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Aging and Disability: Beyond Stereotypes to Inclusion

PROCEEDINGS OF A WORKSHOP

Caroline M. Cilio and Tracy A. Lustig, *Rapporteurs*

Forum on Aging, Disability, and Independence

Board on Health Sciences Policy

Health and Medicine Division

Division of Behavioral and Social Sciences and Education

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PLANNING COMMITTEE FOR A WORKSHOP ON DISRUPTING STEREOTYPES OF AGING AND DISABILITY: SOCIETAL IMPACTS AND OPPORTUNITIES FOR CHANGE[1]

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[1] The National Academies of Sciences, Engineering, and Medicine's planning committees are solely responsible for organizing the workshop, identifying topics, and choosing speakers. The responsibility for the published Proceedings of a Workshop rests with the workshop rapporteurs and the institution.

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[1] The National Academies of Sciences, Engineering, and Medicine's forums do not issue, review, or approve individual documents. The responsibility for the published Proceedings of a Workshop rests with the workshop rapporteurs and the institution.

Reviewers

This Proceedings of a Workshop was reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise. The purpose of this independent review is to provide candid and critical comments that will assist the National Academies of Sciences, Engineering, and Medicine in making each published proceedings as sound as possible and to ensure that it meets the institutional standards for quality, objectivity, evidence, and responsiveness to the charge. The review comments and draft manuscript remain confidential to protect the integrity of the process.

We thank the following individuals for their review of this proceedings:

JAMES C. APPLEBY, The Gerontological Society of America
DONNA FICK, The Pennsylvania State University College of Nursing
WALTER R. FRONTERA, University of Puerto Rico School of Medicine
SUSAN PESCHIN, Alliance for Aging Research

Although the reviewers listed above provided many constructive comments and suggestions, they were not asked to endorse the content of the proceedings, nor did they see the final draft before its release. The review of this proceedings was overseen by **DAVID B. REUBEN,** University of California, Los Angeles. He was responsible for making certain that an independent examination of this proceedings was carried out in accordance with standards of the National Academies and that all review comments were carefully considered. Responsibility for the final content rests entirely with the rapporteurs and the National Academies.

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1

Introduction[1]

Many different groups of people are subject to stereotypes—the generalization of certain characteristics (either positive or negative) to all members of that group. Positive stereotypes (e.g., "older and wiser") may provide a benefit to the relevant groups. However, negative stereotypes of aging and of disability continue to persist and, in some cases, remain socially acceptable. Research has shown that when exposed to negative images of aging, older persons demonstrate poor physical and cognitive performance and function, while those who are exposed to positive images of aging (or who have positive self-perceptions of aging) demonstrate better performance and function (Hausdorff et al., 1999; Hess et al., 2002; Levy, 2003; Levy et al., 2014). Furthermore, an individual's expectations about and perceptions of aging can predict future health outcomes (Levy et al., 2002, 2006, 2009). These effects are due in part to *stereotype threat*, a term that refers to how simply being a member of a group that faces a negative stereotype in a particular domain can undermine one's performance in that domain. Individuals with disabilities also face stereotypes that affect their lives. For example, these individuals are often perceived as being weak, dependent, and incompetent,

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[1] The planning committee's role was limited to planning the workshop, and the Proceedings of a Workshop was prepared by the workshop rapporteurs as a factual summary of what occurred at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants and are not necessarily endorsed or verified by the National Academies of Sciences, Engineering, and Medicine, and they should not be construed as reflecting any group consensus.

BOX 1-1
Statement of Task

An ad hoc committee will plan a 1-day public workshop to explore how stereotypes and stereotype threat (i.e., the predicament in which an individual is at risk of conforming to a widely known negative stereotype about his or her own group) affect older adults and adults with disabilities in terms of their health and their ability to be independent and participate in their communities. The workshop will feature invited presentations and discussions that will explore (1) the state of the knowledge about how stereotypes and stereotype threat affect older adults and adults with disabilities, and how they affect various industries that interact with these populations, such as the health care workforce, technology, and fashion; (2) successful and promising strategies for disrupting stereotypes; and (3) opportunities for changing perceptions among the public and the above-mentioned industries.

The committee will plan and organize the workshop, develop the agenda for the workshop, select and invite speakers and discussants, and moderate or identify moderators for the discussions. A single summary (“proceedings”) of the presentations and discussions at the workshop will be prepared by a designated rapporteur in accordance with institutional guidelines.

which can affect their employment opportunities (Colella and Varma, 1999; Louvet, 2007; Nario-Redmond, 2010). Stereotypes about aging and disability can also affect how various industries portray and interact with older adults and individuals with disabilities, which, combined with the effects of stereotype threat, can cause a vicious cycle by which negative stereotypes continue to be promulgated (Mason et al., 2010; Miller et al., 1999, 2004; Parshar and Nevanathan, 2006; Schwartz et al., 2010).

To better understand how stereotypes affect older adults and individuals with disabilities, the Health and Medicine Division along with the Division of Behavioral and Social Sciences and Education of the National Academies of Sciences, Engineering, and Medicine (the National Academies), with support from AARP, convened a public workshop on October 10, 2017, at the Parsons School of Design in New York.[2] The Forum on Aging, Disability, and Independence (the forum) hosted the workshop. The forum is an ongoing activity of the National Academies that meets regularly to discuss how to support independence and community living for people with disabilities and older adults.

An ad hoc committee (see Box 1-1 for the committee’s statement of task) planned and designed the workshop to meet the following objectives:

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[2] Meeting space was provided by The New School’s Parsons School of Design.

- Summarize the state of the knowledge and the gaps in knowledge about the impact of stereotypes and stereotype threat on older adults and adults with disabilities.
- Highlight successful campaigns that have changed public discourse for other stereotypes and how they might apply to disrupting negative stereotypes of aging and disability and mitigate their effects.
- Explore effective communication, education, and system design strategies for aging and disability, with attention to media, marketing, and other industries.
- Identify sustainable interventions that promote and support psychological and physical resilience in older adults and adults with disabilities.

Under National Academies guidelines, workshops are designed as convening activities and do not result in any formal findings, conclusions, or recommendations. Furthermore, the workshop proceedings reflect what transpired at the workshop and do not present any consensus views of the planning committee or workshop participants. The purpose of this proceedings is to capture important points raised by the individual speakers and workshop participants. Speaker presentation slides are also available on the workshop website.[3]

OPENING REMARKS

In her introductory comments at the workshop, forum co-chair Terry Fulmer, the president of The John A. Hartford Foundation, reminded the workshop participants that the forum focuses on the commonalities between aging and disability. “We know that people age and become disabled, or people with disabilities age,” she said. “So there is our intersection and our nexus.” Forum co-chair Fernando Torres-Gil, a professor at the University of California, Los Angeles (UCLA), and the director of the Center for Public Research on Aging at UCLA’s Luskin School of Public Affairs, added that over the last several years the forum has looked at a variety of substantive programmatic, organizational, scientific, and analytical issues related to aging and disability. However, he said, “whatever we might do might be inhibited if we cannot change how we are viewed.”

Burak Cakmak, the dean of the School of Fashion at the Parsons School of Design, said that the school’s curriculum challenges students to reinvent the fashion design process so as to place the human being at

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[3] See http://www.nationalacademies.org/hmd/Activities/Aging/AgingDisabilityForum/2017-OCT-10.aspx (accessed November 10, 2017).

the center of the process and encourages unusual collaborations in order to affect positive social change and break down stereotypes. These new conversations can expand the possibilities for what design can be and can create enormous potential for increasing the diversity of people that fashion can serve. As such, he said, the workshop represents "an exciting opportunity for all of us to rethink the potential of how fashion design education and the sciences, nonprofits, and public policy–focused organizations can all work toward a common goal to address critical social issues."

Jonathan Stevens, the senior vice president of thought leadership at AARP, challenged the workshop participants to reflect on what they think about when they hear the word "aging." He said that it is natural for most people to lean toward negative concepts (e.g., wrinkles, decline, grey) rather than positive ones (e.g., creativity, innovation, possibility). Stevens also said that the way we are aging is changing and that while what older adults want and need is changing, the world around them is not responding to that challenge as quickly, efficiently, or respectfully as it could. Because of this, he said, AARP seeks to disrupt aging—that is, to address stereotypes about how we live and age and, ultimately, to change the conversation in order to help people understand that with longer lives come more opportunities and possibilities. Stevens said that together we can work to reframe aging to include innovation, social engagement, growth, and new opportunities.

ORGANIZATION OF THE PROCEEDINGS

An independent planning committee (see page v for the list of committee members) organized the workshop (see Appendix A for the agenda) in accordance with the procedures of the National Academies. This publication describes the presentations and discussions that occurred during the workshop. Generally, each speaker's presentation is reported in a section attributed to that individual. Chapter 2 recaps the keynote presentation by Liz Jackson on the concepts of choice that provided a foundation for the remainder of the workshop's discussions. Chapter 3 examines the scientific evidence about stereotypes of older adults and people with disabilities and the impacts of those stereotypes. Chapter 4 considers issues of disrupting stereotypes in practice and also looks to lessons learned from interventions for other stereotypes. Chapters 5 and 6 summarize moderated discussions among individuals working in the media (Chapter 5) and in design (Chapter 6) about the challenges they faces and their roles in helping to disrupt stereotypes. Chapter 7 presents the concluding remarks of the planning committee chair. Appendix A presents the workshop agenda and Appendix B provides biographical sketches for all of the workshop speakers and moderators.

In accordance with the policies of the National Academies, the workshop did not attempt to establish any conclusions or recommendations about needs and future directions, focusing instead on issues identified by the speakers and workshop participants. In addition, the planning committee's role was limited to planning the workshop. Workshop rapporteurs Caroline M. Cilio and Tracy A. Lustig prepared this workshop proceedings as a factual summary of what occurred at the workshop.

2

Who Is Worthy of Choice?

Stereotypes can influence public opinion and, in turn, how both the public and private sectors react to and interact with older adults and individuals with disabilities. In her keynote presentation, Liz Jackson, the founder and chief advocacy officer for the Inclusive Fashion & Design Collective, focused on stereotypes in the design industry and the limitation in design choices, particularly for individuals with disabilities.

Liz Jackson
Inclusive Fashion & Design Collective

Jackson began by comparing the worlds of aging and disability to cheeseburgers. "They are my favorite food," she said. "Every time I eat a cheeseburger, I wonder to myself who was the person who decided to grind up meat only to smash it back together and grill it." In the same way, she argued, aging and disability have been pulled apart and separated for so long, but are beginning to realize that they are actually stronger together. "I believe our convergence can be equally game changing. We've just got to find our cheese." Jackson said that for her presentation, she would use the term "disability" to encompass both aging and disability, saying that both are "searching for beauty and dignity in the face of stigma."

THE SOCIAL MODEL OF DISABILITY

"I am disabled, not by my body, but by the world around me," Jackson said. The social model of disability adopted by the United Nations in 2006 describes persons with disabilities as including "those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (United Nations, 2006). This definition is important, she said, because it puts the emphasis "on design rather than on our bodies." Jackson continued:

> We draw upon a history that did not exist before industrialization. Industrialization created an expectation that bodies should be able to perform rote or mechanized tasks. Those that couldn't were diagnosed by doctors and philosophers at the time as disabled. Disability quite literally meant inability to contribute. This was the birth of the medical model of disability, which cast blame on the bodies we were suddenly disabled by. But we now live in a post-industrialized era. Eleven percent of our college population is disabled. We are an emerging $8 trillion market the size of China. Yet, the medical model lives on. Why? I believe it comes down to that moment in each of our childhoods where we see somebody who looks a little bit different than us. We eye that person curiously until mom or dad says don't stare. We reflexively look away, never to look back unless we are confronted with it.

