the organization's success and sustainability. This holistic change results in a creative, innovative workforce, a competitive advantage, and an organic shift in audience demographics.

The committee's approach to diversity and inclusion is supported by research that shows a focus on internal change is critical to an institution's ability to attract, retain, and promote people of color (Jennings & Jones-Rizzi, 2017). There is currently momentum around issues of diversity and inclusion in the profession of public horticulture. The time is ripe for research on the role internship programs play in developing a diverse workforce.

Further study is needed on the issues of pay, mentorship, family involvement, the cultural meanings connected with horticulture held by interns of color, the existence and effect of diversity and inclusion policy at public gardens, and outcomes for both gardens and interns. Information about the experiences of both interns of color and internship administrators would illuminate how well internship programs are supporting a racially diverse group of interns. A better understanding of these issues is critical to advance not only the success of individual internship programs, but the success of public horticulture in the future.

Chapter 2

MATERIALS AND METHODS

The purpose of this study is to determine how public garden internship programs currently contribute to building a racially diverse public horticulture profession, and how they could be improved to help cultivate diverse and inclusive organizations. Interviews were conducted with both administrators of internship programs as well as individuals of color who were currently participating in or had completed public garden internships. The study takes a holistic approach to the issue of racial diversity by examining both gardens' efforts to further diversity and inclusion in internship programs as well as the experiences and perceptions of interns of color. This study is intended to further the dialogue on issues of diversity and inclusion in public horticulture career development.

Research Questions

Do current efforts to provide internships contribute to enhanced diversity in our public gardens? How do administrators and interns of color perceive internships in public gardens? How can internship programs be improved to cultivate diverse and inclusive public gardens and support interns of color?

Research Approach

The research was conducted between January 2016 and July 2017. Phase 1 of the research consisted of an online analysis of public horticulture internships offered in the Philadelphia region, completed in January 2016. The research documented the availability of internships using the websites of the 30 public gardens in the Greater Philadelphia Gardens consortium. The analysis assessed the duration of the internships, who administered the programs and their contact information, eligibility, and the compensation and benefits for each program. This information was recorded in an Excel spreadsheet. Phase 2 of the research consisted of a series of qualitative narrative interviews with administrators of public garden internship programs and participants of color in the broader mid-Atlantic region.

Interview Selection Criteria

Administrator interview participants served in an administrative capacity at a public garden within the past five years. All intern interview participants were currently enrolled in or had completed a public garden internship program in the past 12 years, and self-identified as a person of color. Location was restricted to standardize demographic information and regional attitudes about horticulture. All administrators worked in the greater Philadelphia area or New York City region. All interns had either completed their internship in, or were currently living in, the greater Philadelphia or New York City regions.

All research subjects signed a consent form to be interviewed and to be audiotaped for research purposes. Research subjects were informed that their interviews were strictly confidential, and that any information that might identify them would be removed.

Interview Questions

Separate structured interview guides were developed for administrators and interns of color. The questions utilized a mixed methods design, utilizing both qualitative, open-ended questions as well as forced choice, quantitative questions utilizing a Likert-type scale. Likert scales measure interviewee's opinions on a fixed continuum of response (Saldaña, 2016), in this case a 5-point scale. Minor changes in the wording of the questions occurred after the University of Delaware's Institutional Review Board (IRB) approval to improve the flow of the conversation and elicit deeper and more complex responses from participants.

Questions for internship administrators addressed the general purpose and structure of their internship program, their perspectives on diversity and inclusion at the garden, and issues that are salient factors for internship success, such as pay and mentorship (Appendix D). Questions for current and former interns of color were broken into four sections in the interview guide, "About You", "Your Internship Program", "Race and Ethnicity", and "Internship Satisfaction". Questions in the "About You" section asked for information about the intern including age, educational background, and their

motivations for being involved in public horticulture. Questions in the section “Your Internship Program” asked for specific information about the internship(s) the intern participated in, how and why they applied, what they learned in the program, pay, and family support. Questions in the “Race and Ethnicity” section addressed what race or ethnicity the intern identified as, the role of race in the intern’s life, and their perceptions of race at the garden. The final section, “Internship Satisfaction” inquired about the intern’s experience at the garden, staff support, skills gained, how the intern thought the internship could be improved, and if the intern wanted to continue working in public horticulture. These questions addressed the experiences and perceptions of administrators and interns in order to gather information about how gardens are currently contributing to diversity and inclusion through internship programs, and where there might be opportunities for improvement.

Institutional Review Board

All research with human subjects adhered to IRB standards. Guidelines included: Participants were informed in writing as well as on the day of the interview that if they did not wish to answer a particular question, or if they would like to end their participation in the study they were free to do so at any time. Participants were informed that if they decided to stop participation, that decision would not influence current or future relationships with the University of Delaware or Longwood Gardens.

Participants' confidentiality was maintained by assigning identification numbers and/or pseudonyms. A digital list linking participants' identification numbers or pseudonyms was kept on a private, password-protected server accessible only to study personnel. Participants were informed that if the findings of this research are presented or published, no information that gives participants' names or other details would be shared. Recordings would be erased after three years. Study personnel would be the only individuals with access to the recordings during those years. Paper consent forms and other data were scanned into digital form to be stored on secure password protected server, and then shredded. Materials were submitted to the IRB on August 25, 2016, and final approval was received September 26, 2016.

Identifying Participants and Conducting Interviews

Administrator participants included in this study were identified through the spreadsheet of internships available in the Philadelphia region and referrals from other public garden professionals. Administrators were contacted via email and invited for an interview.

At the end of each administrator interview, participants were asked for referrals for interns of color that were currently involved in or had completed the garden's internship program. The administrator interviewees then introduced the investigator to the interns via email. There were two exceptions to this method of identifying interns;

one intern interviewee was already known personally by the researcher, and another heard about the research via the Longwood Graduate Program webpage and contacted the principal investigator via email in August of 2016 and volunteered to be interviewed.

The original intent of the research was to restrict the study area to the 30 public gardens located within 30 miles of Philadelphia to standardize demographic information and regional attitudes towards horticulture. However, insufficient number of interns of color were recruited via administrator referrals and the study area consequently was expanded to include New York City. All interns had either completed their internship in the greater Philadelphia or New York City regions, or were living in the greater Philadelphia or New York City regions at the time of the interview.

All administrator and intern interviews were conducted in a private conference room or office. All administrator interviews were conducted at the workplaces of the administrators. Six intern interviews were conducted at the current workplaces of the interns, two were conducted at Longwood Gardens, and one was conducted in a meeting room of a local college.

All interviews were audio recorded using Quicktime Player on a MacBook Pro. Files were stored as MP3s on a secure server.

Coding and Analysis

MP3s of recordings were uploaded to transcription computer program Transcribe (transcribe.wreally.com), put on loop, transcribed, and then saved in Microsoft Word. The data was coded in the software program Nvivo, as well as by hand on paper copies of interviews, incorporating field notes. Coding was done in two rounds, followed by data analysis that identified emergent themes and categories (See Results section). Codes were chosen to illuminate what efforts administrators and gardens make to increase diversity and inclusion in their internship programs, how interns of color perceive public garden internships, and how internship programs might be improved to support interns and enhance diversity and inclusion at gardens.

A combination of attributive and structural coding methods were used for the first cycle of coding (Tables 1 and 2). Attributive coding is defined as “the notation of basic descriptive information such as ...participants’ characteristics or demographics.” Attributive coding helps provide participant information and context for data analysis (Saldaña, 2016). For the administrative interviews, attributive coding identified the amount the garden administrators paid their interns. For the intern interviews, attributive coding was used to document the interns’ age, race, location of internship, and amount they were paid. Structural coding identifies qualitative data as it relates to the specific questions in the interview guide (Guest et al, 2012; Saldaña, 2016). Researcher generated codes were developed that corresponded to the questions in the

structured interview guides. Quotes from participants were then categorized into these codes (Tables 1 and 2).

Table 1 *First cycle administrator codes (see appendix D: Structured Interview Guide).*

Administrator Interview Guide Questions	Administrator First Cycle Codes
Questions 1- 4	Mission
Questions 5-7	Intern Experience
Questions 8-10	Recruitment
Questions 11-13	Diversity and Inclusion Policy
Questions 14 - 15	Pay
Questions 16 and 17	Mentorship

Table 2 *First cycle intern codes (see appendix D: Structured Interview Guide).*

Intern Interview Guide Questions	Intern First Cycle Codes
Question 1	Why Horticulture
Questions 2 and 3	Demographic Info
Question 4	Where & How Long
Questions 5 - 7	Applying to the Internship
Questions 9 and 22	Support
Questions 10 and 11	Pay
Questions 12 -16	Experience of Race
Questions 17-21	Satisfaction with Internship
Question 8 and 23-25	Learnings

The second cycle of coding utilized the In Vivo coding method. Saldaña (2016) describes In Vivo coding as using participants' own words to deepen understanding of their particular experience and worldview. Codes were revised with the additional data from participants quotes, and sub codes were developed (Tables 3 and 4).

Table 3 *Second cycle administrator codes*

Administrator Second Cycle Codes	Administrator Second Cycle Sub-Codes
Internship Type	Duration of Internship
	Location
	Number of Interns
	Who Applies & Participates
Mission	Educational Mission
	Accomplish Work
	Create Next Generation Horticulturists
	General Job Skills for Public
Recruitment	Where/How Gardens Recruit
	General Selection Criteria
	Race as Selection Criteria
Intern Experience	Learn by Working
	Field Trips
	Individual Projects
Diversity and Inclusion Policy	Type of Policy
	Confusion with Legal Issues
	Uncertain How to Increase D&I
	Beliefs Why Few POC in Public Horticulture
Support	
Pay	Pay Amount

	Benefits

Table 4 *Second cycle intern codes*

Intern Second Cycle Codes	Intern Second Cycle Sub-Codes
Internship Type	Number of Internships
	Location of Internship
	Internship Title
	Duration of Internship
	Partner Internship
Demographic Information	Current Age
	Age at Internship
	Classroom Based Education
	Race/Ethnicity
Calling	Why Horticulture
	Unfamiliarity with Public Horticulture
Application	How Found
	Why Applied
	Applied to Multiple Internships
Intern Experience	Positives
	Negatives

	Satisfaction Rating
	Improvables
Experience of Race	Race Growing Up
	Diversity of Garden
	Need to Represent Race
	Connection with Other POC at Garden
	Stories About Race
Support	Parents and Pay
	Parent Support of Internship
	Staff Support
	Mentor
Pay	Importance of Pay
	Pay Amount
	Benefits
Outcomes	Knowledge Rating B&A
	Skills Obtained
	Future

Summary

This research consisted of two phases. Phase one was an online analysis of Philadelphia-area internships. Phase two consisted of 18 qualitative interviews, nine

with administrators of public garden internship programs, and nine with public garden interns of color. Structured interview guides for interns and administrators were developed, and IRB approval was obtained. Administrator participants were identified through the Phase 1 online analysis of internship programs, and all but two of intern participants were identified via administrator referral. Interviews were transcribed and underwent two rounds of coding.

Chapter 3

RESULTS

The separate administrator and intern coded interviews were examined for patterns. Unifying themes were identified that allowed the researcher to compare administrators and intern opinions on the same topics, and categories within those themes further illuminated findings (Table 5).

Table 5 *Research themes and categories*

Themes	Categories
1. About Internship Programs and Interns of Color	Administrators (1a)
	Interns of Color (1b)
2. Motivation of Administrators and Interns	Motivation of Administrators (2a)
	Urban Garden Focus on General Job Skills (2b)
	Intern Interest in Horticulture (2c)
	Intern Interest in Internship (2d)
3. Connecting Interns with Internships	Where Gardens Recruit (3a)
	How Interns Found Internships (3b)
	General Selection Criteria (3c)
	Race and Selection (3d)
4. Perspectives on Race	Administrator Perspectives on Race (4a)

	Diversity and Inclusion Policy (4b)
	Intern Perspectives on Race (4c)
	Racial Division of Labor (4d)
5. Emotional and Material Support	Staff Support (5a)
	Family Support (5b)
	Administrator Perspectives on Remuneration (5c)
	Intern Perspectives on Remuneration (5d)
6. Internship Outcomes	

About Internship Programs and Interns of Color

Nine internship administrators and nine interns that self-identified as people of color were interviewed for this study.

Administrators

Any program based at a public garden that the administrator defined as an internship was eligible for this study. Internships ranged from specifically endowed programs with a set number of interns each year and predetermined curriculum, to less formal programs.

All administrators directed the horticulturally based internships at their gardens. Some administrators were also in charge of non-horticulture internships, including internships in facilities, visitor services, and education. This research represents only the internships directed by the administrators interviewed.

Internship programs varied in size from one intern to 37 interns (Table 6).

Table 6 *Number of interns managed by administrator.*

Number of Interns Managed by Administrator	Administrators (n= 9)	
	Number	Percent
1-3 Interns	1	11.1
4-6 Interns	2	22.2
7-9 Interns	3	33.3
10-12 Interns	2	22.2
12+ Interns	1	11.1

Internship program duration ranged from two months to one year (Table 7). Some gardens had flexibility on the internship duration, and were willing to work with individual interns to tailor the length of the program to the individual. Two gardens offered a summer internship of less than six months in addition to a longer internship lasting more than six months.

Table 7 *Duration of internships managed by administrator.*

Duration of Internships Managed by Administrator	Administrators (n=9)	
	Number	Percent
1 to 5 months	6	66.6
6 to 12 months	5	55.5

Administrators were categorized as working in gardens that were either rural or urban (Table 8). For the purposes of this study, urban gardens are defined as gardens that are both walkable and transit friendly. Walk Score is a variable measured by the company Redfin, a frequently used indicator of a location's accessibility by foot and public transit (Carr et al. 2010; Duncan et al. 2011). Walk Score measures walkability and transit accessibility on two 100-point scales. A location's walk score is based on walking routes to destinations such as grocery stores, schools, and retail, and their transit score is based on the location's closest stop on each transit route, analyzing route frequency and type of transit (WalkScore, 2017). Gardens with both walk and transit scores of 50 or above were categorized as urban, and gardens with both walk and transit scores below 50 were categorized as rural.

Six out of nine administrators reported they had few participants of color in their internship programs. Two administrators could not recall having an intern of color. One administrator said:

In all my years of working in horticulture I have seen very few minorities and I think it is like this self-fulfilling thing, horticulture is associated with white people, unfortunately middle-aged women often, which is bad.

Gardens located in rural areas were more likely to report having few interns of color in their internship programs (Table 8). Two urban gardens co-hosted their internships with other partner institutions (hereafter known as a “partner internship”). Institutional partners included city government, non-profit organizations, local colleges, and a high school. The two gardens reporting that people of color regularly applied for their internships worked with partner institutions to co-host their programs.

Two gardens were owned or affiliated with universities. Three administrators reported that the majority of their interns were female.

You can see that we get lots of women, more than men, I mean you know we have years where there is only one guy here, there's like 2 guys here.

