

Articoli/Articles

NURSES CARE, DOCTORS CURE: THE RACIAL
CONSTRUCTION OF WORK FOR BLACK MEN
IN GENDERED OCCUPATIONS

ADIA HARVEY WINGFIELD

Washington University in St. Louis, Missouri, USA

SUMMARY

NURSES CARE, DOCTORS CURE

The research on gender and work documents that occupations are defined as more gender-appropriate for men or for women. Nursing is seen as a “woman’s job” while being a doctor yields higher economic rewards and status. Most of the research in this area, however, fails to consider how racial minority status affects the performance of duties associated with gendered occupations. I examine how gender and race shape the ways that caring and curing are done in gendered occupations of nursing and medicine. How do black male nurses and doctors construct ideas about caring and curing in their respective professions? These findings can help us understand additional factors that shape the ways medicine and nursing are practiced by minority groups who may experience their professional work differently from those in the majority.

Introduction

Despite women’s rapid advancement into the paid labor force over the last several decades, researchers note that gender differences in work and employment still persist. One of the most notable areas where this occurs is in the gender composition and culture of various jobs. Many jobs and industries remain sex segregated, with

Key words: Gendered occupations - Black professionals - Nurses Care

women clustered in lower paying, lower status positions relative to their male counterparts. Researchers note that these patterns often perpetuate gender inequalities at work and inform the expectations attached to various jobs¹.

Within the health care industry, nursing and medicine are two clear examples of occupations that carry with them distinctive ideas about suitable workers, tasks, and responsibilities. The nursing profession is predominantly white and female, with lower pay, more strictly defined responsibilities, less autonomy, and lower status. In contrast, even despite a recent influx of women into this field, medicine remains a predominantly white male profession where workers enjoy higher wages, status, and prestige than their peers in nursing². These differences extend to job expectations, where (mostly female) nurses are frequently tasked with and expected to be caring, nurturing, and deferential to doctors; while (mostly male) doctors are expected to cure and take on primary responsibility for many aspects of patient wellness³.

In this paper, I consider how race and gender work together to complicate these occupational expectations. Specifically, I examine how black men in nursing and medicine negotiate gendered job expectations that are attached to their occupations. Black men are in the minority in both fields due to race, but are in the gender majority in the medical profession. Thus, in this paper I address how gender and race work in concert to shape the ways they engage in curing and caring in gendered occupations.

Literature Review

In her classic theory of gendered organizations, Acker notes that bureaucracies are often misconstrued as neutral, objective structures⁴. However, she argues that organizations are actually gendered in ways that have implications for the workers, roles, and jobs that exist within them. Following this theory of “gendered organizations,” she contends that different occupations within the same industry are often

subject to implicitly and explicitly defined roles, assumptions, and divisions of labor that reproduce gendered hierarchies and divisions. Researchers have documented this with studies of the ways certain occupations are gendered in ways that offer opportunities for men while perpetuating multiple challenges for women. Jennifer Pierce's classic study of the legal profession explores the ways that attorneys, paralegals, and legal secretaries are all subtly gendered occupations⁵. Her research demonstrates that implied job definitions and expectations are attached to each position. These reinforce traditional gender stereotypes, making it difficult for women attorneys to perform their work satisfactorily, while pressuring women across all professions in the legal field to model feminized behaviors such as deference and caretaking. Men, in contrast, were not expected to engage in these emotional behaviors, but were permitted (even encouraged) to display more masculinized emotions such as aggressiveness and belligerence, even when they worked in predominantly feminized occupations (legal secretaries and paralegals). Studies of gendered occupations have also considered other fields such as nursing, social work, education, and construction, with similar results⁶. Overall, the research in this area indicates that unspoken assumptions and expectations about jobs serve to reinforce gendered hierarchies by sorting women and men into different occupations and rewarding traditional gender behavior.

These studies also give insights into the ways that masculinity becomes embedded in various occupations. Behavioral attributes such as aggressiveness, assertiveness, and risk-taking are particularly encouraged and rewarded in jobs that are primarily performed by men. In her study of men in the construction industry, Paap finds that these traits are encouraged and help to maintain a dividing line between white male workers and the few men of color and women employed in this field. Pierce's research on the legal profession demonstrates that male attorneys performed a "Rambo" masculinity where they

were often belligerent and rude towards opposing counsel, peers, and subordinates. Another study of accountants shows that while the organizational culture matters in constructing masculine behavior, men in this profession are also permitted to express gendered emotions and behaviors⁷.