LEARNING TO NOT LOOK AWAY

On March 30, 2012, Jackson woke up to a complex neuromuscular condition and landed in the hospital. She admitted that when she left the hospital, she had difficulty reconciling the things she had always attributed to disability and the person she had become overnight:

> I thought disability was the kids at school who had never made it into my class. I thought it was my great-grandmother in her final years. I thought it was injured athletes or the commercial, I've fallen and I can't get up, accessible signage and inspirational memes. These examples had something very important in common. They were moments so fleeting they captured me before I could look away. So, I began to wonder what if disability wasn't the things that I was seeing, but rather the things I had learned to avoid? Even further, what if disability wasn't the things that I had learned to avoid, but was actually my own act of avoidance?

Jackson noted that many people who could benefit from hearing aids opt not to use one because they are so expensive and stigmatizing. Furthermore, she said, hearing aid companies often create marketing campaigns each using the same word: discreet. Invisibility is not the answer to solving stigma issues, Jackson said. "The thing is we need to stop assuming invisibility and, instead, making it a choice." For example, recent legislation will create a category of hearing aids that are considered consumer products rather than medical products, and she predicted that this will increase choice by increasing competition in the marketplace. Baby boomers are adding to the market every day, she continued:

> Richard Donovan, the CEO of the Return on Disability Group, reminds us that boomers are the ones who created the teenager. They rewrote middle age. Now, they are entering their later years with an expectation of choice. This is why this moment in time is so important. Disability is empowered. Boomers are unwilling to settle. We need to come together and demand better and ask hard questions. And when better can't be demanded, we've got to do it ourselves.

Jackson described how shocking it was to go cane shopping after she got out of the hospital. "There were, quite simply, no options. Yet, there was an endless array of eyeglasses for me to choose from." Eight months after she got sick, Jackson discovered "a beautiful purple cane that changed my life."

> I will never forget the first time I rode the subway with my new purple cane. This woman got on and she sat across from me. She gave me the up and down. I thought I knew what was coming. I thought she was going to tell me to feel better, ask what's wrong, tell me she is going to pray for me. Instead, she asked where I got my cane. She wanted to get one for her friend. This is the power of design. At first, I thought design was what allowed me to finally adjust to my newly disabled body. Over time, I realized that the thing I had struggled so deeply with wasn't actually the change in my body, but the change in my identity. I, like everybody else, express my identity through the choices I make, but there was suddenly no variety. The only identity I was able to express was that of somebody who could not choose.

Soon after finding the purple cane, Jackson said, she felt more empowered and resilient than ever, and therefore she decided she needed a superhero alter ego. In a nod to the movie *The Girl with the Dragon Tattoo*, she, and her subsequent blog, became *The Girl with the Purple Cane*.[1]

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[1] For more information, see http://www.thegirlwiththepurplecane.com (accessed November 28, 2017).

WHAT MAKES A WHEELCHAIR A WHEELCHAIR?

Jackson uses her blog to ask why things are the way they are. For example, what makes a wheelchair a wheelchair? Many daily items have wheels and chairs, including cars, bicycles, and office chairs. Jackson approached a friend, Amanda, who is a mother and uses a stroller, and Amanda's father, David, who uses a wheelchair. Jackson asked each of them about what it is like to navigate the world, but used the word "stroller" for Amanda and "wheelchair" for David. Amanda's answers were about the physical realities, but David's answers were about the emotional impact:

> Amanda: It's not too bad. I go most places that I would like with two kids. There are a lot of places I can't get in or couldn't go to, but honestly, I wouldn't want to bring my toddlers there anyway.
>
> David: When you're in a wheelchair, people don't talk to you generally. They treat you like you are a child. They talk to the person with you rather than talking to you. Like when walking into a restaurant to be seated, they ask the person with you how many are in the party or the check gets brought to somebody else at the table instead of you.

Jackson then asked each of them about the options they have:

> Amanda: I purchase a separate one to account for different needs. I have a jogging stroller, a get-around-town stroller, and an umbrella stroller for traveling.

Jackson interjected that Amanda's answer went on for two paragraphs, ending with an explanation of how she has learned to use Craigslist. In contrast, David replied:

> David: Insurance pays for one wheelchair every 5 years. So, you try to think of the things that you may need over the next 5-year period. Most people don't change in that period, but because of my MS, my needs have changed greatly over time. We have had to try to anticipate how my MS might progress. In both cases we have had to go back and slightly modify the wheelchair and what it came with.

These conversations helped Jackson understand that choice requires more than opting in or opting out. Choice is not deciding between a wheelchair and never leaving home, she said. Choice is not using a hearing aid or being left out of conversation. Choice is not using a cane or risking your safety.

BRANDING AND MARKETING

The 2007 Institute of Medicine (IOM)[2] study *The Future of Disability in America* stated that "research and experience suggest that consumer involvement in the selection process (rather than an essentially one-sided prescription by a health care professional) helps avoid later rejection or abandonment of the technology" (IOM, 2007, p. 216). Jackson added:

> There is this absurd assumption, this stereotype that in disability and aging, that we don't care what we look like. So, when somebody comes along and says, "I won't use that; it is ugly," it is dismissed as vanity. In *Branding and Designing Disability*, DePoy and Gilson say, "we often hear students articulating the well-oiled belief that the mere functionality of an object should elicit gratitude." Because everything is *for* us. Our products are *for* us. Our charities are *for* us. Compliance is *for* us. But have you ever stopped to consider how little is actually *by* us? We are not viewed as experts in our own lives.

Brands have begun to see the viability of the disability and aging markets, but Jackson asserted that instead of turning to individual consumers, companies are working with organizations such as charities that represent people with disabilities. "While charities work to speak in our best interest, they often times inadvertently silence us," she said. For example, Jackson said she was dismayed to learn that the Zappos Adaptive disabled clothing line did not directly engage individuals with disabilities, but only organizations that represent individuals with disabilities. She read a quote from the marketing language she had seen: "The special needs community is no longer an 'institutional community.' They are out living among us. They follow trends, from music to social media to fashion. They want and deserve to dress like everyone else in their age group. Now, they can do it themselves." Jackson argued that this language plays into the segregation of the disability community. "They seem to see themselves differently than they see us," she said. She added that it is often thought that disability products should be designed with little, if any, aesthetic consideration.

ENGAGING PEOPLE WITH DISABILITIES IN THE DESIGN PROCESS

Jackson suggested that many individuals with disabilities do not have access to traditional career paths due to access issues and prohibitive costs. She told the story of her friend Andrea who uses a wheelchair:

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[2] On July 1, 2016, the IOM was reconstituted as the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine.

> Back when she was deciding on her future, she dreamt of fashion, only she couldn't find an accessible lab. My mentor often muses that design students design for small spaces because they live in small spaces. We design for what we know. We can't design for what we don't know. Designing for stereotypes doesn't do anybody any good. I often wonder what could have been had Andrea found an accessible lab.

The 1997 IOM report *Enabling America: Assessing the Role of Rehabilitation Science and Engineering* called for consumers with potentially disabling conditions to be involved in research and technology development and dissemination. However, Jackson added, "I am not entirely sure that the National Academy of Sciences is fully aware of how game-changing our innovative solutions tend to be. We are the original life hackers."

Jackson asked the audience if anybody used Finger Works; only a couple of hands were raised. She then described Wayne Westerman, a man struggling with carpal tunnel and tendonitis who decided to create a technology that would allow him to continue working. In 1998 he created Finger Works, which was purchased by Steve Jobs in 2005. It is the touchscreen on your phone. Jackson asked the audience a second time, "Who here uses Finger Works?" Every hand was raised. Jackson cited other examples:

> In 1655 a Nuremberg watchmaker and paraplegic named Stephen Farffler created something he called the manumotive carriage. With it, he accomplished two things. First, he created the first ever self-propelled wheelchair. Unbeknownst to him, it was the precursor for the modern-day bicycle. Remember Richard Donovan from before, the guy who is so meticulously tracking the disability market? He has cerebral palsy. This is why non-altruistic support is so important. When disabled people are invited to the table, we tend to find solutions rather than seeing our bodies as the problem.

CLOSING REMARKS

The phrase "nothing about us without us" is important, Jackson said, because when disabled people are finally able to articulate their desires, oftentimes the first thing that goes is "what the doctor ordered." She concluded:

> My purple cane was my choice. It was mine as a consumer. I recall trying to decide between the turquoise cane and the purple cane. I remember thinking the turquoise cane was the most dapper option for my handsome physique, but the purple cane captured my heart. It was this moment of gut instinct for the first time, when it stopped being about my body and it finally became about me.

DISCUSSION

Fernando Torres-Gil of the University of California, Los Angeles, thanked Jackson for voicing the frustration that individuals with disabilities have because of the lack of choices for assistive devices. He asked how people can influence business, manufacturers, and even government to create more appealing options. Jackson said the answer lies in asking, "How do you extend the range of *normal*?" She said that people tend to think of a bell curve where there is disability on one end and superability on the other end. Instead of having a small peak at "normal," she said, what is needed is an extended range of "normal" that allows for individuals to express their identities, including their various levels of function.

John Auerbach with Trust for America's Health asked if there are good examples of companies or governmental organizations that have, in an authentic and meaningful way, involved individuals with disabilities. Jackson said there are a lot of great examples, but she said that she didn't want to say that one particular company did it "right" or did it "wrong." As an advocate, she said, she would find it difficult to name any company that got it exactly right in her eyes, because "I see it so specifically; I am always going to find that thing that I want them to improve." She said that it is better to focus on the idea that what everybody needs to be doing right now is approaching disability and aging "and really allowing us to drive the conversation and stop saying that something is done *for* us, and it is really *with and by* us."

Charlotte Yeh of AARP Services, Inc. reinforced the importance of choice and the opportunity to reframe disability. Yeh said that since being hit by a car 5 years ago, she has had to relearn how to walk and that in spite of being told she would never be able to walk without a walker or a cane, she has learned how to ski and scuba dive. She has a cane for biking and a cane for the beach.

> What I really want to underscore is how you captured those feelings. When I first went out with my walker and an ordinary cane, everyone was coming up and they said, Oh, don't bump into that little old lady. Oh, can I help you? Can you sit down here? I am thinking "I am standing. This is the most exciting part of my life." I would go out, and I would come home and go, "I must be really sick." I would come home feeling terrible about myself.

While at home, Yeh would forget where she left her cane, so she started putting a red ribbon on it. This was followed by a flower, sparkles, and other things. After that, the reaction was completely different. People said, "That is the coolest thing ever! Where did you get that?"

> I have conversations with total strangers all around the country, in elevators, in stores, people taking photographs not of me, but my cane. It is about attitude and reframing. We have to stop looking at assistive devices as disability, but creative expression. It is who we are.

Jerron Herman, who has cerebral palsy and is a principal dancer with Heidi Latsky Dance, a physically integrated dance company, emphasized the concept of variance. He asked Jackson to expand on how the market can approach different kinds of disabilities not as singular or unilateral, but as a hodgepodge. Jackson noted that most disabilities are completely invisible, so incorporating disabilities into a business plan does not have to be overt. She noted, for example, that for people who are over-reactive to stimulation, companies can modify clothing through their choice of fabrics and construction, such as by eliminating seams. She also emphasized that the disability community does not have to be pitied and that collaborations between people with disabilities and the fashion industry can create "super-cool fashion."