Table 8 *Characteristics of rural and urban internship programs.*

Characteristics of Internship Programs	Rural Internship Programs (n=5)		Urban Internship Programs (n=4)	
	Number	Percent		Percent
Few Interns of Color	5	100.0	1	25.0
Few Males	2	40.0	1	25.0
Job Skills Focused Internship	0	0.0	3	75.0
Partner Internship	0	0.0	2	50.0
University Garden	2	22.2	0	0.0

Interns of Color

All nine interns interviewed had participated or were currently participating in a public garden internship and self-identified as a person of color.

The age of interns at the time of their interviews ranged from 22 to 51. One intern was still participating in the internship, while all others had finished. The youngest age when participating in an internship was 20, and the oldest was 39. The largest gap between age at internship and age when interviewed was 12 years. Two of the interns were significantly older than the others, and had also completed their internships later in life. Eight of the interns were American citizens, and one was a Canadian citizen. All interns interviewed were female. Interns used a variety of terms to describe their racial and ethnic identities (Table 9).

Table 9 *Interns' self-description of racial and ethnic identity.*

Intern's Self-Description of Racial/Ethnic Identity	Interns (n = 9)	
	Number	Percent
Black	3	33.3
African American	1	11.1
Black/Haitian/Asian American	1	11.1
Black/Latina	1	11.1
Chinese Canadian	1	11.1
Puerto Rican/Hispanic	1	11.1
Filipino	1	11.1

Six out of nine interns graduated from a formal academic program related to plants. At the time of their first internship, six out of nine of the interns were enrolled in higher education. Seven interns did internships after they had completed a college degree of at least two years (Table 10).

Table 10 *Interns' highest level of completed classroom-based education.*

Intern's Highest Level of Completed Classroom-Based Education	Interns (n = 9)	
	Number	Percent
High School	1	11.1
Two-year degree in applied arts	1	11.1
B.A. in English	1	11.1
B.A. Landscape Architecture	1	11.1
B.S. in Plant Science	1	11.1
B.S. in Horticulture	1	11.1
B.S. in Environmental Studies	1	11.1
M.S. in Horticulture	1	11.1
M.S. in Public Horticulture	1	11.1

All interns completed at minimum one internship of at least three months at a public garden or arboretum. Combined, the nine interns completed a total of 23 internships, 16 at public gardens or arboreta, seven of which were at other plant-related organizations. Most interns (five out of nine) participated in more than one internship (Table 11).

Table 11 *Number of total internships completed by intern (includes plant related organizations).*

Number of Total Internships Completed by Intern (Includes Plant Related Organizations).	Interns (n=9)	
	Number	Percent
1 internship	4	44.4
2 internships	0	0.0
3 internships	2	22.2
4 internships	2	22.2
5 internships	1	11.1

Of 16 public garden/arboreta internships completed by the interns, 12 were horticulture internships, two were visitor services, and two were education. Three interns participated in a partner internship, all located in urban areas.

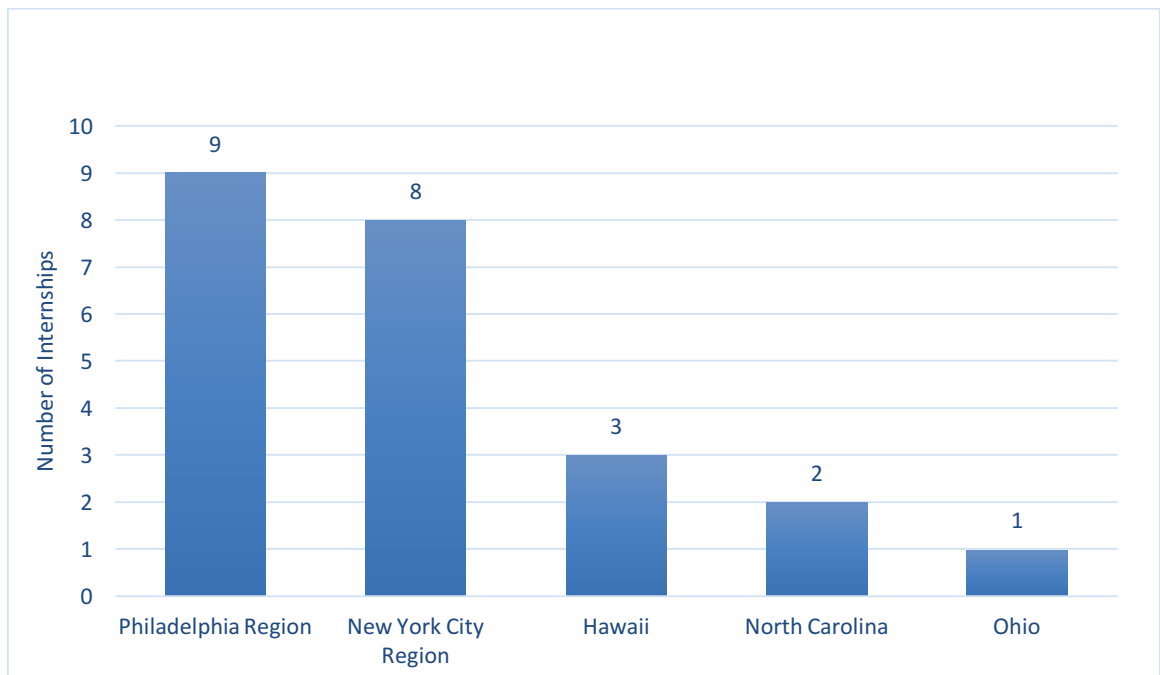
Other plant related organizations where interviewees completed internships included:

- New York City parks department (2 interns)
- Global agribusiness

- Horticultural nonprofit
- Garden center
- Plant science lab
- Land trust

All interns completed their internships in the United States, with the greatest number located in the Philadelphia region, defined as within 30 miles of Philadelphia (Figure 1).

Figure 1 Location of internships completed by interns.



After reviewing the characteristics of administrator's internship programs and the demographic information of interns of color, deeper inquiry was made into areas that address the research questions. Results help illuminate how current efforts contribute to diverse internship programs, how administrators and interns of color perceive internships, and how programs might best cultivate diverse and inclusive public gardens and support interns of color.

Motivations of Administrators and Interns

Motivations of Administrators

All administrators said that their internship programs existed to educate people. Eight out of nine administrators said the internship program aligned with or was a key part of the educational mission of their organization.

Eight of nine administrators said part of the reason they had interns was to accomplish work at the garden. One administrator commented:

We really rely on the interns as an educated workforce that help us accomplish the work that needs to be done... we only have 20 full time staff here, and that includes facilities and administration and public programs, so the interns are treated and handled almost as part of our full-time staff when they are working with us, they are given a lot of responsibility.

Some internships were more structured than others, with standardized curriculum for their interns and specific learning objectives, while others were tailored to the intern's interests. Eight out of nine gardens taught their interns basic gardening skills such as weeding, pruning, and plant identification, and the ninth internship program expected interns to have already acquired basic horticultural skills. Most administrators reported there was flexibility for the intern to pursue their individual interests within the structure of the program.

Ideally, they are learning modern best management practices, and then that's sort of the baseline, where they go from there depends on their interest level and, um, skills set, and then it's really kind of tailored from there.

All nine administrators believed the main way that interns learned was by working alongside gardeners and gaining hands-on experience. Some internships had formalized classroom training and specific days set aside for educational experiences. Eight out of nine administrators reported taking their interns on field trips to other gardens and/or the Philadelphia Regional Intern Outreach Day.

Three administrators reported their interns worked on an individual project that aligned with the garden's institutional goals and resulted in a written report with an oral presentation.

Urban Garden Focus on General Job Skills

Three programs (all urban) reported a stronger focus on fostering general job skills.

Rural garden administrators described a greater focus on creating the next generation of horticultural staff. Rural garden administrator:

We want to help the new next generation of horticultural professionals get started.

Administrator of job skills focused internship:

We may not be focusing really really heavily on people who we know are going to remain in the field, but that we are giving people some experience that's just life experience, and some good knowledge and awareness about horticulture.

Two of the three gardens focusing on job skills co-hosted their programs with a partner institution. The administrator with the most interns, 37, worked with multiple outside partners to co-host their interns. Rural gardens did not have institutional partners to administer programs.

The three urban gardens with general job skills as a focus incorporated additional elements to their curriculum that were absent from rural gardens. For example, one program held financial literacy days for their interns. For the two gardens with partner

institutions, some partners provided the additional job skill training, and the garden focused on teaching horticultural skills.

We actually hired someone to work with the interns in particular on learning soft skills kind of things, interviewing, working on professional development, simple things like showing initiative and showing up to work on time, what being professional means.

All three administrators indicated the programs were an important part of the garden's community outreach and engagement. Integrating the garden in the community allows access to people that may not usually visit public gardens, including people of color.

There's also a real community credibility we get from it, that we are helping, we are part of the community, we're not this like, ivy tower garden.

The administrators at the two urban gardens with partner internships said their interns were from the surrounding community. The rural garden administrators did not talk about the internships relative to the surrounding community or visitorship.

For one urban garden administrator, a main goal of the internship program was to hire more people of color at the garden.

I think the former managers and directors were thinking about trying to diversify but then you run into all kinds of, the kind of obstacles that people fall back on when they want to do the work but they don't know how to do the work. Or they want to give lip service to the work or they are making excuses. Like you know there aren't people of color applying for the position, ... or they don't have the training we need... So that's one of the things we started doing, just training people.

Intern Interest in Horticulture

Seven of nine interns described their interest in plants and gardening as a basic reason they were involved with public horticulture. Five of nine interns described early experiences in nature as a reason they were interested in public horticulture. Three out of nine reported they gardened as children.

I've been interested in gardening since I was little, like my big sister has a green thumb and I could just follow her around in the garden.

Two interns described early experiences visiting public gardens.

I think the first time that I came (to the garden) I was in a stroller... I grew up in the area and there are a lot of public gardens in the Philadelphia area. I was blessed in

that sense to be able to have access to public gardens, so that is obviously where I went first as opposed to a farm. I'm definitely a city girl, that was not me.

One intern believed early exposure to horticulture helped attract people of color to the profession.

I don't think there aren't a lot of black people in horticulture because they don't want to be, I think they just haven't thought of it, it hasn't been introduced to them, in that way they haven't been like as exposed, as maybe kids that went to school that took better field trips.

One intern credited her participation in youth programming at a public garden as a reason she was interested in public horticulture. Another intern's interest in horticulture was connected to her family's history.

Apparently, my great grandfather was really big into herbs and was really knowledgeable about them. People from all cultures would come and ask his expertise for different things. He chose not to tell my grandfather about it because he was like you don't get respected in this industry because of the color of your skin, so go find a different job kind of thing. Just knowing that that's in my genes, kind of really inspirational.

Another motivation for interns was a belief in the mission of public gardens. Interns believed they were contributing to the greater good and doing meaningful work.

I wanted to continue working with plants and the plant people and public gardening I think is important because it does seem a little... exclusive even to have a little space, most of us live in apartments, or apartment building or small spaces where we don't have a yard or a front lawn ... We are right here smack in the middle of all of these giant apartment complexes, and so I want to make it for them.

Another intern commented:

It's nice to be in this kind environment as opposed to a corporate setting because I feel like a connection with the purpose of this place a little bit more than other jobs that I've had.

One intern viewed her internship as community service.

So I was like okay this sounds cool like it's like something where I would be able to volunteer and get paid, why not do it? And so that was like another thing where I was like ah I'm going to be helpful while I am still being able to make a living and take public transportation to get places.

Three of nine intern's horticultural career ambitions were sparked by plant science classes. Two were required to take a plant science course in college, while one studied botany in high school.

For me it was just eye-opening to the world of plants and how plants grow, that you can use them for food, for medicine, just beautify the world.

Four of nine interns said they grew up without knowing a career in public horticulture was a possibility. One intern reported graduating with a B.S. in horticulture before discovering public gardens.

I got into horticulture by accident, um, I had been a gardener all my life, but I didn't even know you could actually make a living, especially in (the city), doing horticulture.

Another intern said:

I think prior to the internship I never really thought about the term public horticulture, I understood what horticulture was, and I understood that I personally like connecting people with plants, but I never considered what public horticulture was.

Two interns discovered their internship by volunteering at a garden workday. One of these interns describes her experience.

That introduction really won me over. I wanted to pursue horticulture. I didn't know it in that sentence, we weren't throwing the word around, horticulture, I wanted to do gardening. I wanted to work outside, with plants - and people! it's a dynamic, awesome endeavor.

Intern Interest in Internship

Seven of the interns expressed that at the time of their internship they were beginning their careers. Two interns were older than 30 when they did their internship, and one of them described the internship as the start of her second career. All interns said they participated in their internship(s) as a way of furthering their career, and eight of nine wanted to pursue careers specifically in horticulture. The only intern without an interest in a career in horticulture was interested in returning to her garden at a later date as a volunteer.

I guess as a college student, I wanted to get my feet wet, you know, kind of get into something related to my major and see what it's all about. Learn some things that are about plants... The internships are good because it helps let you know what you like and what you don't like without any huge commitment.

Four interns took their internships in part because they could not find other desirable jobs. One intern describes asking her plant science professors' advice about finding work:

I kept asking about what my next step should be. I just finished a master's degree, what's my next step? They were like "Do an internship" and I was like "I have a master's degree". But I just didn't have the experience to go anywhere else.

Interns had a variety of reasons for applying for their particular internship programs. Some wanted a more general horticultural education and some sought a more focused experience.

I looked at a few and those were all very specific. If you are a greenhouse intern, you have to just work in the greenhouse, and if you are one of the grounds, they give you a specific area to work on so herbs or flowers... but this one is sort of like the doors are open for all areas.

I'm like, what can I do and how can we use the resources that we have around us? So that was my focus definitely... and that led me to go to (the garden) and to learn about native plants and ecology.

The location of the garden was a factor in interns' decision to apply. Five interns said proximity to their home was a reason they applied to at least one of their internships, and one intern said the tropical location of her internship was a reason she applied. Five interns moved in order to participate in an internship.

Other factors cited as reasons interns applied to their internship were the prestige and mission of the organization. Pay and benefits such as housing were also motivating factors for applying to a particular internship. (See Emotional and Material Support section).

Connecting Interns with Internships

Where Gardens Recruit

Seven of the nine administrators said word of mouth was paramount for recruiting interns (Table 12). All administrators posted their internships on the garden website, and seven of nine gardens reported recruiting for interns in other ways. Two administrators did not actively recruit for interns.

The administrators at the two university gardens reported the university, not the garden staff, helps manage part of the selection process. One university recruited for interns through their human resources department and another through the admission's department.

Recruiting is a whole other world It is handled by admission, and it is just sort of a lack of awareness on my part because I am not doing it.