Importantly, these distinctions persist even when men are employed in female-dominated occupations. Williams' study of mostly white men working as nurses, social workers, librarians, and teachers finds that these men often disassociate themselves from the femininity associated with their profession by seeking ties to higher status men in their workplaces (i.e. doctors or principals). They also pointedly sought out more physical aspects of work, and while they described their relationships with female colleagues favorably, they also sought to establish distance from these women as a means of maintaining male privilege. Pierce also found that men working as paralegals and legal secretaries enjoyed more emotional flexibility than their female counterparts and were not expected to show the emotions of deference and caretaking required of women in this profession⁸.

Gender, Race, and Masculinity

Research has only recently begun to consider the implications of these gendered expectations for minority workers. Though previous studies assert that gendering occupations privileges men in various occupations, additional research indicates that this gendering is a racialized process. That is, minority men often do not benefit from the unspoken gendered expectations attached to jobs when it comes to advancement, promotion, or occupational stability. Instead, these gendered norms are subtly racialized in ways that primarily advantage white men, while in many cases men of color face difficulties conforming to these rules or seeing results because of them.

For Asian American men, common stereotypes that they are passive and nerdy shape their ability to adhere to masculinized norms attached

to white collar, professional occupations. For instance, Cheng finds that white men believe that management roles require men to be aggressive and domineering; thus Asian American men are seen as non-competitive and therefore unqualified for these types of occupations. Rosalind Chou documents that these stereotypes of Asian American men create difficulties at work in male-dominated professions like engineering and business, and Anthony Chen identifies various typologies of masculinity that Asian American men use to try to counteract the stereotypes that hinder their occupational advancement⁹.

In studies of black men working in the nursing profession, Wingfield has shown that in contrast to their white counterparts, these men rarely describe adopting or benefiting from traditional displays of masculinity. Black male nurses did not shun their female counterparts or the femininity associated with their profession. They also did not report close, affable ties with male doctors. Instead, they contended that due to the gendered racism they encountered in nursing, they endorsed the femininity associated with nursing because it allowed them to access their caring side and prove that despite opinions to the contrary, they really were capable, qualified, and good at nursing. They also reported that racial tensions made it difficult to perform masculinity by seeking close ties to (mostly male) doctors. Thus, for black men, implicit racial tensions and stereotypes made it difficult for them to adhere to the gendering of their profession¹⁰. These challenges are present for black men working in white male-dominated occupations as well. In fields like law and construction, white men are free to express the anger, belligerence, or aggressive understood to be suitable for these male-dominated occupations. However, black men working in predominantly male fields like law, banking, engineering, and medicine were reluctant to display irritation or frustration out of fear that they would be subject to stereotypes of the “angry black man.” These men felt that this cultural construction of out of control, dangerous black masculinity made expressions

of normative masculine behavior inappropriate and impossible for them. Thus, even in jobs where occupational norms legitimize traditional definitions of masculinity, racial stereotypes shape the extent to which black men are able to conform to these expectations¹¹.

In this study, I consider how the racialization of gendered job expectations informs practices of masculinity in two occupations in the health care field. I examine the ways that black men working as doctors and nurses negotiate the gendered expectations associated with their work, and the implications this has for their practices of curing and caring.

Research Design/Methodology

To conduct this study, I used data from two sources. One was a larger research project focusing on organizational change in the health care industry and the impact this change has on the racial work experiences of black professionals. Data collection consisted of intensive interviews with 25 black men and women working as doctors, nurses, technicians, or physician's assistants (PAs). 10 respondents worked as doctors, 11 as nurses, and 2 were technicians, and 2 were PAs. Respondents ranged from ages 25-77. Of the doctors, six were women, four were men. Nine of the eleven nurses interviewed were women. Both technicians and one of the two PAs were women. I located respondents using a snowball sample that began with personal contacts in the medical industry, and then included their personal and professional links.

Respondents were asked an array of questions about various changes in the health industry and how these changes may have impacted the everyday, routine aspects of their work as black professionals in the health care field. They discussed the changing gender composition of medicine and nursing, revisions to the MCATs, and of course, the Affordable Care Act (ACA). Interviews typically lasted about 90 minutes and were recorded and later transcribed. All respondents are identified by pseudonym to protect their anonymity.