Margaret Campbell of Campbell & Associates Consulting noted that the National Institute on Disability, Independent Living, and Rehabilitation Research funded much of the research that created both the social model of disability and universal design principles. She said that it was "incredibly exciting" to see how Jackson was translating and using these concepts in her own work. Campbell asked how these concepts play into choice. Jackson started by saying she struggles with compliance, which creates a minimum standard or checklist and does not inspire design. She agrees that compliance is needed for those who do not understand disability and those who are not thinking about it, but she said that she would like to see companies who are committed to disability be allowed to focus on innovation. Jackson said that access has been the root of the disability conversation up until now, but that to make the conversation just about access reduces what disabled people are capable of giving, which can affect all of society. Both compliance and innovation are needed, she said.

Kenneth Brummel-Smith of the American Geriatrics Society asked if there is a way to reframe the natural inquisitiveness of the child who stares, but whose mother tells the child to look away. Jackson agreed that people with disabilities are often "objects of gaze" and that the question of when it is acceptable to look at someone is confusing for everyone. Fashion designers have begun using models with disabilities to show products other than disability-related ones, Jackson said. She reflected on her concept for an art project in which participants are challenged to think about how they look at models with disabilities. The idea would be to have an audience interact with these models before a fashion show and then afterward have the audience reflect on how they were challenged to first "not stare" (before the show) and then to purposefully look at the models (during the show). Jackson concluded, "Nobody learns how to look. I think that is one of the big hurdles we are up against right now."

3

Exploring the State of the Knowledge on Stereotypes and Their Impact

The first panel featured three presentations about the scientific knowledge regarding stereotypes in aging and disability as well as their impact. Becca Levy, a professor of epidemiology and psychology at Yale University, spoke about both positive and negative age stereotypes (i.e., stereotypes of older people) and their consequences. Katie Wang, an assistant professor in the Department of Social and Behavioral Sciences at the Yale School of Public Health, discussed disability stereotypes (i.e., general beliefs about individuals with disabilities) and biases. Michael S. North, an assistant professor of management and organizations at the New York University Stern School of Business, spoke about ageism in the workplace. Following the presentations, Margaret L. Campbell, an independent consultant with Campbell & Associates Consulting, moderated an open discussion among the speakers and the workshop participants.

BENEFITS AND DETERMINANTS OF AGE STEREOTYPES

Becca Levy
Yale University

Levy began her presentation by showing a recent article from *The New York Times* related to Fashion Week (Safronova et al., 2017). In the article, 12 models were interviewed about what they thought were the "burning social issues" in the fashion industry, yet not one spoke about the exclusion of older adults. Levy noted that 10 of the 12 models were in their 20s, and none were over 32, even though about one-third of the population is now over age 50. Similarly, a recent content analysis of *Elle* magazine found that only 2 percent of the models were over the age of 40. However, fashion can also promote positive age stereotypes. Levy showed images from a fashion show held at the 2017 World Congress of the International Association of Gerontology and Geriatrics. She said the show promoted positive images of aging, depicting the vibrancy, social engagement, and activeness of older adults. Levy also showed an advertisement from the anti-aging product industry—a "miracle cream" that will "take away some of the outward signs of getting older" and challenges the observer to "dare to be beautiful." The hidden message, she said, is that if you are older, you are probably not beautiful. She continued:

> So, not only are older individuals excluded, invisible in the fashion industry, but when they are included, they are often presented with negative age stereotypes or they are presented in ways that stigmatize aging as something that we want to fight against.

Levy described a study that found that the majority of survey respondents aged 60 and over reported experiencing one or more instances of ageism (Palmore, 2001). Furthermore, studies of implicit prejudice show that views toward older people are more negative than those toward women and African Americans (Levy and Banaji, 2004). An analysis of age stereotypes over 200 years found that the stereotypes are actually becoming more negative (Ng et al., 2015), which Levy attributed, in part, to both the medicalization of aging and the influence of the anti-aging industry, which profits from negative age stereotypes.

Research on the Impact of Stereotypes

"Children as young as age 3 can already tell us what the stereotypes are in their culture," Levy said. These are reinforced over time and over the lifespan. Levy has developed a framework called the Stereotype Embodiment Theory (Levy, 2009), which proposes that the stereotypes that exist in our culture can, later in life, lead to self-definition that in turn influences functioning and health. According to Levy's theory, this happens in two ways: from the culture down to the individual and then within the individual themselves.

So, Levy asked, do the images of aging that exist in our culture actually have an impact on older individuals? She described intervention research in which age stereotypes are presented subliminally to older adults. The presentation of negative age stereotypes led to worse cognitive function, worse physical function, greater stress levels, and a reduced will to live. In contrast, the presentation of positive age stereotypes led to improvements in some of the same areas, she said. (Levy, 1996; Levy and Leifheit-Limson, 2009; Levy et al., 1999–2000, 2014).

Next, Levy described longitudinal research showing that individuals who held more negative age stereotypes had a significantly higher risk of having a cardiovascular event over the next 38 years than individuals who held more positive age stereotypes (Levy et al., 2009). In fact, the individuals who held more negative age stereotypes had twice the likelihood of having the cardiovascular event than those who held more positive age stereotypes.

Another recent study looked at biomarkers for Alzheimer's disease (Levy et al., 2016). To assess hippocampal volume, the researchers performed annual magnetic resonance imaging studies over 10 years for individuals who started off without dementia. Those subjects who had exposure to more positive age stereotypes showed significantly less decline than those who had taken in more negative age stereotypes. To assess another biomarker, the amount of plaques and tangles in the brain, the researchers looked at brains at autopsy. Again, those who had experienced more negative age stereotypes had a significantly greater accumulation of plaques and tangles as compared to those who had experienced more positive age stereotypes. Levy emphasized the importance of these findings, because "there is some evidence that we can modify the negative age stereotypes. It suggests that there might be a culture-based intervention or risk factor that might help in reducing cognitive decline" (Levy et al., 2012, 2014).

Closing Remarks

Levy described a campaign recently launched by the World Health Organization to overcome negative stereotypes of aging. Levy was invited to be part of the scientific group launching the campaign, which 196 countries have now joined. She speculated that there could be a role for fashion and design as a way to communicate ideas, especially culturally specific ideas.

> In conclusion, I think that design and fashion can help shape negative and positive age stereotypes and thus how aging itself is experienced. We have evidence that negative age stereotypes can harm and positive age stereotypes can benefit older individuals' health, functioning, and well-being. Lastly, I think the time has come for a global intervention to bolster positive age stereotypes and reduce negative age stereotypes.

DISABILITY STEREOTYPES AND BIASES

Katie Wang
Yale University

The Americans with Disabilities Act[1] defines disability as a physical or a mental impairment that substantially limits major life activities, Wang noted. According to the Centers for Disease Control and Prevention, disability affects one in five individuals in the United States (CDC, 2015). This prevalence is even higher among older adults, Wang said, because many people acquire disabilities such as vision loss or mobility impairment as they get older.

Ambivalent Stereotypes

"If you ask me to summarize the nature of disability stereotypes in one word," Wang said, "I would use the term 'ambivalent.'" In particular, she continued, in much the same way as older adults, people with disabilities are often viewed as warm, but incompetent (Nario-Redmond, 2010). This perception can significantly disrupt interactions between people with disabilities and those without. For example, these interactions might be dominated by emotions like pity and sympathy on the part of the people without disabilities. People with disabilities might be treated like children, she said, and they are often offered unsolicited help that they do not really want or need. Although it is generally well-intentioned, unsolicited help can come across as patronizing, because the person offering the help may be presuming the target's incompetence. Recipients of unsolicited help tend to experience more negative effects and lower self-esteem, Wang said.

These negative consequences can present a dilemma for people with disabilities. Individuals may wish to assert independence by declining unnecessary help, but research shows that individuals from stigmatized groups who confront discriminatory behaviors tend to suffer negative interpersonal repercussions. It is very possible, Wang stated, that this penalty will generalize to people with disabilities who refuse assistance. To better understand this dilemma, Wang conducted a series of two studies on patronizing help for people who are blind.

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[1] Americans with Disabilities Act of 1990, Public Law 101-336, 101st Cong. (July 26, 1990).

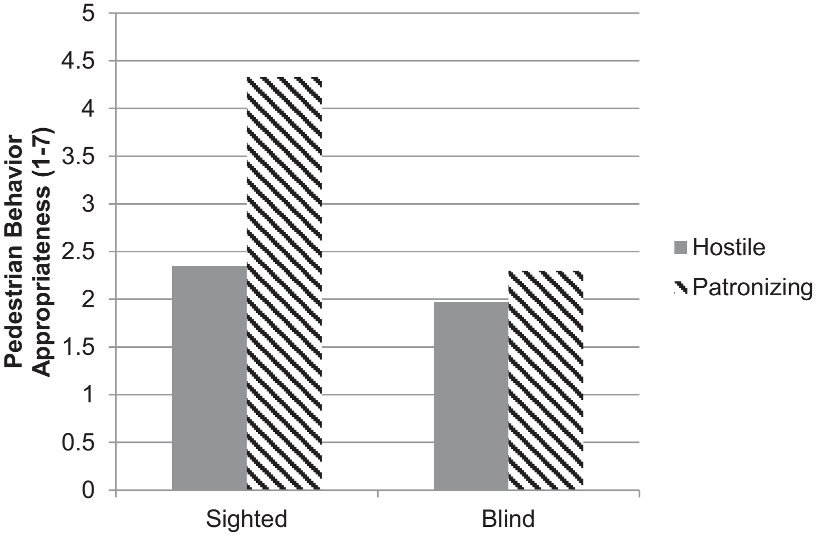

FIGURE 3-1 Perceptions of patronizing versus hostile treatment.
SOURCES: Wang presentation, October 10, 2017. Data from Wang et al., 2015.

Study 1: Perceptions of Patronizing Treatment

Wang first hypothesized that sighted people would find patronizing treatment to be more appropriate than hostile treatment, whereas blind people would find both types of treatment to be inappropriate. Study participants were told that "Mary," a 22-year-old blind person, was walking by herself using a white cane and stopped at the street corner to ask someone for directions to the nearest bus stop. In a *patronizing treatment* scenario, the pedestrian grabbed Mary's arm without her consent and said, "It is too dangerous for you to be walking around by yourself. Let me take you to the bus stop." In a *hostile treatment* scenario, the pedestrian said, "It is too dangerous for you to be walking around by yourself. You should just turn around and go home." Wang then asked participants to rate the extent to which they perceived the pedestrian's behavior as appropriate using a scale that included terms such as "appropriate," "helpful," "condescending," and "overbearing." As shown in Figure 3-1, Wang found a significant interaction between treatment type and participant disability status. Sighted study participants perceived the patronizing treatment as significantly more appropriate than hostile treatment. However, blind participants perceived both types of treatment to be highly inappropriate. Wang concluded:

> What these results are basically telling us is that there is a significant divergence in perspective between how blind and sighted people perceive

patronizing help. This discrepancy may have very important downstream consequences when it comes to how blind people are perceived by the sighted public.

Study 2: Consequences of Confronting Patronizing Treatment

Next, Wang examined how Mary would be perceived by sighted study participants when she confronted the patronizing or hostile treatment. Specifically, Wang hypothesized that when Mary confronted the discriminatory treatment from the sighted pedestrian, she would be perceived as less warm relative to the scenario in which she did not confront the treatment, especially when the treatment in question was patronizing rather than hostile in nature. She also predicted that this interaction would be mediated by the perceived appropriateness of the pedestrian's behavior. In other words, Wang said, participants would penalize Mary more for confronting patronizing treatment because they felt that she was just overreacting to what should actually be considered appropriate behavior in the first place.