Seven of nine administrators reported they advertised their internships through contacts at universities or community colleges. One administrator used campus recruiting software Symplicity to post their internships to multiple universities at once. Four of the nine administrators recruited through horticultural websites including the American Public Gardens Association, the American Society for Horticultural Science, and Metrohort. Two rural administrators posted on more general web platforms such as Craigslist and Internships.com. Two urban administrators recruited interns from youth programs located at their gardens. Garden administrators said they generally recruited interns from the same places annually.

I've been a little conservative with the recruiting because I'm mostly going to the places that we have been successful with in the past.

Two gardens reported hosting international students in the past and suggested these students had been or could be a source of greater racial diversity for their internship programs.

Six of nine gardens, including all rural gardens, did not specifically recruit for interns of color. The three administrators specifically recruiting for people of color were all from urban gardens. Three administrators, all at rural gardens, attributed the lack of interns of color to a lack of people of color in academic horticulture programs.

Although all four urban gardens were located in racially diverse areas, three of the four reported still needing to actively recruit interns of color or “manage” the selection process in order to have a diverse program. An urban administrator:

Actually, this year I think there was more diversity of people that applied and that we've interviewed. I would say it's like 80 or 90 percent young white women and maybe like 9 percent African Americans, maybe 2 or 3 Asian people.

The one urban administrator who said they had a racially diverse program and did not recruit for interns of color indicated a lack of racial diversity had previously been a problem at the garden.

It's gotten to be so much a part of who we are and what we do and that, when you work with the local schools here in (the city), you get that diversity. If you are open to it. It didn't happen before I was director.

Administrators recruited interns of color by contacting local community groups and nearby neighbors, community garden organizations, a black urban gardeners group,

community colleges and the CUNY and SUNY colleges. No rural administrators reported recruiting by contacting community groups. An urban administrator:

A key thing is connections. It's one of my messages about working with different cultural communities... I've found that you go to the leader, and once you go to the leader they help spread the word in their community.

The two gardens that co-hosted their programs with other institutional partners depended on their partners for some or all of their recruitment efforts. Some of the institutional partners already worked extensively with communities of color.

Table 12 *Intern recruitment strategies used by administrators with few interns of color vs administrators with interns of color.*

Recruitment Strategies	Administrators with Few Interns of Color (n= 6)		Administrators with Interns of Color (n=3)	
	Number	Percent	Number	Percent
Garden Website	6	100	3	100
Word of Mouth	6	100	1	33.3
Academic Contacts	5	83.3	2	66.6
Horticulture Industry Websites/Listervs	3	50.0	1	33.3
Contacting Neighbors and Community Organizations	0	0.0	3	100
General Job Websites	2	33.3	0	0.0
Did Not Recruit	2	33.3	0	0.0
Recruitment through Partner Institutions	0	0.0	2	66.6
Contacting Other Racially Diverse Organizations	0	0.0	1	33.3

How Interns Found Internships

The two most popular ways interns found internships (academic contacts and online search) were common recruitment strategies used by administrators (Table 13). One intern discovered her internship through her college, which partnered with the garden to co-host the internship.

Table 13 How interns found internships.

How Interns Found Internships	Interns (n=9)	
	Number	Percent
Academic Contacts	4	44.4
Online Search	3	33.3
Volunteer Day at Garden	2	22.2
Horticulture Industry Listerv/website	1	11.1
Through Partner Institution	1	11.1

Eight interns applied to multiple internships at once. Seven interns were applying specifically for other public garden internships, and one intern applied for other non-horticultural internships through a school program.

One intern volunteered how they thought gardens could recruit for interns of color.

As far as getting people into the internships... you have to go to them. You have to show up at churches and youth groups and after school programs and just talk to them. The interest is out there, but when you post internships on the APGA web site or you email your colleagues and they email their not diverse group of friends, then people will never hear about it... You have to work to do that.

General Selection Criteria

Criteria varied for admission into internship programs (Table 14). The two common requirements for all administrators were an interest in plants, and enthusiasm/a good attitude.

Enthusiasm is helpful. Like I have definitely interviewed potential interns who were just kind of like, "yeah, that's something I can do", you know that is kind of what they exuded, and they probably could. But if somebody else is like "oh! you know what would be really cool!" Really, it doesn't take much.

Other factors considered by administrators included availability and an ability to do the work. One of the two administrators who could not recall an intern of color in the program said recommendations from garden staff and colleagues were selection criteria. Three of nine administrators said an applicant's interest in a future career in horticulture or public horticulture was an important qualification.

One of our application parts of our process is we have an objectives survey that it's just a small form that has some basic questions about what are you hoping to gain from this experience and what are your career objectives, and kind of just in your own words describing the big picture of where this is going. That is taken into consideration as we do interviews.

Two of nine programs required an academic background in horticulture to qualify for their horticultural internships. Five of nine did not necessarily require formal classroom training, but did require some sort of prior horticultural experience. The three urban gardens with job skills focused internships did not require either an academic background or prior experience in horticulture to qualify for their horticultural internships. The fourth urban administrator did require prior experience in horticulture but understood this was not always an option for applicants living in the city.

I realize a lot of people in the city do not have the opportunity to be mowing or doing that, but if they have shown some interest or they will take classes in college on plant science, things like that, or they are interested in botany, so it might not always be the hands on but it might be they show in there that there is a stronger than, like if you came in as a plumber and all of your background was plumbing, I wouldn't.

Table 14 *Intern selection criteria used by administrators with few interns of color vs administrators with interns of color.*

Intern Selection Criteria	Administrators with Few Interns of Color (n = 6)		Administrators with Interns of Color (n = 3)	
	Number	Percent	Number	Percent
Interest in Plants	6	100	3	100
Enthusiasm	6	100	3	100
Prior Horticultural Experience	5	83.0	0	0.0
Interest in Horticultural Career	3	50.0	0	0.0
Academic Horticulture Background	2	22.2	0	0.0
Recommendations from People Garden Staff Know	1	20.0	0	0.0

Online research of internships in the Philadelphia region demonstrated that of the 54 internships offered in the Philadelphia region (<http://americasgardencapital.org/>), 18 required an academic background in horticulture or plant sciences.

Race and Selection

Administrators had a wide range of responses when discussing race and intern selection, and discussed both the garden’s formal diversity and inclusion policy as well as individual administrators’ use of race as selection criteria. More information on diversity and inclusion policy and its effect on selection is in the results section “Perspectives on Race”.

Individual administrators had different personal attitudes about the role race should play in selection. No rural garden administrator said they considered the race of the applicant during the selection process. One administrator could not remember the garden having an intern of color. For her, commitment to diversity meant not considering the race of the applicant.

It's a tough issue to talk about because I don't think any of us is obviously selecting based on what they look like. In talking about it, you almost have to kind of, if it comes down to things like skin color and it's just one of those issues that it's kind of awkward to talk about, but I don't think institutionally it's any kind of even a concern or a thought. It's something that we are committed to diversity so that's not going to change. It's certainly not part of our hiring process or anything.

Four administrators, all at urban gardens, said they considered race when choosing who they interviewed and selected in order to increase the amount of racial diversity at the garden (either in the past or currently). One urban garden administrator described how he managed who he ended up interviewing.

I'm holding off some really really promising looking candidates, because we want to bring in those community members and students who are neighbors to try to give them that opportunity first, if possible.

An administrator who considered race as selection criteria said he noticed a significant decrease in the number of people of color who were interviewed and selected when the mostly white gardening staff began leading the process.

Just so many issues of underlying racism and things like that that just occur and we're not even clued in on. And it becomes a situation of how do you tell your staff when you all of a sudden turn over to them to make these decisions that this is a priority they have to make. Especially when some might not believe that. Some already have issues of like; hey, certain people already have rights or whatever.

Several garden administrators mentioned they could not tell the race of the applicant before an in-person or video interview. An urban administrator described trying to guess an applicant's race from information on their application:

I've been relying on a colleague of mine who's African American or a person of color. He works here... I'd have him check over some of the resumes of mine, I'd get so many. He would say, oh going by a person's name or something like that, and I would make sure that that person got thrown in the mix, or I'd look at it a little more closely.

There was a sense of confusion from administrators on the legal issues surrounding race and selection. One administrator checked with their supervisor to make sure he

approved their participation in a study on race at the garden. One administrator quoted another public garden professional from a discussion they had on strategies to select more people of color.

Ok this is great, don't tell my human resources team that I am here but yes let's start talking about this.

One urban administrator said:

I think people are mostly really scared to even broach the subject and I think people think they know, but I don't think people really know. I can't say that I know the actual laws. The more and more I talk to people, and the more and more I learn about this I know that there are ways that you can recruit people of color legally, and its fine, and you just have to, I think people fall back on it as an excuse a lot, the legal issues, the same way people fall back on, well there aren't any people of color candidates out there. There are. There are ways to recruit people of color without getting into weird legal issues. You just have to be brave enough.

Perspectives on Race

Administrator Perspectives on Race

Multiple rural administrators, when contacted for an interview for this research, mentioned they had a lack of people of color in their internship programs, and so might not be a resource on the subject of race and public garden internships.

Three administrators (all at rural gardens) were uncertain how to change the amount of racial diversity in their internship programs.

I don't know, the applicant pool that we get is just pretty...white. you know? and I mean its I don't know what to do to make it any different you know?

Rural garden administrators and urban garden administrators had different opinions on why there was a lack of people of color in public garden internships (Table 15). Two reasons cited by rural garden administrators was the location of the garden, and the lack of students of color in academic horticulture programs. Rural administrator:

I think in terms of diversity, we are only limited by the field that the crop of young people that is coming up.

The most commonly cited reason by urban garden administrators was the exclusive nature of public gardens. One urban administrator described a division between the interns of color and the white funders of the garden.

There is a lot of white privilege with typical public horticulture, it's a lily-white field honestly at this point ... The funder end of things really comes into play. These funders coming in for our annual benefit are looking at our interns like, oh my god, who are these people what are these Afri- these black guys here? And (the interns) feel that.

Another urban administrator described his role as a white person working with communities of color.

I have a whole team that is working out in the community so I become the white man in this black community. I'm the slave owner because they are the black people that are out working in there. So how has that changed? Even though I don't feel that way, that's what I do represent.

Table 15 *Urban vs. rural administrators' beliefs why the lack of people of color in public garden internship programs.*

Reasons for Lack of Participation	Rural Administrators (n=5)		Urban Administrators (n=4)	
	Number	Percent	Number	Percent
Location of Garden	4	80.0	0	0.0
Lack of Students of Color in Academic Horticulture Programs	4	80.0	0	0.0
Exclusive Attitude in Public Horticulture	0	0.0	3	75.0
Lack of Role Models of Color at Gardens	2	40.0	1	25.0
History as Estate Garden	2	40.0	0	0.0
Applicants of Color Lack Experience in Horticulture	0	0.0	1	25.0
Applicants of Color Don't Speak English	0	0.0	1	25.0

Diversity and Inclusion Policy

Three gardens did not have a diversity and inclusion policy (Table 16). One administrator posited that their garden's lack of a policy was perhaps because the garden was a former estate. They said:

So, you know, we always just pick the best people, and unfortunately, I just don't think we've talked about this.

Six gardens had current or past diversity and inclusion policies, which varied widely in content. The two university affiliated gardens had diversity and inclusion policy at the university level. These administrators were unfamiliar with the university level policy, and did not have diversity and inclusion policies at the garden level.

I know (the university) prides itself in its diversity in a vague marketing kind of way, like come one come all, we have all states, you know we definitely get those statistics in our emails now and then like how many countries our student come from and all that, it's a big university so I know that on a university level I am sure there are people whose full-time job is to think about this... but I would say for sure that there is not a lot of thought given to recruiting minorities for our program, on a program level.

Four administrators knew of current or past policy they could articulate. One was described as “being an equal opportunity employer” and the other was described as written policy included in the employee handbook that stated that the garden would not discriminate on the basis of race. Two administrators reported policy with specific goals. One policy was current, while the other garden had set diversity goals

previously, but no longer found it necessary as they now had many employees and visitors of color. The administrator with past diversity policy said

So in the past we've done different strategic plans over the years I've done about 6 of them so, um, at one point when we were newer to this we had goals like to have our staffing reflect like the diversity of the borough.

One of the garden administrator with current diversity policy with concrete goals described a metric used by her garden:

We told our staff our goal is to be able to interview at least two people of color for every position that we hire for. And we were able to do that this year, at least on the horticulture staff with our hiring.

Programs with interns of color intentionally focused on diversifying their programs (Table 16). Two out of three of these gardens had (current or in the past) policy with concrete goals at the garden level they could articulate. All three administrators at these gardens considered the race of the applicant as selection criteria.

Gardens with few interns of color were more likely to have a diversity and inclusion policy that was not at the garden level, or policy without accompanying goals. Only

one garden had no policy of any kind and did not consider the race of the applicant as selection criteria.

Table 16 *Strategies used by public gardens to increase their racial diversity compared with intern of color participation.*

Strategies Used by Public Gardens to Increase Their Racial Diversity	Programs with Few Interns of Color (n = 6)		Programs with Interns of Color (n = 3)	
	Number	Percent	Number	Percent
No Diversity and Inclusion Policy	2	33.3	1	33.3
University Policy Only	2	33.3	0	0.0
Garden Policy Without Concrete Goals	2	33.3	0	0.0
Garden Policy with Concrete Goals (past or present)	0	0.0	2	66.6
Administrator Considered Race as Selection Criteria (past or present)	1	16.6	3	100

Intern Perspectives on Race

Interns gave a wide range of responses when talking about their race and the role they believe it played in their internship. To qualify for the study, all interns identified as people of color. However, interns identified with their particular racial or ethnic group differently.

I guess I never really considered myself, I never thought of myself as colored, like of that specific type of person I guess. I was just a person. Just to clear that up.

African American female all the way. God made me the way it is and I'm embracing it.

Interns grew up in locations with varying degrees of diversity. All interns described spending at least part of their childhood in areas or schools they considered racially diverse.

I am just sort of used to being around people who look like me.

Five interns lived in or went to schools where there were few people of color.

I was the only little chocolate dot in so many of my classes, especially when I got into the AP courses and like the sports that I did.

Six of nine interns shared specific stories about uncomfortable racial incidents or discrimination they and their families had experienced.

We left (where I grew up) because my dad heard some things that he wasn't supposed through emails or phone calls that hinted at there was some racial issues ...I don't

think that we found out when we were leaving he was like “Oh we're moving everybody! Let's go!” and then later he told us the true story.

Only three interns out of nine described doing an internship at a garden with a racially diverse staff (Table 17).

I think it was probably two weeks into the internship before I saw another black person. We saw each other from across the hallway and we walked up and we embraced each other. She said “Hi, it's so good to meet you”. I called my mom and told her that and we just laughed ... Most of the people who come here are older white people and so it was like two weeks into my internship before I saw someone, which was kind of shocking.

Table 17 Intern perception of racial diversity at internships.

Intern Perception of Racial Diversity at Internships	Internships completed (n = 24)	
	Number	Percent
Garden Location Not Racially Diverse	7	77.7
Garden Location Racially Diverse	7	77.7
Staff Not Racially Diverse	7	77.7
Staff Racially Diverse	3	33.3

Two interns at rural gardens expressed that being the only or one of the few people of color working at their garden was difficult.