The other source of data came from a study of black men in the nursing profession. This study consisted of interviews with 17 black male nurses in various subspecialties including oncology, ambulatory care, emergency, and surgery. Respondents here ranged in age from 30-51 and worked in suburban, urban, and rural care centers. They had varying degrees of experience in nursing, ranging from 5 to 26 years in the field. I found respondents by using snowball sampling in this case as well. Interviews in this project also lasted approximately 90 minutes, were audio recorded and later transcribed, and took place in my office or in coffee shops. Respondents were asked about their pathways into nursing; challenges they faced in the field; relationships with patients, colleagues, and supervisors; stereotypes about black men in nursing, and their short and long term career goals.

Findings

The findings indicate that for black men in these professions, racial dynamics contextualize the ways they do their work. Their experiences are largely racialized in multiple ways—interactions with colleagues and patients, motivations for working in health care, understandings of their role in the medical industry. It is within this racialized context that gender informs the ways that they engage in caring and curing.

The Racial Context of Work

Black doctors and nurses both described race-related challenges that structured their occupational lives. For black male nurses, these issues often included exclusion, marginalization, and distancing from mostly white female colleagues. Chris, a 51 year old oncology nurse, describes one instance where a coworker attempted to physically segregate him from other white women as he tried to get his instructions for the day's shift:

Adia Harvey Wingfield

She turned and ushered me to the door, and said for me to wait out here, a nurse will come out and give you your report. I stared at her hand on my arm, and then at her, and said, "Why? Where do you go to get your reports?" She said, "I get them in there." I said, "Right. Unhand me." I went right back in there, sat down, and started writing down my reports.

In this case, the nurse's attempt to remove him from other colleagues' presence evoked uncomfortable reminders of racial segregation and for Chris, highlighted the ways race and gender rendered him different from his white female coworkers.

Kendall recounts a similar story of being isolated from his colleagues on the job. He states:

[The staff] had nothing to do with me, and they didn't even want me to sit at the same area where they were charting in to take a break. They wanted me to sit somewhere else. [...] They wouldn't even sit at a table with me! When I came and sat down, everybody got up and left.

This obvious, overt example highlights the social-and in this case, physical-distance that Kendall felt from his white female peers. Distancing and marginalization were not exclusive to nurses. Black male doctors also discussed ways they felt isolated from their coworkers, in some cases due to intentional, overt practices. Nathan states:

When you're in a workplace and it's just Caucasians or non African-Americans, they don't tend to believe, or some of the things that happen, they don't believe happened but you know that it happens all the time. For example I had a patient complaint, and the complaint was, one of the supervisors came and said, "I want to tell you something. We had a patient complaint, some lady that you saw February of '08, she came in and she complained, she made a complaint." And I was like, "Why a year later?" And she said, "That's the strangest thing, she said that she requested a white doctor and there was a black doctor." And she was like, "Can you believe that?" And she was astonished! And I was like, "Yeah, I believe that. It happens all the time."

From Nathan's perspective, his white colleagues are unaware of the ways that race shapes his experiences in medicine in ways that are very different from theirs. They were not cognizant of the racial tensions he navigated on a regular basis as one of few black doctors in the hospital.

Kennard shared a similar account. He described a particularly painful experience during his time as a resident:

I was a chief resident at the university, and-this is actually one of my most painful memories of just being a physician, period. Some fellow is at the hospital impersonating a doctor, stealing supplies at a local hospital. Now I've been at that program for three years. I've been in everybody's face the whole time. If you're the chief resident obviously you're kind of the smartest guy and so you're doing the consults, you're pressing the flesh with other doctors. A secretary of the chief of medicine got it in her head that I was the guy who was the imposter. This is a true story. That I must have been that person stealing because she hadn't seen this black doctor before. So I came out of an attending's room one day and there's like thirty people outside and I just looked, I thought someone had had a heart attack or something. But the funny thing is they were actually looking at me because this woman was like, "That's the guy." And people went, "Are you crazy? That's Dr. Walcott. He's coming out of the chief resident's room." She said, "No, I saw him, he's here late." This is a real story. So I went over to her and said, "You know the funny thing is I've been doing the consults for three years but you've never looked at my face, which is okay. I'm invisible to you and that's not a big issue with me. But let me explain what is. I am going to talk to your boss and tell him how I feel about this."