Wang noted that this study used the same scenario from the first study, but after describing the pedestrian's behavior, the researchers additionally described Mary's response. In the confrontation scenario, Mary responded by saying "I can handle myself just fine. I was only trying to get some simple directions." In the non-confrontation scenario, Mary said nothing and either accepted the assistance being offered (in the case of patronizing treatment) or she walked away (in the case of hostile treatment). Participants indicated their perceptions of the pedestrian's behavior and then rated how warm and likeable Mary was as a person. As seen in Figure 3-2, Mary was perceived as less warm when she confronted patronizing treatment as compared to when she confronted hostile treatment. Therefore, Wang said, the participants penalized Mary more for her confrontation in a patronizing condition when they believed the pedestrian's actions were more appropriate in that case than in the hostile condition.

Research Implications

Taken together, Wang said, the two studies illustrate that people with and without disabilities tend to view patronizing treatment very differently. This discrepancy in perception can lead to interpersonal penalties for people with disabilities who refuse unsolicited help. "Our results also highlight this tricky balance that people with disabilities have to navigate between self-efficacy and getting along with the non-disabled general public," Wang said.

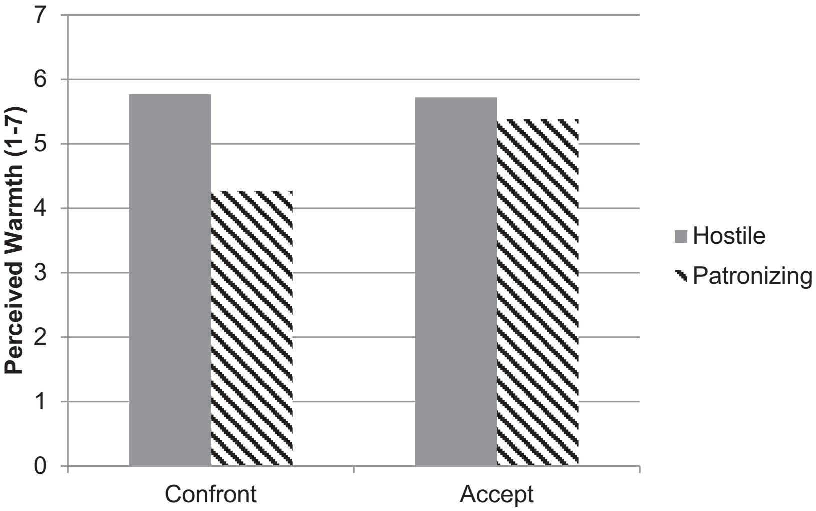

FIGURE 3-2 Effect of confrontation on perceived warmth.
SOURCES: Wang presentation, October 10, 2017. Data from Wang et al., 2015.

Wang reflected on how to improve the interpersonal dynamics between people with and without disabilities in order to disrupt these harmful stereotypes. One possibility, she said, would be training in communication skills. For example, non-disabled individuals can ask people with disabilities whether they need help and then respect their responses rather than making the assumption that some kind of help is always necessary. In the case of the study scenarios, Wang said, a more positive and constructive interaction would be if the pedestrian offered to take Mary to the bus stop and then let Mary decide whether this help was necessary. Wherever possible, Wang said, this type of communication skills training should also incorporate positive and equal status contact between people with and without disabilities. For example, blind and sighted people can collaborate on a joint project or activity so that they can become more comfortable interacting with each other.

Closing Remarks

On a larger scale, Wang said, it is important for the media to portray people with disabilities as competent individuals with agency and self-determination. This is particularly relevant in the case of fundraisers for disability-related causes. For example, Wang said, some disability organizations will try to attract public attention and sympathy by highlighting all of the difficulties that people with disabilities face and how helpless they can be because of their impairments. While this approach might be successful in terms of its ability to attract donations and public attention, Wang said, it can reinforce existing disability stereotypes and potentially exacerbate some of the discrimination that people with disabilities already face. She suggested that an alternative would be that fundraisers focus on what people with disabilities can accomplish with appropriate support and accommodations and that they try to advocate for resources that will facilitate the implementation of this type of support.

Wang ended with three takeaway points. First, disability stereotypes are ambivalent in nature, with people with disabilities often perceived as warm but incompetent. Second, this stereotype often leads to patronizing treatment, which can present a dilemma for people with disabilities in terms of how they respond. Third, laws and regulations are important tools for removing structural barriers for people with disabilities, but they are unlikely to modify existing ambivalent stereotypes and unconscious biases. "As a result," Wang concluded, "it is very important for us to consider individual-level intervention strategies to disrupt disability stereotypes, even though we might have to do this one person at a time."

AGEISM AND THE WORKPLACE

Michael S. North
New York University Stern School of Business

North began his presentation with an anecdote about the case of *Reid v. Google, Inc.*[2] Brian Reid was a computer science professor at Stanford University who conducted foundational research related to the Internet and headed up the team that developed the early Internet search engine AltaVista. Reid became operations manager at Google, but soon encountered problems:

> He starts coming to work every day, and he is being greeted with phrases like this from his younger coworkers and younger supervisors, phrases like "old man," "too old to matter," "not a good cultural fit." Eventually, things come to a head. His then 30-year-old CEO, Larry Page, calls him to his office, says, "Brian, we are letting you go. You are not a good cultural fit here." Reid counters with a fairly aggressive lawsuit alleging age discrimination on Google's part. Ultimately, the case becomes emblematic of a larger problem in Silicon Valley and elsewhere, such that people as young as in their 20s are getting plastic surgery to avoid

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[2] *Reid v. Google, Inc.*; 50 Cal. 4th 512, 235 P.3d 988, 113 Cal. Rptr. 3d 327.

> a similar fate as Brian Reid, to avoid this perception of looking "too old for the workplace."

North said that this anecdote exemplifies three key points that provide the framework of his presentation:

1. Older adults in the workplace face perceptions of what they are unable to do ("ageism as disable-ism").
2. These perceptions lead to discriminatory treatment and the denial of resources.
3. There are things we can do to "disrupt" misguided perceptions and unfair treatment of older workers.

Ageism as Disableism

North argued that two major types of stereotypes afflict older workers: descriptive ("older people are . . .") and prescriptive ("older people should . . ."). Concerning descriptive stereotypes, studies show that older-age stereotypes are rooted in the fact that older adults remind younger people of their mortality; such stereotypes include the ideas that older adults are nice but incompetent, are a useless burden, and are societally invisible. North referred to Susan Fiske's stereotype content model, which argues that social groups can be divided according to their stereotype content based on whether they are seen as high or low in warmth or high or low in competence (Fiske et al., 2002). As seen in Table 3-1, both adults

TABLE 3-1 Four Types of Out-Groups, Combinations of Status and Competition, and Corresponding Forms of Prejudice as a Function of Perceived Warmth and Competence

	Low Competence	High Competence
High Warmth	Paternalistic prejudice Low status, not competitive Pity, sympathy (e.g., elderly people, disabled people, housewives)	Admiration High status, not competitive Pride, admiration (e.g., in-group, close allies)
Low Warmth	Contemptuous prejudice Low status, competitive Contempt, disgust, anger, resentment (e.g., welfare recipients, poor people)	Envious prejudice High status, competitive Envy, jealousy (e.g., Asians, Jews, rich people, feminists)

SOURCES: North presentation, October 10, 2017. Data from Fiske et al., 2002.

with disabilities and older adults are perceived as having high warmth but low competence.

These descriptive stereotypes are also seen in the workplace, North said. The literature shows that employers see older workers as too costly and not worth the investment of training (Burtless, 2013; Dychtwald et al., 2004).

North's own dissertation focused on prescriptive stereotypes. As part of this work, he labelled three overall types of prescriptive stereotypes that target the older population. First, *succession* is the expectation that older workers should actively step aside and make way for younger generations (e.g., through retirement). Second, *consumption* is the idea that older adults should minimize their passive depletion of resources (e.g., they should not overuse the shared resource pool of health care). Finally, *identity* is the idea that older adults "should not try to look cool" (e.g., trespassing on "younger territory" such as Facebook or texting). Overall, North said, these stereotypes focus on disability and the idea that older adults do not belong in mainstream society.

Perceptions Lead to Discriminatory Treatment

Older workers face barriers at each stage of employment: entry, on the job, and exit. Audit studies have found discrimination toward older workers at the level of hiring, North said. For example, when researchers sent out a pool of resumes that were equal in qualification but different in age, the younger applicants were 40 percent more likely to receive callbacks, even for entry-level jobs (Lahey, 2008). North's own work (North and Fiske, 2016) shows that perceptions such as "older workers are not worth the training investment" lead to denied resources and opportunities for older adults already in the workforce:

> I actually asked participants to imagine that they are the manager of training and development at a medium-sized company and that they can allocate training resources, training dollars, to equally qualified, equally tenured, and yet differentially aged employees. I find time and time again . . . they deny resources to the older worker.

Concerning discrimination at the point of exit from the workforce, North simply noted that the number of age discrimination charges brought forth to the Equal Employment Opportunity Commission has risen 47 percent since 1999.

Part of problem, North said, is that age discrimination and denying resources to older workers is subtle in nature. So much of ageism is socially condoned, he said, such as birthday cards joking about how terrible it is to get older. Similarly, ageism in the workplace can be equally subtle:

> Consider coded language, job advertisements that advertise "fitting in with a young team" or they look for "new or recent college graduates," "new blood," "a willingness to learn," "high ambition." I was at an HR [human resources] conference last week, and I learned that one of the new tricks is to say we are looking for a "ninja." That is something that the young kids say these days, which in some ways, sort of reinforces this idea that older workers need not apply. Again, so much of it is coded. You see these same kinds of examples on the job. "Over-qualified," "not a good cultural fit"—these are phrases that do serve to exclude older generations. Yet in many ways they are very subtle and very, very difficult to prove in court.

North added that there is also a subtlety of the older worker self-handicapping through stereotype threat. In this way, older workers may internalize negative aging stereotypes, which in turn undermines their performance. For example, research shows that framing a task as a memory task causes older adults to perform worse, but framing that exact same task as a reading comprehension or impression formation task causes older adults to perform better (Chasteen et al., 2005; Kang and Chasteen, 2009). In his own work, North has simulated workplace interactions where actors of different ages talk about themselves:

> They subtly inject this idea that they are either violating these expectations to step aside by remaining around and sticking around and potentially blocking other generations or else they adhere to these expectations and they decide—they say, you know what, I am going to get out of the way and make way for younger generations. Again, it is a subtle effect, but, by and large, people have the strongest reactions toward the older guy depending on whether or not he gets out of the way or doesn't.

Proposed Solutions

North said that there is both a demographic imperative and a theoretical moral imperative as to why everyone should care about older workers. The demographic imperative is based on the fact that the population—and the workforce—is aging. The older segments of the labor force are the only ones projected to grow in the coming decades, and so North argued that "it is just pragmatic sense to create value from that." In terms of a moral imperative, North referred to his own work: "Age is the only social category identifying subgroups that everyone may eventually join" (North and Fiske, 2012, p. 1). He continued:

> That is different from race. It is different than gender. It is even different from how we typically think about disability. We typically think of the disabled as the others, as some people we have already alluded to today, if you are not disabled. Age is different. We are all going to get there one day; at least we hope to get there.

Given these imperatives, North said, it makes sense to recognize the truths about the abilities of older workers. He acknowledged that fluid intelligence (e.g., the ability to learn new things) does decline with age. However, he argued, this decline actually begins in the late 20s, and not every individual declines in the same way. A focus on declines in fluid intelligence tends to cause people to ignore the crystallized elements of intelligence (e.g., knowledge and experience). Furthermore, there are many other qualities that improve with age: emotional stability, conscientiousness, agreeableness, loyalty, certain kinds of problem solving, and certain types of wisdom.