What's kind of frustrating is that people are always having discussions about making things more diverse and then they don't hire more diverse people ... It's kind of hard to imagine yourself doing something when there is no one else that looks like you. I don't see anyone in a leadership position here of color and it's kind of hard for me to really fit in. It's kind of tough.

I was cautious about what I shared. So I didn't talk about a lot of things that would be meaningful to me, kind of like culturally. I might think it in the back of my head. You talk about history, 1800's this so and so at XYZ did this garden blah, blah, blah, and not hearing my history, that kind of is like well, it would be nice to hear it, but I probably won't.

One intern at an urban garden was the only person of color in her internship program, but did not find it challenging.

It wasn't a thing for me... We just were young people, figuring out what career we were going to try to make our own, and we had all chosen horticulture and we were just eating it up, every day. So a lot of things probably just bounced right off me, or I

didn't notice them at all, I was just so enamored with just being here and getting to do this.

One intern described herself as “a chameleon”.

I am equally comfortable around people of color and white people. and I am very good at talking to both... There are definitely people that are less comfortable with one group or the other. And that I think is definitely a disadvantage.

Three interns felt they represented their race or ethnicity for white visitors and staff.

I loved them to death and they are like family to me, but I almost got the feeling that, my mom was like, I don't think they were expecting you... It was subtle... One of the staff ladies there, she was so sweet. When I left, she was like, you represented your culture very well ... She's white and she did comment that I was the first one and you did a great job ... I'm carrying the banner and I need to make sure I do a really good job, I need to be perfect.

I was approached by a teacher once about a class that I was teaching and he was like this is so good for this title one school to see someone who looks like them doing so well. Make sure you tell them about the internship, they should study hard and be able to do this.

One intern said that her lack of a personal relationship with her supervisor made talking about issues that involved her race difficult.

Because I was doing a rotational, I didn't have the chance to establish that relationship per say with your supervisor... It was just for me being comfortable enough for me to say, hey, I don't want to get a bunch of dirt in my hair because to restyle my hair, it's going to take a long time. I know you talk about having your showers every night and wash your hair, that doesn't work for my hair kind of thing. It's like, how are they going to respond?

Racial Division of Labor

One administrator of nine mentioned they saw a racial division of labor at their garden. In contrast, six of nine interns described a racial division of labor.

Interns reported staff of color working in facilities, not horticulture, even in gardens located in very diverse neighborhoods. One intern said:

(Staff was) definitely mostly white, maybe an Asian. If I was lucky, I might find a maintenance person that was African American, maybe.

Another intern commented:

(The garden) is diverse for sure, it's not diverse in certain departments... it's just like America, that's how I see it (laughs). You have the higher positions, you know who is there, and the lower you go, you know who is there. It's not diverse. Security will be diverse. Custodial will be diverse. Management is diverse to a certain degree, but you know there is usually one... (laughs). Well, who can argue when you have one? (laughs). Well you could, but it makes it a little bit more difficult.

Two interns from the same garden both described the staff as diverse, but one intern elaborated further.

Well I guess collectively there is a nice mix, when I do think about it, break it into departments it is very clear that there is not so much of that integration. I guess it would be nice to see more people of color within the offices or even doing the actual gardening, and it would be great if that were also true in education, because education is a purely white staff.

One intern expressed that even when people of color were employed at public gardens, there was a gap between entry level and executive positions.

You have to move people up. I think there are a lot of diversity internships but after that there is not much to go in to get people in. Like the higher up positions aren't diverse and the boards aren't diverse.

This point was echoed by an urban garden administrator:

It's hard because even with these students and the interns that we bring in, how do you even get them jobs into the next level if that discrimination or that built-in stuff continues?

Emotional and Material Support

Staff Support

Interns in all programs worked alongside professional staff. All administrators said interns learned from staff they worked with, and that a staff member could potentially fill the role of a mentor. Administrator:

Some of the gardeners are good teachers and others are not. Others will just let them weed and go away. So it's like how do you then make it a good experience for both people? So since it was coming from the gardeners it was kind of like, ahh, I'm tired of every two weeks trying to train someone new for the eight weeks.

Four gardens had an intern coordinator that usually did not work with the interns on a day-to-day basis. This coordinator served as a mentor or source of support for interns. An administrator at a university garden said the faculty generally ended up being mentors to the students. One garden had a buddy system; interns worked with a seasonal gardener who was not in charge of them but served as “a point person”. Mentor relationships were formed informally; no administrator or intern described a program where interns and mentors were connected with the explicit intention of forming a mentor relationship.

Five of nine administrators said networking with public garden professionals was something their students gained from the program. One administrator described setting up interns with staff members within the garden who shared their interests. Four administrators spoke about connecting interns with contacts outside the garden that would be helpful for jobs after the internship.

One of the underlying outcomes we hope the interns get is that our network is linked to them so they might make deeper connections with these people or find mentors in the field.

Two administrators mentioned writing letters of recommendation and making job recommendations for interns.

All interns reported feeling welcomed and supported by garden staff in at least one of their internships. All nine interns expressed that their interactions with garden employees was critical to the success of the internship.

These are my people. These are the sisters and brothers that I don't have, you know what I mean?

I stay really close with them, to this day, including the other person I did the internship with, like my best friend now. It's a pretty small group of gardeners, so they really give you a lot of time and attention, they work with you, they explain things, they demonstrate how to do things. They are not babying you, but they do genuinely care.

Four interns mentioned another source of support were other people of color on staff.

This black guy who I became very close friends with, and it was funny first he thought I was just some white girl, and then I like surprising people with it, like saying something in Spanish and then they are like "What?!". And then it's weird how they treat you differently, it's like oh you are one of us, a minority! Like they are buddy buddy and it's like you understand our struggle.

Five of nine interns mentioned the importance of the attention they received from upper level management in the gardens.

So there was that open friendliness with the staff, it wasn't all like "oh the boss". You could be funny with her or ask her about her dog.

Seven interns described having important mentors in their lives. Six interns said that garden staff served as mentors.

In general I felt like most of my mentors in the field of public horticulture are other public garden professionals that are at a higher level of administration, and that's been really helpful... I definitely had a lot of good mentorship. Usually from white people, just because there weren't that many people of color that I knew at that time.

One intern clarified that while a staff member served as a role model for her, she lacked a mentor.

One of our gardeners, you know, he is very smart, I call him my encyclopedia of botany because he is so knowledgeable... but he is not my mentor, I don't have a mentor so far, but I wish I did. That may be something that is missing from the program. Some kind of mentorship.

Although all interns appreciated the support they received from the staff, five interns said they wished there was more staff support in at least one of their internships.

Unless someone was around me that wanted to talk about their experience, I wouldn't know to ask them. Or where even to begin because that was my introduction to public horticulture. I'm like; I don't know to ask what scholarships, what organizations are out there.

Family Support

Seven of nine interns' families generally did not understand their interest in public horticulture as a career. There was a strong theme of parents wanting a stable and lucrative career for their child.

I think my mom would have always preferred that I had a nice job where I could wear like nice dress to work and stockings, and stuff like that (laughs).

Coming from an Asian family, my mom really wanted me to go into something practical. I guess what she told me was, we left the Philippines so you don't have to do that.

Four interns expressed their family members were unfamiliar with public horticulture career possibilities.

My mom and dad told each one of us to follow our dreams, find out what we like, and do it. Just do your best, leave the rest up to the Lord, and it will be great ... I think they were like I'll figure it out. They didn't know about the opportunities. They knew that it's what I was passionate about, but as far as where to apply, what jobs are out there, they didn't know about that.

Although parents were not enthusiastic about their child's decision to go into horticulture as a career, they still provided practical, financial, and emotional support.

They wanted security for me, and its sort of like ok, that's a nice thing to do, but you are already out of college, where is this going to lead? I think they were a little bit more into very cookie cutter sort of careers that seemed a little bit more obvious to them, but my siblings and the rest of my family, they were really supportive, because they always kind of envisioned me being in a place like this, and they know it's a passion.

It seemed to them that it might not be a step in the right direction, that I was over-qualified for an internship. But they were encouraging. I mean this is the field that I want to be in, so they were encouraging.

Although parents were skeptical of their child's interest in horticulture as a career, five were supportive of the internship itself. One intern's mother was "probably glad that I had something to do for the summer." Another intern's parents were supportive of continued education.

They were excited that I had been like "Oooh!" you know, seemed eager, and willing to learn something, and because they are eternal learners.

Five interns mentioned pay was important to their parents and helpful or necessary for gaining their support for the internship.

My mom wanted to just make sure I was getting paid. Once that was settled she was very supportive. She was happy that I was doing something that I was interested in.

Administrator Perspectives on Remuneration

Internships at eight of nine gardens were paid. Some of the interns in partnership based programs were paid by the outside partner. The two administrators of these programs did not know the rate of the partners' pay.

None of the urban gardens provided housing (Table 18). Four gardens provided housing for all or some of their interns. One garden paid a higher hourly wage to interns who chose not to live in intern housing. Intern administrators that provided housing said it made their internship more attractive to students, especially because their gardens were located in expensive areas.

I've noticed from a staff standpoint that there is an ease of accepting (the internship) whereas when we weren't able to offer housing there was some reluctance, like oh I will have to make sure that I can find a place to live.

Hourly pay is reported in dollars per hour, rounded down. Administrator reported pay from years previous to 2017 has been adjusted for inflation, using the US Inflation Calculator (<http://www.usinflationcalculator.com/>).

Table 18 *Hourly pay with and without intern housing, reported by administrators.*

Hourly Pay	Without Housing (n = 6)		With Housing (n =4)	
	Number	Percent	Number	Percent
\$9-\$10	1	16.6	1	25.0
\$11-\$12	2	33.3	2	50.0
\$13-\$14	1	16.6	1	25.0
\$15-\$16	1	16.6	0	0.0
No Data	1	16.6	0	0.0

One internship offered health insurance, two offered tuition credits, and one provided vacation time.

Administrators generally felt the interns were getting appropriate wages and benefits. One administrator said the interns received “a decent wage”, another that interns were “generally satisfied with the hourly wage that we pay”. Two administrators expressed that although the pay was necessary, it was not the main reason interns participated in the internship.

I think it's mostly they are mostly not looking at it from the pay... I mean that if they weren't going to get paid, we wouldn't be getting interns a lot... We've never had any pushback about the pay, it's actually in line or even slightly more generous than other places.

There is usually kind of like a waiting list to get in the program so I don't think the money has much to do with it... Sometimes if there are special events or whatever, they might have the opportunity to work overtime if they so desire. So they can make a little, pick up a little extra money on the side. But, it's not a lot of money, but you know between the housing and that, it's a good deal.

One rural administrator had received negative feedback from interns about the pay.

I know this past year we had a candidate who declined an offer because she didn't think that she would be able to support herself enough with other commitments that she had at the time that it wouldn't be able to work for her. We've occasionally had an intern at the outset request a higher level of pay than we are able to offer... I think in terms of cost of living, I think in general, that it's fair.

One administrator noticed when the economy was better, they received fewer internship applications.

There were two administrators who expressed concern about the rate of intern pay. One of the administrators did not feel the interns could live on what the garden paid them, and said he received consistent negative feedback about the low pay.

We had one girl, she was 16 or something and she was the only one working in her family. The only one working. And we found that people come, and they sometimes have money to use public transport to get here or money for food but not both.

One administrator thought pay was part of the reason interns did not go into horticulture in the first place.

I would say there are not enough good paying jobs. I am not surprised that more people don't go into horticulture... If you don't specialize in design or science, like

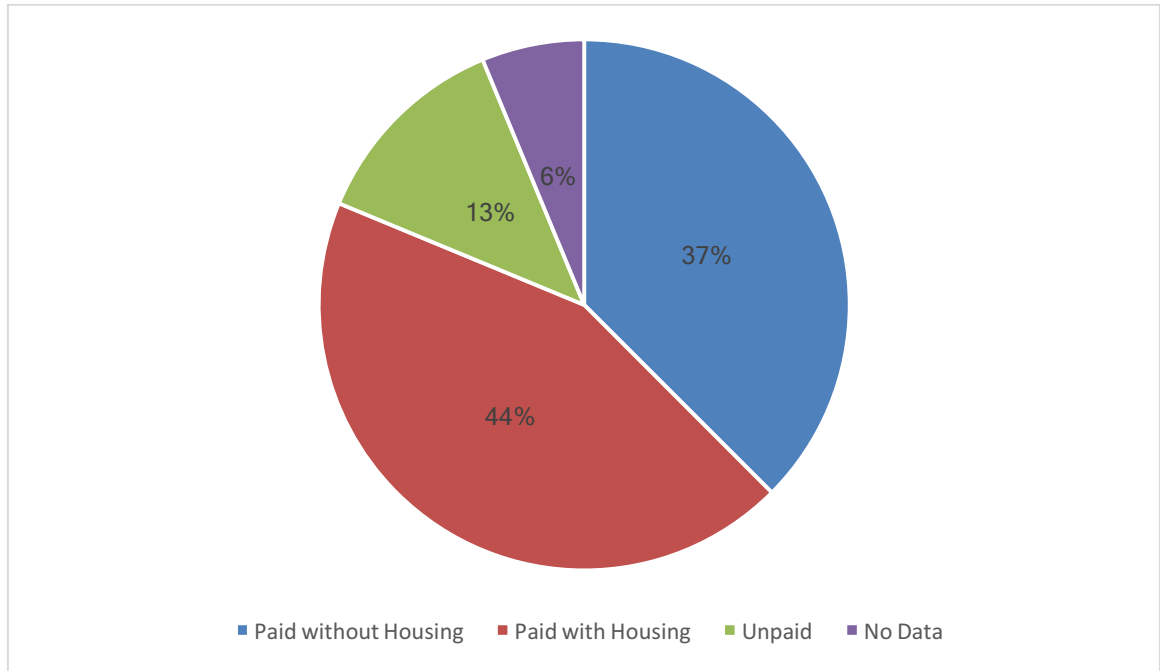
research, I think you are left without a real clear path. Like I don't know if a 4-year degree in horticulture is necessarily a good endpoint anymore. That in itself doesn't lead into anything.

Intern Perspectives on Remuneration

Pay and benefits can be concerns for all interns, irrespective of race. Interns reported they were paid for 13 out of the 16 public garden internships (Figure 2). Of the three unpaid garden internships, one intern did not receive remuneration from the garden but was paid a lump sum from a school grant that averaged out to \$5.39 an hour, and another intern received housing for her unpaid internship, and also received a lump sum from the garden at the end of the internship.

They ended up giving me a 1000-dollar stipend at the end because they were able to shuffle some money around, as gardens do. But I went into it knowing that I might not get paid and I was willing to take an unpaid internship in order to get exactly the experience I wanted.

Figure 2 Public garden internships paid vs. unpaid.