Kennard goes on to describe the response when he informed the chief of medicine about the accusations leveled towards him:

And I did, and I said it was reprehensible. I called my chairman and the chairman chewed them all out. The interesting thing is some of the other attendings in the university, the dermatology attendings who were doing slides, and they said, "Oh man, did you hear this hilarious story that happened to Kennard? It was hilarious." And it wasn't hilarious, man. I mean

Adia Harvey Wingfield

I am a black person up here with just one other black person, the chairman, and I got accused of being an imposter thief physician stealing supplies. That's not funny.

The experience of being accused of theft was painful enough, but for Kennard, this was compounded by the fact that his colleagues made light of it and found it humorous. Incidents like this reinforce the sense of being marginalized and sidelined within the professions.

In other cases, black men nurses confronted doubts about their levels of skill, suitability, and preparedness for their profession. Many described interactions with patients and colleagues who assumed that they lacked the requisite skills and training for nursing. Describing one particularly memorable encounter with a patient, Richard stated:

I come [to work] in my white uniform, that's what I wear-being a Black man, I know they won't look at me the same, so I dress the part-I said good evening, my name's Richard, and I'm going to be your nurse. She says to me, "Are you from housekeeping?". [...] I've had other cases. I've walked in and had a lady look at me and ask if I'm the janitor.

Unlike white men nurses who are routinely assumed to be doctors or other higher status officials, it was not uncommon for patients to assume black men nurses filled lower status roles¹².

This process occurred for black male doctors as well. Many noted that it was a common practice for patients to assume they were orderlies or that they were unqualified for their jobs. Marvin, a surgeon, stated:

I think being a black male, I understand a lot about what [my women colleagues] are going through. A lot of them will complain that when they walk into the room, patients say 'I have to hang up the phone now because my nurse is in the room.' But I would tell them that I would much rather be a nurse than an orderly or an X-ray tech.

Like the black male nurses interviewed for this study, race and gender mattered more than occupational category. For Marvin, these served as signifiers to patients that he was in the lower-status role they associated with black men.

These examples show how race set the tone for the work environment these professionals encountered. As racial minorities in predominantly white occupations, black doctors and nurses often dealt with marginalization, sidelining, and presumptions of incompetence or unsuitability for their work. In the next section, however, I discuss how nursing and medicine, as gendered occupations, created differences in the ways black nurses and doctors engaged in caring and curing, respectively.

Black Male Nurses and Caring

Working in predominantly white, gender-segregated occupations, black men in nursing often emphasized the importance of *caring* by categorizing it as something that helped them become more effective at their jobs. This was particularly important given ongoing racial stereotypes and misperceptions assured that they were often undermined or assumed incompetent. Thus, caring allowed them to counter negative perceptions about their lack of suitability for the nursing field. Many of the black male nurses described the role that caring played their work. For these respondents, caring was a critical, integral part of being successful in nursing. Given that respondents described many accounts where patients and colleagues doubted their qualifications, black men nurses responded by showing that they were open and comfortable with caring. They contended that this level of comfort helped position them to be successful in their chosen profession. Christopher gives one example of how he derives joy and personal satisfaction from caring for others:

Adia Harvey Wingfield

The joyous part of the job is just that sense of affecting somebody, of helping somebody. There's one instance in particular that kind of sums up everything and it made me really feel good about being a nurse. There was this one time I was working in the emergency room and I was taking care of a lot of people. I didn't even remember this instance, but this guy came back and he thanked me, he remembered me. I didn't really remember him, I was just doing my job and he thanked me and [told me] he owed his life to me being fast, expediting his care, he said. I guess he was having a heart attack and I took care of him, got his I.V. going, got him straight to the lab in a good amount of time where it would save some tissue damage to his heart. He kind of owed that care, that whole experience to me, kind of like thanked me for him even being on this earth today. I was like, "Wow. Thanks. No problem!" It felt really good cause I didn't, it wasn't anything special that I was doing just for him. I would have done it for anybody and I was just doing my job. So, that felt really good. That was some validation of what I do.