North said that large-scale studies have found no overall relationship between age and job performance (McEvoy and Cascio, 1989) and no evidence that older workers are less innovative than younger workers (Ng and Feldman, 2013). Furthermore, studies have shown that younger workers are more resistant to change than older workers (Kunze et al., 2013) and that older workers surpass younger workers in terms of their reliability, loyalty, professional networks, skills, and productivity (Pitt-Catsouphes et al., 2007). Finally, North said, there are small things that companies can do that do not cost a lot of money and that could result in cost savings: flexible, half-retirement options; prioritizing older worker skill sets; creating new positions or adapting old ones; and changing workplace ergonomics (North and Hershfield, 2014).

In closing, North mentioned his research group, the Accommodating Generations in Employment (AGE) Initiative.[3] Its goal is to conduct research to show how to create value from the unprecedented levels of older workers and multiple generations in the workforce.

DISCUSSION

Kirsten Jacobs from LeadingAge asked if working to make perceptions of aging more positive can diminish the experiences of those who are not able to age "successfully." Levy said that the term "successful aging" needs to be redefined to recognize the diversity of aging experiences, including people of all different levels of health and ability. She added that it is necessary to develop an image of successful aging that is

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[3] For more information, see http://www.ageatnyu.org (accessed December 19, 2017).

not too idealized. North agreed, saying people need to be careful not to assume that looking younger than your age means you are more successful at aging. Kenneth Brummel-Smith of the American Geriatrics Society said he prefers the term "optimal aging" because that refers to the ability to respond to different challenges and also because the term "successful aging" implies that some people are not successful at aging. Campbell added that successful aging can also be defined as avoiding disability while aging, which is not a useful definition for people who already have disabilities. She said that researchers who study healthy aging in individuals with disabilities are looking at resiliency, and Brummel-Smith agreed that resiliency is the key to optimal aging.

Julie Bynum from Dartmouth University asked how receptive people in different fields, particularly business, are to making changes to help older workers. North said that despite the known demographic shifts in age, many companies and business schools are "behind the curve" when it comes to issues around ageism and not many researchers in the business world study aging. Levy agreed that this area of research is "in its infancy." She added that the issue of how receptive different fields are to change will become more important as campaigns to overcome ageism go forward. It will be important to know where changes will be most likely to happen, she said, and who will need more convincing. Wang added that the issues are the same for disability, especially because the business world focuses on competence and efficiency. The stereotypes of individuals with disabilities as warm and incompetent can be particularly hurtful.

Rebecca Stoeckle of the Education Development Center asked how automation will affect the business community, perhaps in displacing and disrupting jobs and skillsets. North emphasized the value of soft skills that increase with age and expressed hope that these capabilities could not be replaced easily by automation. He suggested a possible future in which automation replaces more of the types of skills normally ascribed to younger workers (e.g., computer coding) and therefore yields a net benefit to older workers.

Gabby Mendieta with IBM Watson Health asked about the positive images of age in the media. In particular, she asked if there are culture-specific views of aging that can be used as positive examples. Levy said that cross-cultural research does show that certain cultural groups have more positive views of aging, and she agreed that more should be done to draw on these examples in order to change the dialogue in a variety of sectors. She said that more positive age stereotypes have been presented in the media recently, but unfortunately, negatives views are very strongly held and reinforced over time.

Judy Gray, a journalist, asked how to avoid the onrush of negative stereotypes when competency begins to decline. Wang responded that when it comes to limitations in physical or cognitive competence, individuals with disabilities will talk about the importance of autonomy—meaning that they make their own decisions and enlist others for help when needed (as opposed to *independence*, which she said implies the individual doing everything for himself or herself). While a person may not be able to make certain decisions, she said it is important to determine what the individual can do and allow that person to make as many decisions as possible.

Donna Fick of the Penn State University College of Nursing asked how less visible disabilities (both physical and intellectual) can best be addressed in workplace discrimination. North emphasized the importance of looking at the domains of workplace characteristics that improve with age. Levy also commented on the importance of recognizing the diversity of strengths and abilities of the older population.

A workshop participant expressed a desire to keep aging as a separate issue from ability and innovation, as well as a need to better define "disability." She also said that it may be necessary to consider how to make workers and their environments more adaptive to aging in order to be more successful, just as workers and their workplaces have had to adjust to advances in technology. Campbell said that ageism in large part may be rooted in a fear of disability. In closing, she said that this highlights the importance of understanding the connections between aging and disability stereotypes because understanding the reciprocal nature of what underlies these stereotypes can help advance the conversation.

4

Disrupting Stereotypes in Practice

The second panel featured three presentations on the science of disrupting stereotypes in everyday life. Patricia Devine, the Kenneth and Mamie Clark Professor of Psychology at the University of Wisconsin–Madison, spoke about the ways in which individuals can overcome unintentional stereotyping. Mark L. Hatzenbuehler, an associate professor of sociomedical sciences and sociology at Columbia University's Mailman School of Public Health, discussed stereotyping and stigma in social structures and institutions. Julie Sweetland, a sociolinguist and vice president for strategy and innovation at the FrameWorks Institute, spoke about her organization's strategic approach to disrupting stereotypes. After the presentations, Rebecca Stoeckle, a vice president in the Health and Human Division of the Education Development Center, moderated an open discussion among the speakers and the workshop participants.

BREAKING PREJUDICE HABITS

Patricia Devine
University of Wisconsin–Madison

Devine started by describing her interest in the paradoxical situation where individuals believe that prejudice is wrong, yet they continue to hold unconscious stereotypes. Stereotypes come to mind unintentionally and automatically, she said. As a result, stereotypes influence our impressions of people, the judgements we make about others, and the way we interact with others. This creates a moral dilemma for people who renounce prejudice when they realize that they unintentionally contribute to bias simply by virtue of their subconscious thinking. Because of such stereotypes, even well-meaning individuals might constrain others' opportunities, diminish the personal experiences of others, or otherwise unfairly disadvantage others, she said.

Unconscious Bias and Habits of Mind

Devine described *unintentional biases* as "habits of mind" that arise spontaneously and may be responsible for perpetuating bias even among people whose personal values reject prejudice. As an example, Devine cited the experience of social psychologist Tom Pettigrew who talked to American southerners about race issues. Pettigrew said that many white southerners confessed that although they no longer feel prejudice toward black people in their minds, they still feel "squeamish" when asked to shake hands with a black person (Goleman, 1987). "These feelings are left over from what they learned in their as children," he said.

Devine offered one of her student's experiences as another example that emphasizes why unconscious biases are concerning. Devine said that the student came to the University of Wisconsin to study how to overcome bias. As it turns out, she said, there are many traffic accidents on the street corner outside the psychology building in Madison: students often cross against the light, and too often get hit by cars when doing so. One day, her student witnessed another student getting hit by a car and ran over to render assistance. Simultaneously, another woman came to help and began barking commands: "Don't move the head. Call 911." Devine's student looked up at the woman and asked, "Are you a nurse?" As it turns out, the woman was a doctor. Devine explained that her student's reaction to the experience was extremely negative. The student felt that she had violated her own morals, values, and principles, while also making the woman feel diminished in her role as a physician.

Overcoming Unintentional Bias

Devine posed the question, "Can we do anything about these habitual responses?" Her answer was "yes," and she explained that using the "habit metaphor" is helpful when thinking about unconscious biases. She used a personal example—her habit of biting her nails—to illustrate her point: Although she had the motivation to stop biting her nails, that motivation alone did not provide her with steps toward breaking the habit. In order to break a habit, a person first needs to be aware of when that habitual behavior appears. Devine realized that her habitual nail-biting occurred when she was writing and her fingers were poised above the keyboard. But even though she is now aware of when she is most likely to bite her nails, she said, simply being aware of the habit is also not sufficient to stop the behavior. To overcome habits, specific strategies are needed, which might include alternative responses or behaviors. In her own case, Devine said, she would place her fingers on the keys as a tactile reminder and an alternative response to her nail-biting habit.

Devine said that she has found that many people already have the motivation to change their stereotyping responses. As with the nail-biting example, after the initial motivation to break a habit is in place, it is necessary to help a person become aware of *when* he or she is likely to show bias. Devine said that this can be done by using the Implicit Association Test (IAT),[1] which reveals people's tendency to express automatic associations and unconscious stereotypes such as linking black people with negative information, linking white people with positive information, linking men with ideas of science or career, or linking women with ideas of the humanities or family life. Taking the IAT can be a very palpable and sometimes threatening experience for people, she said. The implicit biases that the IAT reveals show that we grow up in a culture where it is extremely difficult to avoid learning stereotypical associations commonly attached to major social groups. Devine said that media influences (e.g., television and the Internet) and observations of social interactions in everyday life activate stereotypical associations quite frequently. Children articulate these types of implicit associations as early as 3 or 4 years old—long before they make conscious decisions about their own personal values and beliefs. Essentially, people are set up to fall into the stereotyping predicament, she said.

Devine teaches about the kinds of processes and constructs that lead to the perpetuation of bias, such as the cognitive bias known as expectancy bias. Stereotypes, she said, tell us what to expect in others. Often stereotypes are prescriptive in that they include assumptions about how others should behave, and people become uncomfortable when others violate those expectations. This becomes a self-fulfilling prophecy, Devine said. "We interact with others in ways that draw out the very behaviors we expect to see." Biases like these are very subtle, which is why they continue to be perpetuated over time. Devine emphasized that "knowledge is power" when it comes to implicit biases and stereotypes. Being aware of biases makes it possible to understand when a person is most vulnerable to acting on biases and when a person's biases might manifest themselves in everyday life.

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[1] For more information, see https://implicit.harvard.edu/implicit (accessed December 19, 2017).

Intervention to Break Prejudice Habits

Devine has developed a toolkit intervention that includes several strategies for overcoming bias, including stereotype replacement, individuating others, taking perspective, considering situational explanations, and seeing opportunities for contact. She highlighted two of these strategies: individuating others, which involves seeking more information about others and taking others' perspectives into account; and considering explanations for other people's behavior that might be different from habitually biased expectations. Devine explained that her intervention builds on motivation, awareness, strategy, and effort. Though we might have the motivation for, awareness of, and strategies for disrupting stereotypes, we still need to work at actually disrupting the biases we hold, she said. Fortunately, she added, none of these tools are particularly difficult to implement, and, in fact, they make up a toolkit with synergistic effects.

Devine described her habit-breaking intervention aimed at disrupting stereotypes.[2] She has found that people in the habit-breaking intervention group increase their concern about discrimination as soon as 2 weeks and for as long as 2 years after her intervention training, as compared to a control group that does not undergo the intervention. Devine has found that *how* participants become aware of their own biases and *when* they are likely to show bias are extremely important because these details become cues for individuals to use the habit-breaking toolkit to reduce their own biases. The awareness gained in the intervention is not limited to personal bias: it also helps trainees become aware of biases held by friends, family members, and the media. After training, people are able to recognize biased behaviors and label them as wrong, and this capability becomes a springboard for combating bias in the larger world. Devine has found that trainees in the intervention group are much more willing to challenge a biased behavior and point out that behavior as wrong even 2 years after the training.

Closing Remarks

Devine said she is often asked, "Why do you focus on individuals when stereotyping is such a big problem, and when there are systematic issues that are involved in addressing bias?" She explained that focusing on individuals is a major part of the solution to disrupting negative stereotypes, although it will not be the whole solution. She emphasized that people become agents of change first in themselves, and then in the

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[2] For more information, see http://breaktheprejudicehabit.com (accessed December 19, 2017).

world around them. Devine described her research conducting cluster-randomized controlled trial designs in the science, technology, engineering, mathematics, and medicine (STEMM) departments at the University of Wisconsin (Devine et al., 2017). She said that these departments have historically suffered from an underrepresentation of women in the faculty. Half of the departments received training on the habit-breaking model of disrupting stereotypes, while half did not receive training. The departments that received training, she said, increased their efficacy in addressing gender bias, in both the commitment to addressing bias and the self-reported actions taken to reduce bias. Two years after the intervention, the departments that received training are hiring about 15 percent more women than was true at the outset of the research. This shows that individuals can be powerful agents of change both in themselves and in their environments, Devine said.