Of the 13 paid internships, there are 10 data points representing hourly paid internships (Table 19). One intern could not remember the rate of pay for one of her internships, and another did not report the rate of pay for two of her internships.

Hourly pay is reported in dollars per hour, rounded down. Intern reported pay from years previous to 2017 has been adjusted for inflation, using the US Inflation Calculator (<http://www.usinflationcalculator.com/>).

Table 19 *Hourly pay with and without intern housing, reported by interns.*

Hourly Pay	Without Housing (n=4)		With Free or Subsidized Housing (n=6)	Percent
	Number	Percent	Number	Percent
\$8	0	0.0	1	16.6
\$9	0	0.0	1	16.6
\$10	3	75.0	1	16.6
\$11	0	0.0	1	16.6
\$12	1	25.0	2	33.3

Most interns did not receive benefits. Five of the 16 internships completed offered health insurance. All internships with health insurance were one-year programs. Housing was an important factor for interns considering accepting an internship. All interns that were offered housing considered it a helpful benefit. One intern was offered a housing subsidy at her internship but rejected it in favor of living with her parents in order to save money. One intern applied to an internship in another state, but decided it was not feasible due to lack of housing.

I applied to one in Virginia, that one was a little tricky because it didn't provide housing, and I am not familiar (with Virginia), so location was important.

Pay was a concern for eight of nine interns. Interns reported struggling financially while in the internship. Four interns said they would not have taken their internship for no pay.

A lot of the interns that do come into the program usually have a second job. So they are here and then they go work at a bar, or at a restaurant just to make ends meet. It's difficult, you know?

Six of nine interns reported receiving financial assistance or free rent from their family while participating in the internship, including both interns with unpaid internships.

The support of my husband and my mom, and even my sister helped me out. A little money, a little extra food, like I made extra so come and get leftovers, kind of thing, was a big help.

The education internship was unpaid ... and that one I think it was just one or two days a week, like on the weekends, so I was perfectly fine coming in and not making any money from it, but it was just the experience, because I was working during the week... it wasn't really an issue, because I was still living with my parents.

Interns described a sense of well-being and enjoyment from gardening that for some, outweighed low pay.

For me, money was, I don't want to say it's unimportant. But, it's not as important, I guess. I don't want to sound like it's a cliché, but money can't buy happiness. So I always felt like when I was in the dirt, working outside, I just felt better.

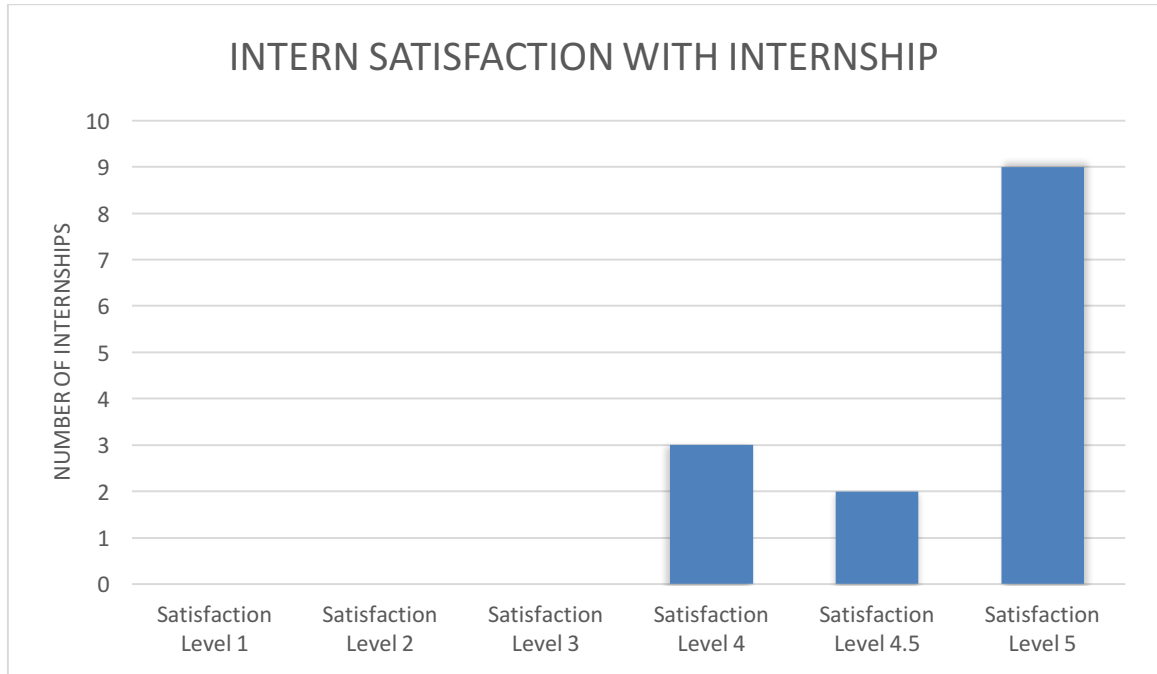
Whatever hard work I have scheduled it's not like I am dreading it, I can't wait to get here and start it. And I think that is the difference between maybe like a job and a career? ... I feel successful. Again, I am just paying my rent, I am not living the highlife, for sure. But I feel like I am in a way.

Internship Outcomes

Overall, interns described having excellent experiences in their internships (Figure 3). When asked to rank their internships at public gardens and arboreta on a scale of one to five (with one being least satisfied and five being most satisfied), interns gave their internships an average rating of 4.71.

Oh I loved it! I learned so much. It was one of the best experiences of my life. A five. Anyone asks me about it, I still them to do it. They may not have the same experience as I did, but in general the people here are good people, very knowledgeable, willing to share information, so yeah no it was one of the best things I ever did. I mean it led me onto a whole different path.

Figure 3 Intern satisfaction with internship on a scale from 1 to 5, 5 = most satisfied.



Interns reported a variety of challenges while doing the internship, including an overwhelming amount of physically challenging work, staff drama, financial challenges, and poison ivy. One intern was significantly older than her cohort, which she found difficult. Another intern chose an internship that did not ultimately fit her interests.

All interns said that they learned more about public horticulture through their internships. Eight interns reported gaining horticultural skills in their internships. Five interns reported gaining skills in plant identification, and four gained skills in nursery

management. Interns also reported learning how to use tools, pruning, transplanting, soil science, pest identification, garden design, and how to install irrigation. The intern who did not report gaining horticultural skills participated in an internship in the garden's education department, and said she learned about programming and curriculum development.

Eight interns mentioned non-horticultural skills, or "soft skills" as something they learned in their internship. Four gained skills in communication, and three gained leadership skills. Other soft skills learned included networking, how to plan, and time management. Two interns said the internship taught them how to be an employee.

Little things like realize okay you work at a place, it's now their time and you have to consider that you are getting paid for this time... It's like they didn't hire you to come and do your own thing and get paid for it.

Three interns said they learned more about what they wanted from a job. Three interns reported gaining confidence from the internship.

Four of nine interns said their internship could be improved if the curriculum was more flexible (Table 20). Two wanted more learning opportunities outside of just working in the garden, two wanted the curriculum tailored to their interests, and one wanted an individualized project.

Three interns expressed they needed more support in order to find jobs.

If they could funnel people into jobs afterwards that would be so nice. Like where we had a mentor at (the garden) where we could network and make connections and something like that because otherwise you are on your own out there. So maybe something like that would make the program better because as far as applying for jobs, my applications are getting lost in the stacks.

One intern described creating her own networking opportunities.

I think a lot of the local kids that would go work there or be coop students there would not have as much exposure to the administration levels, which is what really helped me. But I was also gunning for that. So I was like well, gotta schmooze.

After completing an internship, three interns participated in another internship because they were unable to find work.

I felt like these internships were stepping stones to sort of a career. But I just kept taking internships and I didn't know what my next thing was going to be. Eventually I just was like I don't want to be really poor anymore. Honestly, if these internships can help you better with job placement, I think that would improve them greatly.

Table 20 *Desired internship program improvements cited by interns.*

Desired Internship Improvements	Interns (n=9)	
	Number	Percent
Greater Staff Support	5	55.5%
More Flexible Curriculum	4	44.4%
Better Job Placement	3	33.3%
Increased Pay	3	33.3%
Longer Internship	3	33.3%
Focus on Learning, Not Work	2	22.2%
Housing	1	11.1%

All but one of the interns wanted a career in public horticulture or horticulture after the internship. Six of the nine interns wanted to stay at the garden where they interned.

Four of the interns who wanted to stay at the garden where they interned were hired.

Chapter 4

DISCUSSION

Introductory statement

This research focused on race and public garden internships, but the interviews illuminated many broader topics relevant for public gardens. Interns of color spoke to issues all interns face, such as the efficacy of internship curricula and the importance of family and staff support. Topics including the racial division of labor at public gardens and recruiting for employees of color are also relevant for gardens without internship programs. This discussion will offer suggestions for creating more diverse, equitable, and inclusive internship programs for the benefit of public gardens and future interns.

About Internship Programs and Interns of Color

All interns interviewed were female, and three administrators also reported the majority of their interns were female. Anecdotally, few women have traditionally been employed in horticultural careers, but this is changing (Agee-Aldridge, 2011, Trader, 2018). The Bureau of Labor Statistics reports women represent only 5.9% of grounds maintenance workers, and only 8% of first-line supervisors of landscaping, lawn service, and groundskeeping workers are women (Bureau of Labor Statistics, 2018). However, women are the majority (61.4%) of “archivists, curators, and museum technicians” (Bureau of Labor Statistics, 2018). Public gardens are a blend of cultural

institution and horticulture, which may explain some of this discrepancy. This research is specifically looking at racial diversity in public garden internships, but the predominance of female public horticulture interns may indicate a need for gardens to consider gender diversity in their internship programs as well. Further research may be needed.

Motivations of Administrators and Interns

Administrators and interns shared the same basic understanding of the purpose of an internship. Both groups described an internship as an educational experience where participants worked alongside staff as the main learning experience. The structure and curriculum of internships as described by both administrators and interns varied widely, which is true of work-based learning environments generally (Virtanen et al., 2014). Availability and forms of guidance, length of workplace learning periods, goal setting for workplace learning, and the extent to which students were expected to assess their own work have been found to differ greatly between work-based learning environments (Virtanen et al., 2014).

Administrators of job skills focused internships did not report a lack of people of color in their internship programs. Administrators from the three job skills focused internships said that community outreach was a goal or benefit of their programs. “Outreach” is defined by the Cambridge English Dictionary as “an effort to bring

services or information to people where they live or spend time” (Cambridge English Dictionary, 2018). The American Association of Museums (AAM) states in their report Excellence and Equity that museums must be “inclusive places that welcome diverse audiences, but first they should reflect our society’s pluralism in every aspect of their operations and programs.” (American Association of Museums, 2008)⁴. If administrators seek to create excellent institutions, diversity and inclusion must be fundamental motivations behind all programming (American Association of Museums, 2008). Internships intended as community outreach are, by definition, inclusive.

Internships intended as a form of community outreach can be helpful for rural gardens as well as urban gardens. Rural gardens face challenges connecting with their neighbors that urban gardens do not have. In-person community engagement is logistically challenging in a large geographical area, and the lack of public transit can make in-person gatherings difficult (Lipcsei et. al, 2015). Gardens that intentionally reach out to the community through internship programs can forge stronger connections with their neighbors.

⁴ The American Association of Museums includes botanic gardens in their definition of “museum” (American Association of Museums, 2018).

Two of the three job skills focused internships were joint efforts with partner institutions. The American Association of Museums recommends museums “develop collaborative efforts with individuals, organizations, corporations, and other museums that extend the museum’s public dimension and enhance its ability to fulfill its educational mission” (American Association of Museums, 2008), and museums, libraries and parks are increasingly forming learning partnerships with schools and community based programs (Wilson-Ahlstrom & Yohalem, 2005). Bernadette Lynch’s study of public garden programs intended to engage new audiences, including ethnic minorities, found the most successful programs developed partnerships with organizations and community groups (Lynch, 2015). Partner-based internship programs have great potential to help attract a more diverse group of public garden interns.

Another potential reason green job training programs may be more successful at attracting participants of color is the different language used to describe green job training programs and internships. Participants of both are performing many of the same tasks, often for the same pay, with the ultimate goal of getting a job. However, green job training programs market themselves first as job training, an approach that is more likely to connect with a broader cross section of the public.

There is clearly a role for internships that require more prior horticultural experience and specialization than green jobs training programs. However, 88% of administrators

interviewed did not require extensive prior experience, and reported teaching their interns basic horticultural skills such as weeding and raking.

Five of nine interns cited early experiences in nature as part of the reason they were interested in public horticulture. Research shows children's involvement in nature-based activities promotes an interest in environmental careers (Haynes et. al, 2015), and students with gardening experience are more likely to pursue a horticulture major in college (Bradley et. al, 2000). Early exposure to nature and gardening is also an important factor in career choice for public garden leaders of color (Qiu, 2017). Support for children's programming and involvement at gardens is a crucial tool for cultivating the next generation of public horticulture employees and leaders.

Many interns described their interest in public gardens as a higher calling. Although material remuneration was a necessary part of their involvement, it was not their primary focus. Interns spoke passionately about connecting people with plants and helping their respective communities. This is supported by research that employees of nonprofits are motivated by different factors than for profit employees, and are more likely to value factors such as altruism, personal growth, opportunities to learn, and intrinsic rather than extrinsic rewards (Schepers et. al, 2005). Millennials are especially interested in giving back; 92% of 2016 graduates say it is important to them to work for a socially responsible organization (Sjovall, 2017). The idea that a career

in public horticulture makes a difference in the world should be emphasized when marketing horticultural internships and/or careers.

Connecting Interns with Internships

Forty-four percent of interns did not know a career in horticulture was a possibility. Within the field of horticulture, public horticulture was especially unknown. Several interns described an unfamiliarity with the term horticulture, even though they described themselves as life-long gardeners. This indicates that using alternative terms such as “plant science” or “gardening” instead of “horticulture” may be an effective strategy to recruit people of color. This is supported by research from Seed Your Future, a national initiative to promote horticultural careers that shows 76% of people that self-identified as white were familiar with the term, compared to 48% of people over 35, 49% of African Americans, and 41% of Hispanic people who were familiar with the term (Meyer et al., 2016). Seed Your Future conducted 24 focus groups with middle schoolers in 2017, and of approximately 300 students interviewed, none had heard of the term “horticulture”. These middle schoolers suggested more accessible terminology in place of “horticulturist”, such as “plant master”, or “plantologist”. Seed Your Future is now referring to “the art, science, technology, and business of plants” in lieu of focusing on the term “horticulture” (Yoder, 2018). Similar terms and approaches can be used by individual gardens that want to expand their applicant pool.