In this example, Christopher indicates one of the ways that caring helps to provide rewards and a level of personal fulfillment. Curtis speaks even more directly about the ways that caring has meaning for him as a nurse. He states:

I get lots of emotional fulfillment, personal fulfillment. I'm proud of the work I do. I feel that I'm making a difference in the lives of others. I'm contributing something, even if it's nothing more than bringing a smile to a sick person's face. God put me in the position to help others. Not everyone can be a nurse, but it's a calling. I know now it was divine intervention.

For Curtis, being in a profession that requires him to be caring is a source of pride, fulfillment, and satisfaction. Steven also gives an example of what caring looks like for him during the course of his work as a nurse. He compares his work experience to that of some of his male friends working in traditionally male-dominated professions:

They were going to work with the insurance industries, they were going to work in the E.R. where it's a touch and go, you're a number literally. I don't

The Racial Construction of Work for Black Men in Gendered Occupations

get to know your name, I don't get to know that you have four grandkids, I don't get to know that you really want to get out of the hospital by next week because the following week is your birthday, your 80th birthday and it's so important for you. I don't get to know that your cat's name is Sprinkles, and you're concerned about who's feeding the cat now, and if they remembered to turn the TV on during the day so that the cat can watch The Price is Right. They don't get into all that kind of stuff. OK, I actually need to remember the name of your cat so that tomorrow morning when I come, I can ask you about Sprinkles and that will make a world of difference. I'll see light coming to your eyes and the medicines will actually work because your perspective is different.

Steven provides a detailed account of what caring looks like for him in the nursing profession.

For men in nursing, the racial challenges they encountered in the profession meant that caring took on additional significance. It became a way to show their qualifications and fitness for the work and allowed them to behave in ways that were consistent with the occupational norms of the field. The racial dynamics present of being in the numerical minority, coupled with the fact that they worked in a culturally feminized occupation, meant that caring became an integral and important component of the ways that these men did the labor associated with their jobs.

Black Male Doctors and Curing

In contrast, black men in medicine engaged in the process of *curing* by working to reduce racial health disparities. They did not highlight the importance and need for developing caring as a strategy towards proving occupational competence. Instead, they argued that a key-if understated-dynamic of their occupation was that it gave them a means of curing those who were less fortunate.

O'Neil, an anesthesiologist, talked about the importance of focusing on disparities that particularly impacted black communities. He states:

Adia Harvey Wingfield

I think that's really important. There's so many health disparities unfortunately and I think that's one of the things that I hope should be the goal of our field. To limit those health disparities. And in order to do that, we need all doctors to understand different cultures and be able to address and actually seek out to address those health disparities and just being aware of them is the first step. I think historically maybe the medical field kind of turned a blind eye to it. And said that's not our problem, that's a sociologist's problem or the politicians' problem. Let them fix it and let us just deal with health. But I think it's a positive step in the right direction to acknowledge that we play a part in that.

As this quote indicates, O'Neil sees a major part of his role in medicine as the ability to connect with and improve health outcomes for underserved populations.

Langston also makes similar comments about the importance of reducing health disparities. He remarked:

I mean the realization is, health disparities is a big part of [my work]. There's little education associated with health care disparities. And so that's a struggle. That's a struggle and that's where, within medical schools, they're essentially creating curriculums now for addressing that issue. They're trying to get people to understand the cultural competencies of Asian people and people from the middle east. So there's a lot of education going on right now. And it's slow coming.

For Langston, much of his work in the medical field has been driven by the need to improve representation and reduce health disparities for black populations.

For black men working as doctors, curing rather than caring became a critical part of how they structured their work. Significantly, the racial challenges they encountered in medicine, coupled with its gendering as a more masculinized occupation, meant that they did not engage in or practice caring in the same way as their black male counterparts in the nursing profession. Instead, these men engaged in a process of curing wherein they sought to use their training and

professional standing to help improve medical outcomes for black populations more broadly. In the racial context of a more male-dominated occupation, racialized curing in the form of reducing health disparities became more salient.

Conclusions

This paper documents the ways that racialized work experiences inform the ways black professional men in gendered occupations construct parts of their work. Both black male doctors and nurses encounter a racialized environment wherein they face marginalization, social isolation, and doubts about their capabilities. This racialized context shapes how they experience their occupations as gendered rather than neutral, and in turn informs the ways they engage in caring and curing. For black male nurses, the gendered and racial experience of being black men working in a predominantly white, culturally feminized occupation means that curing becomes a way of proving their competence and skill to colleagues and patients who often doubt it. For black male doctors, however, the gendered and racial dynamics of being in a mostly white but culturally masculinized occupation means that they turn to curing vis-a-vis working to reduce racial health disparities. This study shows that it is not just working in a gendered occupation, but the racial context of that work experience that sets the stage for how labor is done by black professionals in health care.