In closing, Devine said that prejudice is a habit that needs to first be broken in individuals and then dealt with in the larger social context. "It is a habit that can be changed to create a better overall, more welcoming, and inclusive environment for those who have historically been targeted by bias," she said.

STRUCTURAL STIGMA AND HEALTH

Mark L. Hatzenbuehler
Columbia University

Hatzenbuehler began by observing that "when thinking about stigma, we often imagine concrete events and experiences that happen to people such as hate crimes, bullying, or being the target of [negative] stereotypes." However, he said, while these types of experiences are important, they represent only the "tip of the iceberg" in terms of how stigma operates in the world. Stigma is much broader than these concrete events and experiences; it is promulgated and reinforced through social institutions, laws, policies, and social norms and attitudes held about members of stigmatized groups. Such *structural forms of stigma* operate just below the surface of daily life, with profound implications for the health and well-being of members of stigmatized groups, Hatzenbuehler said.

Although structural stigma is embedded in multiple institutions (e.g., schools, the criminal justice system, media, and hospitals), Hatzenbuehler said he focused his remarks on institutional laws and policies for two reasons. First, laws and policies are clear targets for interventions aimed at reducing the structural forms of stigma. Second, research shows that public policies not only reflect social norms and attitudes held toward members of stigmatized groups, but they also help to shape those norms and attitudes (Donovan and Tolbert, 2013). For instance, longitudinal studies have shown that when state governments pass laws banning smoking or banning same-sex marriage, prejudicial attitudes toward smokers and sexual minorities increase, respectively (Kreitzer et al., 2014; Pacheco, 2013). Hatzenbuehler and his colleagues have proposed that social policies have at least three different effects on stigma processes: policy can invigorate stigma (thereby producing harm), interrupt stigma (thereby mitigating harm), or willfully ignore the interests of stigmatized groups, which can exacerbate harm (Link and Hatzenbuehler, 2016). Hatzenbuehler presented illustrative examples of each of these three ways in which social policies affect health, using evidence from his research group.

Invigorating Stigma

To illustrate how policy can invigorate stigma and produce harm for members of stigmatized groups, Hatzenbuehler used the example of a quasi-experimental study that documented negative mental health consequences for lesbian, gay, and bisexual (LGB) respondents following state-level bans on same-sex marriage.

Between 2001 and 2005, 16 states passed constitutional amendments banning same-sex marriage. These events occurred between two data collection periods of a nationally representative survey called the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).[3] Respondents were interviewed in 2001 and re-interviewed in 2005, enabling researchers to examine changes in the prevalence of psychiatric disorders among LGB individuals before and after the bans. Hatzenbuehler and colleagues found that before same-sex marriage bans were instated in 2001, the prevalence rates of mood disorders were nearly identical between LGB individuals living in states that later passed a ban and LGB individuals living in states that did not (Hatzenbuehler et al., 2010). In 2005, following the passage of these bans, there was a 37 percent increase in the prevalence of mood disorders among LGB respondents living in states that banned same-sex marriage (see Figure 4-1). In contrast, no significant change was found in the prevalence of mood disorders among LGB individuals living in states that did not pass a ban. Furthermore, there was no significant change in the prevalence of mood disorders among heterosexual individuals living in states that banned same-sex marriage during the study period (see Figure 4-2), documenting specificity of the findings.

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[3] For more information, see https://www.niaaa.nih.gov/research/nesarc-iii (accessed December 19, 2017).

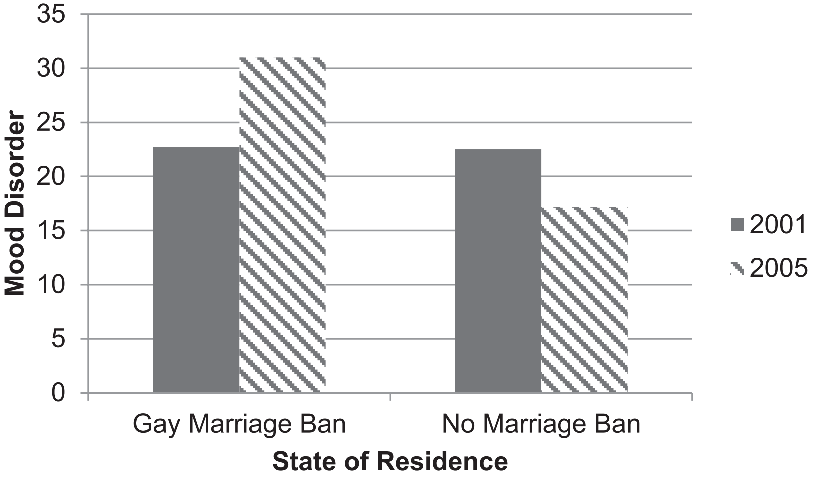

FIGURE 4-1 Comparison of mood disorders among LGB adults living in states that banned same-sex marriage and LGB adults living in states without marriage bans.
SOURCES: Hatzenbuehler presentation, October 10, 2017. Data from Hatzenbuehler et al., 2010.

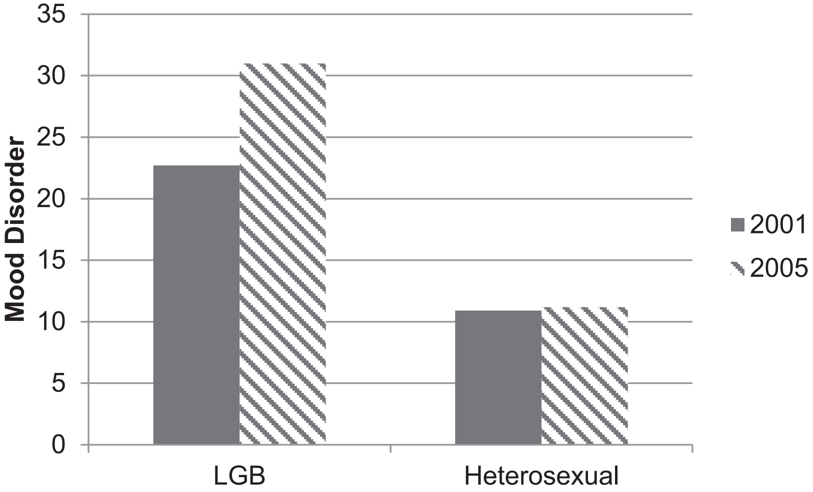

FIGURE 4-2 Comparison of mood disorders between LGB adults and heterosexual adults living in states that banned same-sex marriage.
SOURCES: Hatzenbuehler presentation, October 10, 2017. Data from Hatzenbuehler et al., 2010.

Interrupting Stigma

The second way that social policy can affect stigma processes is to interrupt them and thereby mitigate harm, Hatzenbuehler said. As an example, he described his research on state-level policies related to hate crime laws and employment nondiscrimination acts that specifically included sexual orientation as a protected class status (Hatzenbuehler et al., 2009). In this study, states with no protective policies were compared with states with at least one protective policy. Using data from the NESARC, state-level policy information was linked to individual-level mental health outcomes. The researchers found that LGB individuals living in states with no protective policies were nearly two and a half times as likely to meet criteria for dysthymia, a chronic mood disorder, than heterosexual individuals in those same states (see Figure 4-3). In contrast, LGB adults living in states with protective policies were no more likely to meet the criteria for dysthymia than were heterosexual individuals living in the same state. This pattern was similar across generalized anxiety disorder and posttraumatic stress disorder, as well as for psychiatric comorbidity, which is defined as the presence of two or more co-occurring psychiatric disorders.

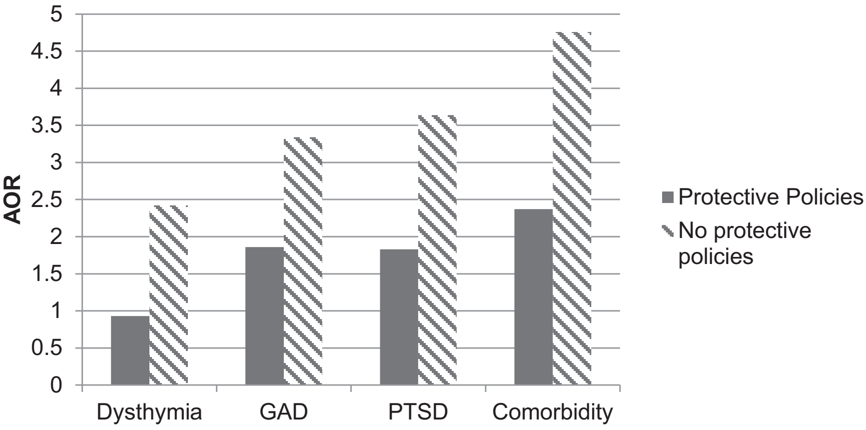

FIGURE 4-3 Comparison of psychiatric morbidity among LBG adults in states with and without protective policies.
SOURCES: Hatzenbuehler presentation, October 10, 2017. Data from Hatzenbuehler et al., 2009.

Exacerbating Stigma

The third way that social policies can affect stigma is by ignoring the interests of stigmatized groups through policy inaction. As one example of policy inaction, Hatzenbuehler noted that at the time of his presentation, no federal employment nondiscrimination act exists that includes sexual orientation and gender identity as a protected status. In the majority of the country, lesbian, gay, bisexual, transgender, and questioning (LGBTQ) people can therefore be legally fired based on their sexual orientation or gender identity, he said, because some 30 states do not include these factors as a protected status in their laws. Policy inaction can also occur when a policy is enacted but is then implemented selectively or not at all. Hatzenbuehler used the rollout of the Americans with Disabilities Act of 1990 (ADA)[4] to illustrate this form of policy inaction. There are many ways in which the ADA had created positive outcomes for individuals with disabilities, he said. Nevertheless, a report released nearly two decades after the ADA's passage noted various problems with the implementation of the law which could ultimately undermine its efficacy (National Council on Disability, 2007).

Structural Stigma and Health Inequities

Hatzenbuehler described three ways in which structural stigma via laws and policies may be producing health inequalities. First, structural stigma appears to increase various risk factors of poor psychological health. To illustrate this, he described a study in which he and colleagues rated European countries, in part, on the number of policies that conferred protections based on a minority sexual orientation (e.g., relationship protection, hate crime laws protections, and employment nondiscrimination protections) (Pachankis et al., 2016). This rating was then linked to individual-level outcomes among men who have sex with men (MSM) living in Europe. MSM living in countries with fewer protective policies were more than twice as likely to report concealing their sexual orientation compared to MSM living in countries with more protective policies. Hatzenbuehler said that hundreds of studies exist showing that concealment of one's stigmatized identity, including sexual orientation, is associated with a host of negative mental and physical health outcomes (Pachankis, 2007). This example suggests one psychological mechanism linking structural stigma to poor health, he said.

Second, structural stigma can also affect physiological health. Hatzenbuehler and his colleagues have conducted research showing that

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[4] Americans with Disabilities Act of 1990, Public Law 101-336, 101st Cong. (July 26, 1990).

structural stigma activates the body's physiological stress response system, as measured by cortisol (Hatzenbuehler and McLaughlin, 2014). If chronically activated over the lifespan, research shows that this activation of the physiological stress response system can lead to poorer health outcomes. Hatzenbuehler said this research suggests a physiological mechanism explaining the relationship between structural stigma and health.