Recruitment

Word of mouth was an important recruitment strategy for administrators, but no intern of color reported learning about the internship via word of mouth. Eighty percent of nonprofit staff recruit from their own personal and professional networks, and these networks are the most commonly used and effective recruitment methods (Brown, 2015). However, 75% of white Americans have exclusively white social networks (Public Religion Research Institute, 2013). Legally, the U.S. Equal Employment Opportunity Commission compliance manual states homogeneous recruitment may be an act of discrimination (U.S. Equal Employment Opportunity Commission, <https://www.eeoc.gov/policy/docs/race-color.html>). Administrators need to expand their recruitment efforts in order to reach potential interns of color.

Most public garden interns of color found their internships via the garden website or via a contact at an academic horticultural program. Participation in internships is closely tied with college attendance (Perlin, 2011), and recruiting college students or recent graduates from academic institutions is common among employers. Research by the National Association of Colleges and Employers found “high touch” recruiting methods such as career/job fairs and on campus recruiting were the most used and considered the most effective methods for employers recruiting interns (NACE, 2017). Strategically partnering with academic institutions that are already educating students of color, such as historically black colleges and universities (HBCUs), and larger state

or public universities is an effective method of recruiting more diverse candidates (Dobbin & Kalev, 2016). Research on recruitment strategies for underrepresented minority undergraduates found in-person recruitment was very effective when recruiting students from HBCUs (Shadding, et. al, 2016). However, companies are less likely to recruit in person at HBCUs (Lee et. al, 2007). Gardens could attract more applicants of color by focusing recruitment efforts on HBCUs, larger state and public universities, and conducting in person visits as much as possible.

Research commissioned by the Association of American Colleges and Universities demonstrates that 91% of employers agree that for career success, “a candidate’s demonstrated capacity to think critically, communicate clearly, and solve complex problems is more important than his or her undergraduate major.” (Hart Research Associates, 2015). Expanding academic recruitment beyond horticulture to related subjects such as environmental studies programs and biological sciences would also increase the number of potential applicants and reach more students of color.

Although some gardens are successfully finding some interns of color through academia, a heavy dependence on academic contacts limits gardens’ ability to recruit for interns of color. There are statistically few people of color in academic agriculture and horticulture programs (Arnold, et. al 2014, Talbert & Larke, 1995), as well as the more general sciences (Pew Research Center, 2018). Eighty percent of rural gardens interviewed believed the lack of people of color in academic horticulture programs

was a major reason they had few people of color in their internships. However, only 22% of the internships in this study and 33% of internships in the greater Philadelphia area required an academic background in horticulture. Clearly defining what criteria constitutes the minimum job requirements and essential job functions, and ensuring those functions appear in the job description, interview questions, and applicant rating system helps equalize the hiring process for applicants who may not have a ‘traditional’ academic background (Harvard Faculty of Arts and Sciences, 2018; Kelly, 2014).

If an academic background in horticulture is not necessary for internship participation, administrators can focus recruitment efforts where there are more likely to be people of color. There are many ways people of color engage with nature than often acknowledged (Finney, 2014); participation in community gardens, landscaping, home gardening including tending houseplants, fishing, recreation in city parks, stewardship groups for parks and gardens, and personal or professional interest in biological science, to name a few. Only one administrator reported recruiting interns from racially diverse nature affinity groups, and succeeded in attracting multiple applicants of color. Focusing recruitment efforts on people of color already involved in activities that may not generally be described as “horticulture” may be a way to attract a more diverse group of public garden interns.

Recruiting interns through community organizations and events, job fairs, professional associations and professional social networking media such as LinkedIn and Facebook, especially the minority subgroups within these sites, as well as via individual diverse contacts are recommended strategies for recruiting more people of color (Kelly, 2014). Emphasizing experiences or skills rather than academic degrees (if feasible), offering incentives for specialized skills such as language ability, and requiring experience with underrepresented groups as part of the job description are additional strategies (Harvard Faculty of Arts and Sciences, 2018).

Partnerships also help nonprofits recruit people of color. A national study by CommonGood Careers and the Level Playing Field Institute on diversity in the nonprofit sector found the most effective recruitment strategies involved partnerships and networking (Schwartz et. al, 2011). Working with a partner institution with a diverse constituency allows gardens to break out of their normal networks and connect with diverse potential candidates.

Gardens accustomed to recruiting internship and job candidates from the same racially homogeneous places will need to take additional time to connect with more racially diverse organizations, leaders, and communities (Jennings and Jones-Rizzi, 2017). A focus on long-term relationship building and developing talent, rather than simply sending out a job posting once, is key to successful recruitment (Kelly, 2014; Qiu, 2017).

Race and Selection

The phenomenon of selection or hiring bias is well documented. An employer's perception of a candidate's suitability of a candidate is often influenced by racial stereotypes (Moss & Tilly, 2001). White sounding names receive 50% more callbacks than African-American sounding names (Bertrand & Mullainathan, 2004), black people must work harder to prove their ability than white people (Biernat & Kobrynowicz, 1997), and hiring bias against black people has not significantly declined in the past 25 years (Quillian et al., 2017). The hiring process is not just matching organizational characteristics, job demands, and applicants' skills, but also a process of cultural matching. Employers are more likely to hire candidates who are culturally similar to themselves, in terms of leisure pursuits, experiences, and self-presentation styles (Rivera, 2012). Hiring bias ensures predominantly white organizations stay white.

There are a variety of federal and state laws that prohibit hiring decisions based on race, most notably Title VII of the Civil Rights Act of 1964. All four urban garden administrators had actively tried to increase garden diversity through recruitment or selection processes, either currently or previously. There are exceptions to this rule, but a general goal of greater workplace diversity does not constitute using race as a hiring criteria, although targeted recruitment is not illegal (Garcia, 2010).

Administrators were unfamiliar with the legalities of race and selection, and worried about getting themselves or their organizations in trouble. Research shows that 20% of environmental NGO leaders are also concerned about the legal implications of having a diverse staff (Beasley, 2017). Administrators need more guidance and support from garden leadership and human resource departments for legal compliance. More holistic organizational efforts to recruit and retain people of color would help intern administrators.

No rural garden administrator said they considered the race of an internship applicant when making selection decisions. Several administrators made comments such as “We always just pick the best people”, or “I don’t think institutionally (race is) any kind of even a concern or a thought.” These are examples of the ideology of colorblindness. Colorblindness posits treating individuals equally without regards to race, culture, or ethnicity is the best way to end discrimination (Tarca, 2005). Many Americans believe the concept of colorblindness is helpful to people of color (Tarca, 2005), including millennials (David Binder Research & MTV, 2014). Public garden leaders of color are wary of hiring to increase diversity, and concerned about tokenization (Qiu, 2017).

However, a colorblind attitude is not an effective strategy for increasing the diversity and equity of an organization (Weingarten, 2017). There is evidence the more hiring managers think they are able to ignore difference, the more they may make biased choices. (Uhlmann & Cohen, 2007). Research has found focusing on colorblindness

can indicate employers don't want diversity "to influence the organization's work or culture" (Thomas & Ely, 1996). An organizational attitude of colorblindness (rather than valuing diversity), coupled with few employees of color led African American professionals to perceive work settings as unsafe (Purdie-Vaughns et al., 2008).

Garden leadership must help administrators avoid ignoring issues of race and selection, as well as illegally using race as selection criteria. Building a stronger pipeline of potential candidates through recruitment and education can help administrators have a larger pool of applicants of color to choose from.

Perspectives on Race

Administrator Perspectives on Race

Rural and urban administrators had different beliefs about the lack of people of color in public horticulture. Eighty percent of rural administrators believed their location was a top reason they lacked interns of color. Metropolitan areas are more racially and ethnically diverse than rural areas (Lee et al., 2012), which limits the number of neighbors of color rural gardens have. However, rural administrators did not recruit interns from the surrounding community. Fifty-five percent of interns interviewed said that proximity to their home was a reason they applied to an internship, but 55% also relocated for an internship. This indicates although location is part of the reason rural gardens have few interns of color, it may not be as much of a limiting factor as

administrators believe. Eighty percent of rural administrators' programs offered housing to their interns, while no urban garden did. The availability of housing may help counteract some rural gardens' isolation from communities of color and allow them to attract interns of color from elsewhere.

Gardens and museums often convey messages of affluence and privilege (Smithsonian Libraries, 2018; Falk & Dierking, 2013). Gardens that were previously estates were by their nature private and exclusive, and the transition to the ethos and practices of a public institution can be difficult. In contrast, publically owned gardens, such as are common in Australia, may be more welcoming for outsiders, and be seen as "admission free public assets, like public parks" (Parker et. al, 2016). The most common reason urban administrators thought there were few people of color in public horticulture internships was a sense of exclusivity in the field, but no rural administrator cited exclusivity as a possible deterrent.

Rural administrators are less likely than urban administrators to have daily encounters with people of color. Data was not collected on the race of individual administrators, but garden staff in general are largely white (Raven, 2015; Redman, 2011). Although nine out of 10 rural areas in the United States have experienced increases in racial and ethnic diversity between 1990 and 2010, many white people rarely encounter people of color on a regular basis (Lee et al., 2012). There is evidence that increased contact between groups can lessen bias (Dobbin & Kalev, 2016; Godsil et al., 2014). It is

possible urban administrators' increased contact with people of color allows them to recognize structures of privilege in public horticulture that rural administrators don't see.

There are many studies that show in order to be effective, diversity and inclusion efforts must come from the leadership of an organization (Wolcheck et al., 2009; Bartlett, 2003; Dobbin & Kalev, 2007)⁵. One important indicator of an organization's commitment to diversity is to diversify the leadership itself (Jayne & Dipobye, 2004). Three administrators reported uncertainty on how to increase racial diversity in their internship programs, and multiple administrators were unclear on the garden's human resources policy on race and hiring or selection. Non-profit employees are often overworked (Kanter & Sherman, 2016; Kunreuther & Thomas-Breitfeld, 2017), and study of Fortune 1000 companies found that 41% of managers say they are too busy to implement diversity initiatives (Rezvani, 2015). Prioritization of diversity and inclusion and guidance from garden leadership would empower internship administrators to increase diversity and inclusivity in their programs.

Diversity and Inclusion Policy

⁵ For more information, see Tracy Qiu's master's thesis on racial diversity in public garden leadership from the University of Delaware (Qiu, 2017).

Diversity policy often begins in response to or in order to prevent discrimination lawsuits, but programs that focus only on protecting themselves legally do not get the full benefits of a diverse and inclusive organization (Dobbin & Kalev, 2016). Research on environmental NGOs shows that for the 39% of organizations with diversity plans, they “consist(ed) primarily of broad statements about the need to diversify but without concrete goals, programming, or incentives — positive or negative — for managers and staff to comply.” (Beasley, 2017). Many diversity policies focus solely on representation, hiring people of color without considering if the workplace culture allows them to succeed (Llopis, 2017). Although most administrators interviewed for this study worked at gardens that had diversity and inclusion policy, the existence of a written policy alone did not translate into a diverse or inclusive organization. Diversity is most accepted in organizations when both structured (such as a written policy) as well as held as a general, informal value (Cox and Tung 1997).

A framework for increasing diversity and inclusion in an organizational culture that has proved successful in the corporate world is Thomas and Ely’s integration-and-learning framework (Beasley, 2017). Integration-and-learning framework lifts up the different understandings, experiences, and abilities employees from difference cultural identity groups bring to an organization. These differences are considered “valuable resources that the work group can use to rethink its primary tasks and redefine its markets, products, strategies, and business practices in ways that will advance its mission” (Ely & Thomas, 2001). This framework takes a fundamentally different

approach from the idea of diversity as just representation. An organization's willingness to learn from difference means people from underrepresented groups report feeling more respected, and organizations are better able to retain⁶ employees (Thomas & Ely 1996).

The most commonly used diversity strategies do not help increase representation of people of color in United States companies (Dover et al., 2014; Dobbin & Kalev, 2016). Some diversity strategies, such as grievance systems, ironically lead employees to believe the company is fair and reduce the detection of discrimination. (Dover et al, 2014). Mandatory diversity training is another commonly used diversity strategy, (Dobbin & Kalev, 2016) but research shows it can often backfire, and lead to resentment and anger on the part of participants (Anand & Winters, 2008).

The most effective diversity programs begin with a shared organizational agreement on what diversity means (Beasley, 2017), and emphasize positive, as opposed to

⁶ A study by the Level Playing Field Institute found the annual cost of employees leaving their jobs due to workplace bias is massive (Level Playing Field Institute, 2007). The costs involved with hiring a new employee including recruitment, training, as well as lost productivity, which can range from 30 to 150 percent of an employee's salary (Deloitte, 2008; Bliss, 2005). This employee turnover does not receive the amount of attention given to multimillion dollar lawsuits, but employers lose more from employee turnover due to bias annually than the cumulative settlements of all sex and race based lawsuits reported by the Equal Employment Opportunity Commission from 1997 to 2006 (Level Playing Field Institute, 2007).

punitive, actions (Dobbin & Kalev, 2016). Engaging managers in activities such as recruiting and mentoring, increasing contact between groups, and increasing social accountability are diversity strategies found to be effective (Dobbin & Kalev, 2016). Designated diversity managers are another component of diversity and inclusion programming that has been shown to be effective (Taylor, 2014 b; Kalev et al., 2006; Dobbin & Kalev 2007), although only 26 and 13 percent of environmental NGOs and foundations have diversity managers in place (Beasley, 2017). Diversity training can also be helpful when voluntary, not mandatory (Dobbin & Kalev, 2016). Employees of environmental organizations find the most useful trainings to occur multiple times, discuss power, privilege, and multiple identities, be available to all members of the organization, and focus on building employees' tolerance for uncomfortable conversations (Taylor, 2014 b).

Two urban administrators reported having few interns of color until they took positive actions (working with the local schools and recruiting from racially diverse organizations) to increase diversity and inclusion at the garden. Gardens have much to learn from one another. Professional organizations such as the American Association of Public Gardens, specifically through their Diversity and Inclusion committee, can help facilitate discussions between gardens to share strategies for success.

Intern Perspectives on Race

Intern's self-perception of race and how much they identified with any particular racial group varied widely. The identity of an individual does not consist of merely one culture or trait. Intersectional theory states human identity is constructed of multiple separate identities such as gender, race, sexual orientation, and social class, that intersect with one another to create a unique, complex whole (Collins, 2015). Interns felt differently about the role race played in their lives and their internship experience. Although most (77%) described the staff and location of the garden as not diverse, some interns described this as difficult for them, while other interns did not. This indicates there is not one "intern of color" experience. Assumptions about an individual intern's identity or experience based on appearance alone can easily prove inaccurate.

Sixty-six percent of interns reported specific personal stories about racially charged and discriminatory incidents. Public garden interns are obviously not alone in experiencing racism. Sixty-four percent of black people surveyed by Pew Research Center believed black people were treated less fairly than white people were at work, as compared with only 22% of white people (Pew Research Center, 2016). Interns described many of the racially charged incidents as "unintentional" or "unimportant". These "unintentional" or "unimportant" incidents can be categorized as microaggressions. Microaggressions are defined as "brief and commonplace actions or words that are subtle examples of bias. Microaggressions can be intentional or unintentional, and often communicate negative feelings towards people of color."