This research has important implications given many of the changes that are currently under way in the American health care system. Nursing is a profession that has long sought to attract more men as a way of raising the profession's status¹³. There are additional movements under way designed to change the minimum educational requirements for nurses from an associate's degree to a bachelors. Yet at the same time, nursing is experiencing a critical shortage due to a rapidly aging population and a declining number of workers trained

to enter this profession. Black men are woefully underrepresented in this profession, and the marginalization and isolation the nurses in this study report may contribute to these low numbers. It might be beneficial to consider making nursing a more inclusive field for underrepresented minorities so that caring becomes simply part of the job rather than a strategy for demonstrating competence.

Similarly, the medical profession is changing in a number of ways, not least of which being the increase of women into the field. More women now complete MDs than men, though the ranks of doctors remain highly male-dominated. Black male doctors, however, remain underrepresented in this field. Given that black male doctors, like black male nurses, encounter social processes and interactions that create a rather unwelcoming work climate, health care policy-makers might devote more attention to ways to make the medical field more open to these practitioners as well. Particularly given their interest in reducing racial health disparities, black male doctors' priorities with regards to curing should be encouraged in and of itself rather than functioning as a coping mechanism in a somewhat hostile environment.

BIBLIOGRAPHY AND NOTES

1. PIERCE J., *Gender trials*. Berkeley, University of California Press, 1995.
2. BOULIS A., JACOBS J., *The changing face of medicine*. Ithaca, Cornell University Press, 2008.
3. BOULIS A., JACOBS J., note 2; WILLIAMS C. L., *Still a man's world*. Berkeley, University of California Press, 1995; WINGFIELD A. H., *Caring, curing, and the community: black masculinity in a feminized profession*. In: WILLIAMS C. and DELLINGER K. (eds), *Research in the sociology of work: gender & sexuality in the workplace*. London, Emerald Press, 2010, pp. 15-37.
4. ACKER J., *Hierarchies, jobs, bodies: a theory of gendered organizations*. *Gender & Society* 1990; 4: 139-158.
5. PIERCE J., note 1.

The Racial Construction of Work for Black Men in Gendered Occupations

6. BUDIG M., *Male advantage and the gender composition of jobs: who rides the glass escalator?* Social Problems 2002; 49: 258-277; FLORES G., *Racialized tokens: Latina teachers negotiating, striving, and thriving in a white woman's profession.* Qualitative Sociology 2011; 34: 314-335; PAAP K., *Working construction: Why white working-class men put themselves and the labor movement in harm's way.* Ithaca, Cornell, University Press, 2006; WILLIAMS C. L., note 3.
7. DELLINGER K., *Masculinities in safe and embattled organizations: Accounting for pornographic and feminist magazines.* Gender & Society 2004; 18: 545-566; PAAP K., note 6; PIERCE J., note 1.
8. PIERCE J., note 1; WILLIAMS C. L., note 3.
9. CHENG C., *We choose not to compete.* In: CHENG C., *Masculinities in organizations.* Thousand Oaks, Sage, 1996, pp. 177-200; CHOU R., *Asian American sexual politics.* Lanham, Rowman and Littlefield, 2012; CHOU R., FEAGIN J., *The myth of the model minority.* Boulder, Paradigm Press, 2008.
10. WINGFIELD A. H., *Racializing the glass escalator: reconsidering men's experiences with women's work.* Gender & Society 2009; 23: 5-26; WINGFIELD A. H., note 3.
11. PAAP K., note 6; PIERCE J., note 1; WINGFIELD A. H., *No more invisible man: race and gender in men's work.* Philadelphia, Temple University Press, 2012.
12. WILLIAMS C. L., note 3.
13. WILLIAMS C. L., note 3.

Correspondence should be addressed to:

Adia Harvey Wingfield, Dept. of Sociology, Seigle Hall 207, Box 1112; Washington University in St. Louis; 1 Brookings Drive; St. Louis, MO 63130.

e-mail: ahwingfield@wustl.edu