A third way in which structural stigma may affect health was suggested by research that finds structural stigma may undermine the effectiveness of health interventions. Researchers reanalyzed a meta-analysis of 78 studies that focused on individual-level HIV prevention interventions to improve condom use among African Americans (Reid et al., 2014). These interventions were conducted in communities across the United States that held varying levels of prejudice toward African Americans. In communities with the highest levels of prejudice, the effect size of the interventions approached zero, indicating that the interventions were not effective. In contrast, as prejudice levels decreased, the effects of the interventions became much more robust. These data provide some empirical evidence for why some health interventions might flourish in some communities and languish in others, Hatzenbuehler said, and they suggest that structural stigma is one mechanism underlying that difference.

Closing Remarks

While the research that Hatzenbuehler presented focused on stigma surrounding sexual orientation, he said he believes that his findings can be used to disrupt other kinds of stereotypes as long as interventions are appropriately adapted to different stigmatized conditions or characteristics, including mental illness and disability. Hatzenbuehler also said that focusing on structural stigma in laws and policies alone is not a sufficient target for interventions that seek to disrupt negative stereotypes. Stigma and stereotypes are multifaceted constructs, he said, so they require multipronged and multilevel interventions. Hatzenbuehler concluded by emphasizing the robustness of the relationship between social policies and health outcomes, and he noted that this relationship has been demonstrated across multiple methodological approaches, stigmatized groups, and health outcomes, as well as by multiple research groups. Taken together, he said, this work suggests that structural stigma represents one important target for multi-level interventions aimed at disrupting stereotypes.

DISRUPTING STEREOTYPES AND THE REFRAMING AGING PROJECT

Julie Sweetland
FrameWorks Institute

Sweetland introduced the work of the FrameWorks Institute,[5] a nonprofit organization that conducts and shares research to provide evidence-based strategies for reframing social and scientific issues. "The stories that we tell about social issues are the dress rehearsals for the policies that our society will eventually endorse," she explained.

Sweetland described FrameWorks' recent studies investigating the communications aspects of aging, in which an interdisciplinary team of researchers conducted individual and group interviews to assess people's attitudes toward aging. These studies have found that Americans hold multiple and conflicting models of what it means to age. The most dominant association is that aging is a process of physical and mental decline that ends in dependency, an idea considered unpleasant by most people. In turn, Sweetland noted, people distance themselves from aging. They consider older people as different or separate from the rest of society and think of older people as "others." Americans often defined *older* as 10 years older than themselves, no matter their age, and typically do not want to identify as aging. The tendency to "other" older people can dampen support for public policy issues that have to do with aging because the public does not want to associate themselves with the idea of being old, she said.

Reference Terms for Older Adults

The FrameWorks Institute ran an experiment to explore the public's associations of common reference terms for older adults with assessed level of competence. Respondents consistently ranked words like "senior," "elder," and "senior citizen" as being the least competent (see Figure 4-4), and respondents associated these terms with frailness, feebleness, and not being able to use a cell phone. The terms "older person" and "older adult" were consistently associated with high competence and ideas like wisdom, savvy, and self-sufficiency. At the time of this research, Sweetland noted, the term recommended by many leading aging organizations was "older adult." However, when respondents were asked how old an older adult is, the average answer was 54 years old, and some answers

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[5] For more information, see http://www.frameworksinstitute.org (accessed January 18, 2018).

FIGURE 4-4 Public association of various terms for aging with expected age and competence level.
SOURCES: Sweetland presentation, October 10, 2017. From Sweetland, Volmert, and O'Neil (2017). Used with permission from the Frameworks Institute.

ranged as low as 30 years old. By contrast, an *older person* was expected to be in his or her mid-60s, and *senior citizens* were expected to be around ages 68 and 69.

In order to successfully characterize people in later life, the FrameWorks Institute recommends using the terms "older person" or "older people" because these terms cue that an individual is over the age of 60 while also prompting associations of competence. Sweetland cautioned against using the term "older adult" when talking about individuals who are 65 years or older because the public pictures a much younger person. The words we use can have significant and non-obvious effects on people's understanding, she said, and it is necessary to use the available evidence-based methodologies so that positive cues are used. Positive cues, such as the term "older people," can move the public toward more positive, productive understandings of age and away from negative stereotypes.

Communicating About Ageism

One of the most important issues that advocates can raise right now, Sweetland said, is the topic of ageism. She noted that FrameWorks research has found that most Americans have not heard of this term before, making it all the more important that communicators take the opportunity to frame the issue conscientiously. It is therefore necessary, she said, to elevate the issue of ageism by talking about it more frequently and explicitly. "There are three legs to the stool of supporting the public's understanding of ageism: naming and defining it; explaining the mechanism, the process by which it happens, by explaining implicit bias; and offering examples," she said.

Sweetland recommended specific wording for a definition of ageism: "discrimination based on prejudices about age." This definition, she noted, allows room for interpersonal, structural, and institutional forms of ageism. It is also necessary, she said, to explicitly state that ageism can have a negative impact, and to avoid examples of ageism that might be dismissed as "not that bad." She noted that the most frequent form of ageism is jokes about age. Nevertheless, when presenting ageism as a social problem, leading with the issue of ageist jokes can backfire by making individuals more likely to dismiss ageism as an issue of little importance.

Sweetland cautioned against comparing ageism to other forms of identity-based discrimination, because when FrameWorks researchers tested language that compared ageism to sexism or racism, it backfired. People reasoned that because they had heard of sexism and racism but had not heard of ageism, ageism could not be as prevalent or as harmful as the more familiar forms of discrimination. Connecting ageism to sexism and racism led people to downplay its possible significance. Thus, we need to define ageism on its own terms, without comparing it to other "isms," Sweetland said.

Ageism should also not be labeled as a civil rights issue, she said. When ageism was labeled a civil rights issue, FrameWorks found that people's focus quickly became narrowed to actions that would be handled through lawsuits. Instead, talking to people about implicit bias and learned expectations was more successful in lending a sense of importance and urgency to the issue of ageism.

Instead, Sweetland said, the most effective strategy for elevating the issue of ageism is stating that ageism has a negative impact and using carefully chosen examples. FrameWorks found that making ageism concrete by using the example of workplace discrimination is an effective way to build public understanding of how and why ageism is harmful to individuals and society. In particular, because the public is familiar with the idea of workplace discrimination in other areas, it is a useful starting point for illustrating the impact of ageism. Sweetland said that FrameWorks analyzed public reaction to a current policy proposal—namely, changing job applications so that applicants are not required to disclose the year that they graduated from high school or college—and found that this example prompted members of the public to broaden their thinking about structural stigma and stereotypes. She noted that examples of age discrimination in health care were also found to be effective in raising public awareness.

Finally, Sweetland said that it was important for communicators to help the public understand how age discrimination comes about, and that raising awareness of implicit bias can be an effective strategy. The explanation of implicit bias that FrameWorks recommends says that "Because we are all exposed to negative messages about older people, our brains automatically form judgements about people based on their age." For example, she pointed out that older characters in movies are often portrayed as forgetful, grouchy, or frail. As these stereotypical characteristics become ingrained in our understanding of old age, it can affect our decisions and assumptions without us realizing it. This explanation should be followed with examples of what can be done to disrupt implicit bias or prevent it from causing unfair treatment of older people, Sweetland said.

Closing Remarks

Sweetland closed with a quote:

> Neither revolution nor reformation can ultimately change a society. Rather, you must tell a more powerful tale, one so persuasive that it sweeps away the old myths and becomes the preferred story, one so inclusive that it gathers all the bits of our past and present into a coherent whole, one that even shines some light into our future so that we can take the next step. (Illich, 2007)

She said, "the ideas that we have brought together today could be really helpful in shining a light on a different way of talking about aging, and I invite you to change society by telling an alternative story."

DISCUSSION

A workshop participant reflected on the different types of discrimination that individuals might face (e.g., discrimination based on age, ability, race, income, or sexual orientation) and asked how discrimination against older persons or those with disabilities might vary based on other demographic factors and whether this should affect how we think about the ways in which discrimination occurs. Devine answered that we do need to think about those other factors because no one is a member of just one group and we all live with different experiences of intersectionality. Hatzenbuehler added that some believe having multiple stigmatized identities can cause additively worse outcomes. This is sometimes true, he said, but not for all outcomes: some research has shown a protective aspect to having multiple identities. Hatzenbuehler gave this example: "If you are African American and identify as gay, you might draw upon your experience growing up in a family that inculcated a positive sense of identity, and thus you can buffer the negative experiences or risk factors of discrimination based on sexual orientation." The ways in which intersectionality play out are complicated, and while intersectionality does not always predict negative outcomes, the complexity makes it difficult to tailor interventions across different groups, he said. Sweetland added that keeping intersectionality in mind might offer the fields of aging and disability different ways to think about possible coalitions that could be very powerful. She encouraged the audience to think about how to connect the movement against ageism and ableism to other movements as a way to begin creating change.

James C. Appleby of The Gerontological Society of America asked if the issue of workplace discrimination could be addressed by teaching people who screen resumes and job applicants how to flag their own biases and therefore avoid them. He asked Devine if there is a way to use her interventional work to get at workplace discrimination. Devine replied that it was absolutely possible and that many organizations around the United States are already interested in doing so. She noted that in her STEMM study, she did not actually know the mechanism causing more women to be hired in the intervention group. She asked: Were the people in charge of hiring doing a more careful analysis of the resumes they received? Did they make a concerted effort to bring in more women and then discover that these women were worthy of being hired? Is it because the department's climate changed and thus became more effective in recruiting women? She believes that more detailed information on these processes could lead to the development of even more effective tools to interrupt bias.

Julie Bynum of Dartmouth University asked how stereotypes and bias around aging and disability might affect physicians' heuristics and decision-making processes and inquired about interventions to address implicit bias in decision making. Devine answered that the key issue is to recognize when heuristics would lead a physician to provide worse instead of better care. She suggested specific things that physicians could do to ward off unintentional bias, including the use of actionable checklists and ways to interact with patients and their families to ensure that the physician is getting necessary information for decision making. This kind of intervention helps people realize how often they are acting on implicit biases and helps them to slow down and have more thoughtful decision-making processes, Devine said. "If you can name it, you can tame it," she said, in regard to identifying bias that might lead someone astray. She once again emphasized that habit breaking is something that one has to do in all domains of life.

Margaret Campbell of Campbell & Associates Consulting brought up the tendency to reify social categories through stereotypes and asked the panelists to comment on their thoughts about getting beyond stereotypes to inclusion. Sweetland responded by providing two framing tips: (1) moving from using they/them language to us/we labels is extremely important in mitigating stereotypes; and (2) she has found it effective to openly communicate with an insistence and reminder that a just society includes and welcomes the participation of all of its members, making sure to note that right now we are marginalizing, excluding, and minimizing the contributions of older persons. She said that simply building this kind of description into communication makes people want to be more inclusive. Devine added that becoming aware of the way in which stereotypes actually constrain the opportunities for older people, whether in the job context or in daily interactions, can be a revelation for some people, which can then lead them to make efforts to become more inclusive and create a welcoming environment. Devine described the University of Wisconsin–Madison Challenge[6] aimed at promoting inclusion and overcoming bias on campus. She said she has found that people who undergo stereotype intervention training are more likely to join the challenge and take active steps to mitigate stereotyping.

Kathy Greenlee of the Center for Practical Bioethics emphasized another aspect of framing aging that often goes unnoticed: society often describes aging as an individual experience, and many messages tell older people that they are responsible for their own future. This is true, she said, but it prevents us from getting to a collective sense of "we." She said that there is a much better sense of *we* in the disability field and that the aging field needs to create more cohesion among stakeholders and older people in order to mobilize people en masse around issues of aging.

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[6] For more information, see https://campusclimate.wisc.edu/join-the-uw-challenge (accessed December 19, 2017).