(David Binder Research, MTV, 2014). Microaggressions are acts of covert racism (Sue et al., 2007), and 58% of millennials of color reported that microaggressions are a personal problem for them (David Binder Research, MTV, 2014).

A third of interns described feeling as if they represented their race for garden staff and visitors. This took different forms, and was more of an issue for some interns than for others. One intern expressed a desire to serve as a role model for students of color visiting the garden, while another described needing to be perfect to prove herself to garden staff. Research of over 4,000 nonprofit workers found 36% of people of color experienced stress from being called on to represent a specific community (Kunreuther & Thomas-Breitfeld, 2017). In 2007, more than 2 million American workers left their jobs due to workplace unfairness, and one of the most often reported reasons for quitting was being asked to attend extra recruiting or community related events because of one's race, gender, religion or sexual orientation (Level Playing Field Institute, 2007). It is important to treat interns of color as unique individuals and not tokens representing their particular racial group. While some individuals may feel comfortable serving as role models or explaining their views as a member of a particular group, this is not the case for every individual, and it should not be the responsibility of people of color. Administrators can help by fostering discussion, providing a forum for individuals of color to speak, and listening.

Racial Division of Labor

Racial division of labor in non-profits and museums is well documented; most museum employees of color work in security and facilities, with 84% of the jobs associated with the intellectual and educational mission of museums held by non-Hispanic white staff (Vincent & Klein, 2015; Schonfeld & Westermann, 2015; ASTC-ACM 2011 Workforce Survey). Six out of nine interns reported a racial division of labor at their gardens, as compared with one out of nine administrators. Data was not collected on the race of individual administrators, but public garden staff in general are largely white (Raven, 2015; Redman, 2011; Qiu, 2017). Peggy McIntosh popularized the phrase “white privilege” in the late 1980s to describe the advantages white people are given by a racist society (McIntosh, 1988). Privilege allows white people to assume their advantages and experiences are universal, and gives white people the freedom not to notice their lack of knowledge about the experiences of people of color (Kendall, 2002). White administrators may not notice a segregation of labor at their gardens due to this lack of awareness.

Workplaces send situational cues to employees that inform the employee’s assessment if their identity group is valued and accepted or not (Walton et al., 2015). Numeric underrepresentation is described as one such signal that can, for some, raise concerns such as “Will I be able to represent my group well? Will I be able to disprove negative stereotypes?” (Walton et al., 2015). Racial division of labor could also serve as a cue

that an organization does not believe people of color can do certain jobs, or perhaps does not promote people of color. Racial division of labor is an issue that should be addressed by garden leadership through diversity and inclusion initiatives and structural changes at the garden. On an individual level, garden staff have a responsibility to recognize their own privilege and what they might not be seeing.

Emotional and Material Support

Staff Support

All interns credited the success of their internships to the support of the garden staff, although 55% wished for additional staff support. Professional and personal support from garden staff is almost certainly important to all interns, both white and of color. Mentorship has been found to be important to environmental science students and millennial museum workers of color (Taylor, 2007; Barnett, 2017), and high-quality mentoring is positively associated with intern interest in permanent employment (Hergert, 2009). Sixty-six percent of interns had mentors who were garden staff. Mentor relationships were formed informally; no administrator or intern described a program where interns and mentors were connected with the explicit intention of forming a mentor relationship. Research on the role of race in mentoring shows “white men tend to find mentors on their own, women and minorities more often need help from formal programs...white male executives don’t feel comfortable reaching out informally to young women and minority men. Yet they are eager to mentor assigned

protégés, and women and minorities are often first to sign up for mentors” (Thomas, 1989). More formal mentorship programs may help interns, both white and of color, connect with mentors at their gardens.

Over half of the interns reported valuing the attention they received from upper level management. A survey from AgCareers.com, a job board for agriculture, food, and biotechnology, found contact with organizational leaders is one of the top five things interns want out of their internship (Johnson, B. 2017). Interaction with upper level management may help signal acceptance and belonging to interns of color.

As interns advance in their careers, public garden leaders can serve as sponsors. Sponsors are people, often in positions of power, that actively advocate for the professional advancement of their protégés, and research shows underrepresented minorities particularly benefit from sponsorship (Hewlett et al., 2010). Engineering leadership coach Lara Hogan says “When privileged people begin to see the systems of bias and privilege, their first instinct typically is to mentor those who haven’t benefited from the same privilege...But at its core, this instinct to mentor plays into the idea that those who are marginalized aren’t already skilled enough, smart enough, or ready for more responsibility or leadership. What members of underrepresented groups in tech often need most is opportunity and visibility, not advice.” Sponsors can bring up their protégé’s name in meetings, suggest them to represent the organization by writing blog posts or giving talks, put them forward for leadership roles and

generally lift up their work with the goal of helping them advance in their careers (Hewlett et al., 2010; Hogan, 2017).

In a research study of 65,679 undergraduates, global research and advisory firm Universum found the most important quality of an internship for 51% of students was an opportunity for full-time employment (Sjovall, 2017). The second and third most important traits were job orientation and training (42%), and a good employer reference (29%) (Smith, 2014). All interns participated in their internship with the goal of advancing their career. Although 44% of administrators reported helping their interns connect with potential employers, 33% of interns wanted more help finding a job, and 33% participated in multiple internships because they could not find employment. A study of over 4,000 nonprofit workers found nonprofit workers of color reported less access to the types of networks they thought would help them succeed as leaders (Kunreuther & Thomas-Breitfeld, 2017). Increased focus on networking and connecting interns with jobs could help more interns of color find employment in public horticulture.

Discussion of diversity and inclusion policy with administrators was almost exclusively about selection and recruitment, not support or retention of interns or staff. Research found public garden leaders of color “require support for additional emotional labor caused by micro-aggressions, discrimination, isolation, and fatigue in the work environment” (Qiu, 2017). Public garden leaders of color suggested a variety

of support strategies, including networking with other leaders of color, dedicated time during the workday for leaders of color to mentor emerging professionals, diversity training, and zero- tolerance policies of abusive and discriminatory language for both staff and volunteers (Qiu, 2017). Diversity and inclusion policy can help institute these strategies.

Family Support

Traditional career theories have been developed by white males, and there are few career theories that are useful for all genders, cultural, and socioeconomic groups (Brown, 2002). Cultural context is important to understanding how individuals choose a career. Newer paradigms of career counseling take a more comprehensive view of how individuals make career decisions, including the importance of family in the decision-making process (Bowman, 1995). A potential barrier for potential interns of color is their families' lack of awareness and negative opinion of horticultural careers. Seventy-seven percent of interns interviewed for this study reported their families did not understand their career interest in horticulture. Similarly, research found college students of color majoring in natural resources faced family pressure to pursue different career paths (Haynes & Jacobson, 2015). The fact that interns pursued internships without the full support of their families may be indicative of how strongly they felt about horticulture.

Although interns interviewed believed their families were not supportive of their interest in horticulture as a career path, 55% of interns felt their families were supportive of their participation in the internship. Fifty-five percent of interns reported it was important to their parents that they get paid for their internships. Increased outreach to parents that highlights the career opportunities available in horticulture as well as the financial benefits of participating in an internship could help gain family support. Familial support is especially relevant as most interns interviewed were dependent on their families for financial assistance during the internship (see “Remuneration” section). Lack of family support and familial attitudes about pay and internships are likely important for all interns, both of color and white.

Remuneration

Eighty-eight percent of gardens paid their interns, and 81% of interns reported they were paid for their internship. These numbers are in line with national research that shows 85% of public garden internships are paid (Trader et. al. 2014). Administrators generally felt interns were receiving a fair wage, but 88% of interns had financial concerns during the internship. The disconnect between administrators and interns over pay is an issue that extends beyond public horticulture. Employers generally underestimate the importance of pay for their employees (Rynes, et al., 2004).

Most prospective interns that are recent graduates seek an internship in a big city, with 24.5% interested in New York City, followed by Los Angeles, San Francisco, and Chicago (Poppick, 2015). Money magazine calculated the average cost of living in these five cities, and found a 10-week internship costs approximately \$6,200 (Mondalek, 2016). The average hourly rate of pay reported by interns in this study (without housing benefit) was \$10.50, meaning a 10-week internship, working 40 hours a week, would pay them \$4,200, before taxes. Intern wages have stalled, despite the economic recovery, and interns in 2016 were making 72 cents an hour less than in 2009 (Mondalek, 2016). Most interns were dependent on financial support from their families to make ends meet while participating in the internship. Additionally, 44% of interns took their internship in part because they could not find a job.

Financial concerns are relevant for all interns, both of color and white. A greater awareness on the part of administrators of the importance of pay to interns, and an increase in pay or amenities such as housing could be helpful for increasing intern satisfaction and making internship programs more accessible.

Internship Outcomes

Although this research focuses on interns of color, results on internship outcomes may be true for white interns as well. Interns were overall very satisfied with their

internship experiences. Research on students' workplace learning outcomes shows the social features of the organization and the structure of the learning experience are more important to student outcomes than student-related individual factors, such as motivation (Virtanen et al., 2014). The structure of internship programs may play a large factor in the positive experience felt by interns. Interns overwhelmingly wanted to stay in the field of horticulture or public horticulture after their internships.

Internships improve students' crystallization of their vocational interests and values (Hora et al., 2017). This indicates the positive experiences most interns had at their internships contributed to their interest in continuing to work in horticulture.

All interns that completed horticultural internships believed they gained horticultural skills, and administrators (with the exception of the three urban administrators of job skills centered programs) reported horticultural skills were the main focus of the internship. However, evidence shows the majority of skills gained in an internship are non-specific and transferable (Busby, 2003). Interns reported soft skills⁷ as valuable learning outcomes at the same rate as horticultural skills. Ninety-three percent of employers surveyed by research company Wonderlic said an applicant's soft skills were an "essential" or "very important", and there is a rising demand for soft skills in

⁷ Oxford Dictionaries defines soft skills as "personal attributes that enable someone to interact effectively and harmoniously with other people" (Oxford, 2018).

the workplace (Moss & Tilly, 2001). The most frequently referenced soft skills were critical thinking, interpersonal skills, professional behavior, self-management skills, teamwork skills, and written communication skills (Wonderlic, 2016). Intentionally teaching soft skills could improve outcomes for both the garden as an employer as well as for interns.

Forty-four percent of interns wanted more flexible curriculum. More flexible working conditions were also a top priority for 19% undergraduates surveyed nationwide (Smith, 2014), and a study of 122 intern–supervisor dyads showed organizations that appeared to be more open to interns' creativity increased interns' application intentions (Zhao & Liden, 2011). Increased flexibility with curriculum may add to intern satisfaction and increase their desire to work at the place of their internship.

An internship gives an employer a chance to assess the intern for potential employment, a benefit to both intern and employer. Most interns wanted to work for at least one of the gardens where they interned, and 44% were eventually hired at the garden where they completed an internship. There is evidence participation in internships does lead to eventual permanent employment (Callanan & Benzing, 2004; Knouse et al., 1999), and one study showed 60% of internships turn into job offers from the host organizations. (Zhao & Liden, 2011).

Recommendations for Public Garden Administrators

1. Establish holistic organizational efforts to cultivate diversity and inclusion at gardens

Leadership should champion and prioritize a clearly articulated vision for diversity and inclusion that focuses on honoring the different understandings, abilities, and experiences racially diverse employees bring to the organization. Diversity and inclusion initiatives should concentrate on positive activities such as voluntary diversity training, mentorship programs, and support for interns and employees of color. Initiatives should include a diversity manager or diversity committee.

2. Design internship program structure to improve diversity and inclusion

Partnerships with community organizations or government can help gardens connect with racially diverse potential interns and create programs that serve both garden and community needs. Job skills focused internships with the goal of community outreach are more inclusive than internships that only engage people already involved with public horticulture.

3. Change recruitment and marketing strategies

Recruit at a wider range of academic institutions including HBCUs, community colleges and state schools, in person if possible. Recruit via additional majors besides horticulture. Focus recruitment efforts on people of color already involved in nature

based activities that may not generally be described as “horticulture”. Leverage organizational partnerships and contacts to connect with people of color. Promote internships to potential intern’s families in a way that highlights pay and career opportunities. Emphasize to potential interns how a career in public horticulture makes a difference in the community and wider world. Think creatively about how internship is described; use more widely known and understood terms than “horticulture”.

4. Increase support of interns

Ensure interns feel welcomed and known by institutional leaders. Promote mentor and sponsor relationships for interns via dedicated coordinator or mentorship program at garden. Increase focus on job placement and networking. Increase remuneration if possible. Specifically teach soft skills and consider implementing more flexible curriculum. Increased support benefits all interns, not just interns of color.

5. Listen to and learn from people of color

Avoid assumptions about the identity or experiences of people of color. This research has demonstrated some interns of color felt isolated, frustrated and the need to represent their race. Although there were some common experiences among interns, there is not one “intern of color” perspective. Listening to and treating people of color as individuals is critical. Examination of personal privilege as well as structures of power at the garden and wider world can help create a more inclusive environment.

Summary

Internship programs have great potential to cultivate a racially diverse next generation of public horticulture employees. To gain the full benefits of a racially diverse workforce, public gardens need to build their capacity to foster diverse viewpoints and value difference. This effort must come from the top down. Public garden leaders have a responsibility and an opportunity to champion diversity and inclusion at their organizations. Different strategies will work at different organizations, but specifically recruiting and supporting people of color, including building meaningful pathways to promotion, will bring new perspectives and talents to the field. This research focuses on racial diversity, but creating a more inclusive organizational culture will help recognize and honor what all employees have to share.

Talking about issues of race and structural inequality can be difficult for everyone. Actively listening to people of color and examining their own privilege can help white people learn what they don't know. In this way, the field of public horticulture can continue to grow and change like the landscapes it nurtures.

Study Limitations

This study had several limitations worth noting. The small sample size of this study affects the breath of data available. It is likely that the sample is not representative of the populations of administrators and interns of color.

All interns in the study were female. Interns were contacted in the order they were referred by administrators, and the lack of male participants was not intentional. It is possible the study is missing important perspectives on male experiences of public garden internships.

Part of the overwhelmingly positive experience reported by interns may be connected to the way interns were initially contacted. Interns with a positive experience at their internship would be more likely to maintain their relationships with their supervisors, and seven out of nine interns were referred by the administrator of their internship. At the time of their interviews, four of the nine interns worked at the garden where they had participated in an internship. This continuing connection also indicates a positive experience with the garden. Several interns of color did not respond to administrator attempts to contact them for the study. It is possible interns with negative experiences did not want to discuss their internships.

The primary researcher in this study is white, and brings her own inherent perspectives, lack of experience, and biases to the research. The responses of study participants may also be affected by the identity of the interviewer.

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Appendix A

INSTITUTIONAL REVIEW BOARD APPROVAL



RESEARCH OFFICE

210 Hulihan Hall
University of Delaware
Newark, Delaware 19716-1551
Ph: 302/831-2136
Fax: 302/831-2828

DATE: September 26, 2016

TO: Alice Edgerton
FROM: University of Delaware IRB

STUDY TITLE: [895176-1] Racial Diversity in Public Garden Internship Programs

SUBMISSION TYPE: New Project

ACTION: APPROVED
APPROVAL DATE: September 26, 2016
EXPIRATION DATE: September 24, 2017
REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # (6,7)

Thank you for your submission of New Project materials for this research study. The University of Delaware IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please remember that informed consent is a process beginning with a description of the study and insurance of participant understanding followed by a signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the signed consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All SERIOUS and UNEXPECTED adverse events must be reported to this office. Please use the appropriate adverse event forms for this procedure. All sponsor reporting requirements should also be followed.

Please report all NON-COMPLIANCE issues or COMPLAINTS regarding this study to this office.

Please note that all research records must be retained for a minimum of three years.

Based on the risks, this project requires Continuing Review by this office on an annual basis. Please use the appropriate renewal forms for this procedure.

If you have any questions, please contact Nicole Farnese-McFarlane at (302) 831-1119 or nicolefm@udel.edu. Please include your study title and reference number in all correspondence with this office.

Appendix B

INFORMED CONSENT TO PARTICIPATE IN RESEARCH: ADMINISTRATORS

University of Delaware

IRB Approved From: 09/26/2016 to: 09/26/2017

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

Title of Project: Racial Diversity in Public Garden Internship Programs

Principal Investigator(s): Alice Edgerton

You are being invited to participate in a research study. This consent form tells you about the study including its purpose, what you will be asked to do if you decide to take part, and the risks and benefits of being in the study. Please read the information below and ask us any questions you may have before you decide whether or not you agree to participate.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to gather information about the experiences and perceptions of individuals that identify as members of an underrepresented group in public horticulture internship programs as well as administrators of public horticulture internship programs. This information will be used in Alice Edgerton's Master of Science in Public Horticulture thesis.

You will be one of approximately 40 participants in this study. You are being asked to participate because you have worked as an administrator for a public horticulture internship program. If you have not worked as an administrator of a public horticulture internship program, you are ineligible to participate in this study. The interview will be recorded. If you do not want to be taped, you will not be able to participate in the research study.

WHAT WILL YOU BE ASKED TO DO?

As part of this study you will be interviewed about the public horticulture internship program and hiring practices of the organization you have worked for.

- The interview will take place either in person at a location decided upon by both you and the interviewer, or over the phone or internet
- Your participation in this study will involve one interview that will last from an hour up to an hour and a half

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

Possible risks of participating in this research study include:

- Discomfort and/or distress when discussing uncomfortable subjects or events

WHAT ARE THE POTENTIAL BENEFITS?

You will not benefit directly from taking part in this research. However, the knowledge gained from this study may contribute to understanding of the issues surrounding racial diversity at public horticulture internship programs.

Page 1 of 3

Participant's Initials _____

HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO MAY KNOW THAT YOU PARTICIPATED IN THIS RESEARCH?

The confidentiality of your records will be protected to the extent permitted by law. Your research records may be viewed by the University of Delaware Institutional Review Board, which is a committee formally designated to approve, monitor, and review biomedical and behavioral research involving humans. Records relating to this research will be kept for at least three years after the research study has been completed.

- Your confidentiality will be maintained by the use of code numbers and/or pseudonyms
- A digital list linking your code number or pseudonym to your identity will be kept on a private, password protected server accessible only to study personnel
- Research results will be transcribed, and reported using direct quotes and descriptions of themes uncovered in the interviews
- The findings of this research may be presented or published. If this happens, no information that gives your name or other details will be shared
- The research includes an audio recording of the interview. Your name will not be mentioned in the audio recording. Recordings will be erased after three years. Study personnel will be the only individuals with access to the recordings

USE OF DATA COLLECTED FROM YOU IN FUTURE RESEARCH:

The research data we will be collecting from you during your participation in this study may be useful in other research studies in the future. Your choice about future use of your data will have no impact on your participation in this research study. Do we have your permission to use in future studies data collected from you? Please write your initials next to your preferred choice.

_____ YES _____ NO

WILL THERE BE ANY COSTS TO YOU FOR PARTICIPATING IN THIS RESEARCH?

There are no costs associated with participating in the study.

WILL YOU RECEIVE ANY COMPENSATION FOR PARTICIPATION?

There is no compensation for participation in this study.

DO YOU HAVE TO TAKE PART IN THIS STUDY?

Page 2 of 3

Participant's Initials _____

Taking part in this research study is entirely voluntary. You do not have to participate in this research. If you choose to take part, you have the right to stop at any time. If you decide not to participate or if you decide to stop taking part in the research at a later date, there will be no penalty or loss of benefits to which you are otherwise entitled. Your decision to stop participation, or not to participate, will not influence current or future relationships with the University of Delaware or Longwood Gardens.

If, at any time, you decide to end your participation in this research study, please inform our research team by telling the investigator.

WHO SHOULD YOU CALL IF YOU HAVE QUESTIONS OR CONCERNS?

If you have any questions about this study, please contact the principal investigator, Alice Edgerton, at edgeral@udel.edu or (302) 831-2517. The academic advisor for this research study is Dr. Brian Trader, who may be contacted at (610) 388-5428, or at btrader@udel.edu.

If you have any questions or concerns about your rights as a research participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

Your signature on this form means that: 1) you are at least 18 years old; 2) you have read and understand the information given in this form; 3) you have asked any questions you have about the research and the questions have been answered to your satisfaction; and 4) you accept the terms in the form and volunteer to participate in the study. You will be given a copy of this form to keep.

Printed Name of Participant

Signature of Participant

Date

Person Obtaining Consent
(PRINTED NAME)

Person Obtaining Consent
(SIGNATURE)

Date

OPTIONAL CONSENT TO BE CONTACTED FOR FUTURE STUDIES:

Do we have your permission to contact you regarding participation in future studies? Please write your initials next to your preferred choice.

_____ YES

_____ NO

Page 3 of 3

Participant's Initials _____

Appendix C

INFORMED CONSENT TO PARTICIPATE IN RESEARCH: INTERNS

University of Delaware

IRB Approved From: 09/26/2016 to: 09/26/2017

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

Title of Project: Racial Diversity in Public Garden Internship Programs

Principal Investigator(s): Alice Edgerton

You are being invited to participate in a research study. This consent form tells you about the study including its purpose, what you will be asked to do if you decide to take part, and the risks and benefits of being in the study. Please read the information below and ask us any questions you may have before you decide whether or not you agree to participate.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to gather information about the experiences and perceptions of individuals that identify as members of an underrepresented racial group in public horticulture internship programs, as well as administrators of public horticulture internship programs. This information will be used in Alice Edgerton's Masters of Science in Public Horticulture thesis.

You will be one of approximately 40 participants in this study. You are being asked to participate because you have participated in a public horticulture internship program within the last five years, and are someone who identifies as a member of an underrepresented racial group in the field of public horticulture. If you have not participated in a public horticulture internship program within the last five years or do not identify as a member of an underrepresented racial group in the field of public horticulture, you are ineligible to participate in this study. The interview will be recorded. If you do not want to be taped, you will not be able to participate in the research study.

WHAT WILL YOU BE ASKED TO DO?

As part of this study you will be interviewed about your background, the public horticulture internship program you have participated in, your experiences and satisfaction with that internship, your perceptions of workplace diversity and your career goals.

- The interview will take place either in person at a location decided upon by both you and the interviewer, or over the phone or internet
- Your participation in this study will involve one interview that will last from an hour up to an hour and a half

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

Possible risks of participating in this research study include:

- Discomfort and/or distress when discussing uncomfortable subjects or events

WHAT ARE THE POTENTIAL BENEFITS?

You will not benefit directly from taking part in this research. However, the knowledge gained from this study may contribute to understanding of the issues surrounding racial diversity at public horticulture internship programs.

HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO MAY KNOW THAT YOU PARTICIPATED IN THIS RESEARCH?

HOW WILL CONFIDENTIALITY BE MAINTAINED? WHO MAY KNOW THAT YOU PARTICIPATED IN THIS RESEARCH?

The confidentiality of your records will be protected to the extent permitted by law. Your research records may be viewed by the University of Delaware Institutional Review Board, which is a committee formally designated to approve, monitor, and review biomedical and behavioral research involving humans. Records relating to this research will be kept for at least three years after the research study has been completed.

- Your confidentiality will be maintained by the use of code numbers and/or pseudonyms
- A digital list linking your code number or pseudonym to your identity will be kept on a private, password protected server accessible only to study personnel
- Research results will be transcribed, and reported using direct quotes and descriptions of themes uncovered in the interviews
- The findings of this research may be presented or published. If this happens, no information that gives your name or other details will be shared
- The research includes an audio recording of the interview. Your name will not be mentioned in the audio recording. Recordings will be erased after three years. Study personnel will be the only individuals with access to the recordings

USE OF DATA COLLECTED FROM YOU IN FUTURE RESEARCH:

The research data we will be collecting from you during your participation in this study may be useful in other research studies in the future. Your choice about future use of your data will have no impact on your participation in this research study. Do we have your permission to use in future studies data collected from you? Please write your initials next to your preferred choice.

_____ YES _____ NO

WILL THERE BE ANY COSTS TO YOU FOR PARTICIPATING IN THIS RESEARCH?

There are no costs associated with participating in the study.

WILL YOU RECEIVE ANY COMPENSATION FOR PARTICIPATION?

There is no compensation for participation in this study.

DO YOU HAVE TO TAKE PART IN THIS STUDY?

Page 2 of 3

Participant's Initials _____

Taking part in this research study is entirely voluntary. You do not have to participate in this research. If you choose to take part, you have the right to stop at any time. If you decide not to participate or if you decide to stop taking part in the research at a later date, there will be no penalty or loss of benefits to which you are otherwise entitled. Your decision to stop participation, or not to participate, will not influence current or future relationships with the University of Delaware or Longwood Gardens.

If, at any time, you decide to end your participation in this research study, please inform our research team by telling the investigator.

WHO SHOULD YOU CALL IF YOU HAVE QUESTIONS OR CONCERNS?

If you have any questions about this study, please contact the principal investigator, Alice Edgerton, at edgeral@udel.edu or (302) 831-2517. The academic advisor for this research study is Dr. Brian Trader, who may be contacted at (610) 388-5428, or at btrader@udel.edu.

If you have any questions or concerns about your rights as a research participant, you may contact the University of Delaware Institutional Review Board at hsrb-research@udel.edu or (302) 831-2137.

Your signature on this form means that: 1) you are at least 18 years old; 2) you have read and understand the information given in this form; 3) you have asked any questions you have about the research and the questions have been answered to your satisfaction; and 4) you accept the terms in the form and volunteer to participate in the study. You will be given a copy of this form to keep.

Printed Name of Participant

Signature of Participant

Date

Person Obtaining Consent
(PRINTED NAME)

Person Obtaining Consent
(SIGNATURE)

Date

OPTIONAL CONSENT TO BE CONTACTED FOR FUTURE STUDIES:

Do we have your permission to contact you regarding participation in future studies? Please write your initials next to your preferred choice.

_____ YES

_____ NO

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Participant's Initials _____

Appendix D

STRUCTURED INTERVIEW GUIDES

Introduction for Both Interns and Administrators

Thank you for volunteering to take part in this interview. You will be providing valuable information by answering the questions I'm going to ask during the next 30 minutes, approximately. The information you provide will become part of my master's thesis about racial diversity in public garden internship programs. All the information you provide will be confidential and used for research purposes only. Your name will not be used, and any personal information you provide will be coded so it is not associated with you. I will be audiotaping our discussion for note-taking purposes only. Do you have any questions before we begin?

Administrator Interview Guide

1. Why does your institution have an internship program? If possible, rank the top three reasons.
2. What would you say is the "mission" of the internship program?
3. How does your internship program help your organization?
4. How does your internship program help the interns who participate?
5. What specific learning experiences does your garden create for the intern?

Please describe.

6. What skills do you expect your intern to acquire from the internship? What evidence does your organization have to indicate that these skills are acquired by an intern?
7. How are your intern's experiences evaluated?
8. How do most interns find your program?
9. How do you recruit? Are there any other organizations you partner with?
10. What criteria does your organization use when selecting interns?
11. To what extent does your organization, as a whole, foster recruitment and retention of a diverse staff? Why do you say this? Please explain.
12. Does your organization have formal or informal policies regarding diversity in hiring?
13. To what extent are there any factors which inhibit diversity within your internship program or its recruitment? Please explain.
14. Do you pay your interns? If so, how much? What do you see as other benefits?
15. To what extent are financial considerations a factor for interns when they apply/accept internship positions? How do you determine this?
16. Is there a formal mentorship component to the internships? If so, please describe it.
17. Is there anything related to your internship program and diversity opportunities for interns that I haven't asked, which I should have asked? If so, what?

About You

1. What got you into horticulture in the first place, and why public horticulture?
2. How old are you? How old were you when you did your internship?
3. What is your educational background? Do you have any plans to go back to school?

Your Internship Program

1. Where did you do your internship? How long did it last?
2. How did you learn about this internship program?
3. Why did you decide to apply to this internship program? Please explain all pertinent reasons.
4. Were there other internship programs you learned about? Did you apply to them? Have you done other internships?
5. How much did you know about public horticulture before your internship, on a scale from 1 to 5, where 1 = no knowledge and 5 = very knowledgeable?
6. How did (do) your family and other important people in your life feel about your decision to the internship? Were they supportive?
7. To what extent did financial considerations play a role in your decision to pursue an internship? Did you refuse any internships because of financial considerations? If so, why?
8. Is (was) your internship a paid position? How much were (are) you paid?

Race and Ethnicity

1. Racially and ethnically, what do you identify as?
2. Where did you grow up?
3. What was it like to grow up __WHATEVER IDENTITY__ in __WHATEVER PLACE__? (THEN: did you hang out with racially mixed groups of people for school, at home etc.)
4. At your internship, what would you say the racial identity was of most people that worked and visited the garden?
5. How did you feel about that?

Internship Satisfaction

1. How satisfied are you with your internship experience, on a scale of 1 to 5, where 1 = not satisfied at all and 5 = extremely satisfied?
2. What are the top three reasons you gave the number you did to that last question?
3. What would have had to change to make you MUCH MORE satisfied with your internship?
4. Did/has the garden staff set you up to succeed at the internship? What were/are some factors that helped facilitate success?
5. What was the hardest thing about doing the internship?
6. Was there a mentor or role model for you in your internship program, or outside your internship program? If so, who was he or she?

7. What are the five most important skills you learned from your internship experience? Why do you think these skills are important?
8. How much do you now know about public horticulture, on a scale from 1 to 5, where 1 = no knowledge and 5 = very knowledgeable?
9. Do you work, or intend to work, in public horticulture now or in the future? Why or why not? Please explain.