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Disrupting Negative Stereotypes in the Media

The media has a significant role in how older persons and individuals with disabilities are seen and portrayed. This panel featured individuals from a variety of perspectives who work primarily in film and television. The panelists were each given the opportunity to introduce themselves and give a synopsis of their backgrounds and experiences. Subsequently, Janni Lehrer-Stein, an independent consultant on disability policy and advocacy, led a moderated discussion with the panelists and then opened up the discussion to the workshop participants.

INTRODUCTIONS

Karen Chong
Disrupt Aging, AARP

Chong is the director of audience and influencer engagement at AARP, working in a department called Disrupt Aging, which seeks to challenge "outdated beliefs about aging." Age itself should not be seen as a limitation to anything that an individual wants to accomplish, Chong said, but rather as something that gives experience, wisdom, and the possibility to do more. Chong expressed an interest in talking about how people are represented and portrayed as they age.

Lisa Takeuchi Cullen
Television Writer, Author, and Journalist

Cullen was previously a staff writer at *Time* magazine and also wrote two books, including one about how American funeral traditions are changing in response to the changing attitudes of baby boomers. Most recently, she has been working in the television industry where she writes and pitches television pilots. Cullen is a member of the Writer's Guild of America East Council and is also a member of its diversity committee. She said that changing who we see on the screen can, in large part, be accomplished by changing who is behind the screen; that is, by increasing the diversity of the writers who originate the stories.

Robert David Hall
Actor, Musician, and Disability Advocate

Hall described how at the age of 30 he was hit by a drunk truck driver and suffered burns over most of his body and the loss of both of his legs. He noted that as a member of the Screen Actors Guild (SAG) and the American Federation of Television and Radio Artists (AFTRA), now collectively known as SAG-AFTRA, as well as of Actor's Equity, he has seen many changes in the entertainment industry over the years. "I love acting," he said. "I love music. I didn't think being disabled was supposed to cut me out of that." Hall continued:

> It was quite a shock to find out that people pitied me for being disabled. I was treated differently when I wheeled my chair than when I put my prosthetics on and kind of hobbled around. People with disabilities understand that there is a difference in the way you are treated.

Annie Marter
Nine Stories

Marter is the executive vice president of production development at Nine Stories, a production company. She noted that while she does not have expertise specific to aging or disability, her years of experience in entertainment and film give her insight into how people are cast, how roles are approached, and what audiences may be looking for.

MODERATED DISCUSSION WITH PANEL SPEAKERS

Janni Lehrer-Stein
Independent Consultant, Disability Policy and Advocacy

Lehrer-Stein moderated the discussion by proposing several questions for the panelists.

Current Characters and Storylines

Lehrer-Stein asked the panelists to reflect on how characters are currently portrayed as well as on which types of characters or storylines are easier or harder to broach. Marter said that characters who are older or have disabilities may be depicted as being sweet or in need of help, which can make the characters accessible to audiences, but not necessarily complicated or truthful. However, Hall said, "It is more than just a cuddly, cute kid in a wheelchair." Noting that he has only had two wives or girlfriends in his movie roles, Hall said more "normal human being" roles are needed for older characters and those with disabilities. Cullen agreed, adding that we do not necessarily see older people as heroes or romantic leads. Furthermore, when a character has a disability, the disability itself is often seen as the whole character. She described how in a pitch for a show, writers will often give synopses of the characters. "We go through all of their qualities, the things that make them special, the things that make them interesting. If the character has a disability, then you lead with that. You don't get to be just a person who happens to have Parkinson's and who is also a racecar driver and a math genius."

Chong said that the portrayal of characters with disabilities in entertainment can be patronizing, and that the use of "inspirational" characters can be an attempt to make it acceptable to look at people with disabilities by highlighting what are framed as extraordinary achievements. Hall agreed, noting that historically, characters with disabilities were first ones like Quasimodo and Captain Hook and later were "inspirational" characters like the angry Vietnam veteran who climbs Mount Everest. Chong added that age and disability need to stop being punchlines for characters. "Is this person a whole person who is someone who seems relatable, that you see yourself in or someone that you know in? Or is that person portrayed as a caricature?" she asked. As an example, Chong pointed to the movie *Grumpy Old Men*. "Just the title tells you exactly what to expect. We just think when you are old and a man, you must be grumpy. You must also wear your pants hiked up to *here*." The panelists also mentioned various cliché lines often spoken by older characters such as "Get off my lawn!" or "You darn kids!"

Hall said his primary goal was to become an actor, and he did classical theater for many years, but he admitted that at this phase of his career he will likely be playing "the senior consulting coroner or the aging judge or the angry disabled guy." However, he said, "that is fine because I like playing. I like stories. Stories change the way people look at things. Above all, you have to be entertaining. . . . If it is not good and if enough people don't see it, it goes away."

Similarities to Other Stereotypes

Lehrer-Stein followed up by noting that the issues raised in the previous discussion relate to more than just age and disability. She asked the panelists to compare the barriers based on age and disability with those related to race and gender. Cullen said discussions around diversity often focus on race and gender first and suggested that writers can have an impact simply by changing what they write in scripts. She said that as a person of color, she has noticed how character descriptions in scripts will often be specific if a character is not white, but will remain silent otherwise, leading readers to believe that all characters are white by default. Cullen said it has become her practice to be more specific in her description of all types of characters, which should apply to age as well:

> What I try to do when I write a character description is I will say if a person is white. I don't care if you have already assumed he is white. I am going to say he is white. Same for age. I think if my character is 65, in my heart, she is 65, I am writing that she is 65. I am not saying she is "older" because older to you may not be older to me. I want the age to be specific. So, I think that we writers can make these small changes, but they are seismic in terms of the generally accepted practice.

Marter agreed with Cullen's remarks, saying that she has also read many scripts where only certain characters had their race or ethnicity identified. Not including race specifications in character descriptions (unless necessary, as in the case of a true story) could help to make the focus more on who the character is as a whole person. Marter then told an anecdote of offering a role to an African-American actor in which the race of the character had not been specified:

> When the actor received the offer, his representation called us, and they were over the moon. They were like, "He never gets offers like this. He only gets the same offers all the time for the African-American guy." This is so exciting to be able to see something that is different. Just that little, tiny thing was like, "Oh, we actually can make a difference in this very easy way of thinking slightly outside of this kind of box that we have been programmed to think in."

In terms of gender issues, Marter also noted that conversations about the importance of female directors have increased.

Changing Perceptions and Storylines

Lehrer-Stein observed that the panelists' comments reflected earlier discussions in the workshop concerning inclusion and personal choice. She then asked the panelists to comment specifically on how stakeholders in the media can help disrupt stereotypes and promote inclusion.

Hall said he would like to see more people with disabilities believe that they belong in the media, including entertainment and writing, so that more good stories are told:

> I think that every group, every subgroup that we can name has a percentage of very gifted people, a percentage of striving people, a percentage of average, and a percentage of below-average people. I want to encourage talent and intelligence and creativity from every single group. The best product will come from that.

Chong cited AARP's project Movies for Grownups,[1] which identifies movies with stories that are more inclusive and often feature intergenerational casts and older people ("however you want to define 'older!'"). She said that an important part of the project is to be in the conversation by celebrating the movies through awards ceremonies and participation in screenings. AARP's Disrupt Aging department is reaching out directly to the entertainment community to change conversations about aging in a more positive direction and to discuss how images in entertainment can reflect more positive images of aging.

Marter said that the film industry is dictated largely by business concerns and that for the content to change, audiences have to show up for movies with those storylines. "As much as, in my every day, I go out of my way to try to find new stories that are telling new perspectives," she said. "There is also a reality of what I am going to be able to sell. That is a direct reflection of what happens to be popular at the time." Marter also circled back to Hall's comments about entertainment value. "If it is good and it touches upon something that I think is fresh and it really portrays people in an honest way, then you will have an audience for it." In that way, she said, she can continue to put these ideas into practice by looking for material that "approaches aging in a way that is positive and fun and entertaining."

Cullen said that streaming entertainment and cable television prob-

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[1] For more information, see https://www.aarp.org/entertainment/movies-for-grownups (accessed November 30, 2017).

ably have the greatest opportunity for change right now because of the huge need for new content. She cited examples like *Transparent*, *Frankie and Grace*, and *Getting On*. "If I came in with a great story that just happened to be about older people or about disabled people that was set in a world that felt organic," she said, "then I think that we have a great opportunity right now to sell those stories and to show them to America."

DISCUSSION

Erwin Tan from AARP asked the panelists how the media can use subliminal messaging and positive stories about aging and disability. Cullen said that seeing stories about people who are different can change conversations. When *Transparent* came on the air, studies mapped how people's attitudes towards transgendered individuals started to change. Tan acknowledged that it was not the show alone that helped to change attitudes, but she postulated:

> Maybe it is different with film, but I think with television, particularly, in the screen, in your house, and you are seeing them every week and you have relationships with them. Maybe it is not even subliminal. Maybe it is just overt. You start to, I think, have an empathy and an understanding of those characters in a way that—if you live in a town, in a family, in a situation, where you just don't confront people who are "other," then maybe the screen can do it for you.

Kenneth Brummel-Smith from the American Geriatrics Society said he appreciated the panel's honesty about how financial concerns can drive the decision-making process for choosing stories, but he noted that many movies targeted to younger generations cost hundreds of millions of dollars to make but end up as box office failures. Therefore, he asked if lower-budget films are more likely to pay for themselves and added: "I wonder whether part of the unwillingness of producers to take the chance on something that focuses on aging and disability might really be more an attitude than an actual reality?" Marter said that attitudes about focusing on younger groups are evolving, in part because of changes in the demographics of who actually goes to movie theaters. Marter spoke about how media companies often attempt to capitalize on the success of other projects. For example, she said, soon after *Transparent* became popular, scripts were suddenly always including a transgendered character, which came across as disingenuous to her, as the characters were not necessarily being presented in a sensitive and honest manner. "It is hard to kind of pick through and feel which ones really are actually told from a good place," she said. "There is this kind of balance of trying to find the right audience, appeal to the right audience, but in a good way and in a way that is truthful."

Linda Flowers from AARP's Public Policy Institute said that it seemed to her that many characters start as caricatures and stereotypes, and wondered if this is a necessary precursor. "Do we have to start there to get people kind of warmed up to the idea?" she asked. "Or is there a way to change the conversation so that you can bring people on as their authentic selves?" Cullen argued that a key step is increasing the diversity of writers:

> I think the more people who look like me or like you, are able to pitch shows, write shows, and get them on air, the more authentic the stories will be because they come from our own experience. . . . When shows are written from an authentic, true experience, when movies are written from that place, I think that the success of those shows and movies will hopefully move us to a place where more people of color, more people who are older, more people who are disabled, people who are writing from their own actual experience will get that exposure.

Chong and Marter agreed, however, that much of the power lies with the ultimate decision makers, who are often not diverse themselves. While writers can write authentic, gripping, and heartfelt scripts with a range of characters, the scripts will still need to get greenlit, funded, and brought to a screen. Hall agreed, noting that many producers will be interested in projects that focus on issues that have affected them personally.

Dan Trucil with the American Geriatrics Society asked whether the regulation of broadcast television "in the public interest" had any role here, as well as whether the growing number of unregulated forums with user-generated content might be a prime outlet for fostering more diverse conversations. Hall said that he did not think regulation could have a real role here, but he agreed that the proliferation of new ways of getting entertainment and information will help to make real changes. Cullen said that the media landscape is changing rapidly and that the newer forms of media like YouTube, Xbox, Instagram, and Amazon represent huge opportunities. "How do we get stories about aging and disability on YouTube?" she asked. "How do we leverage [these newer platforms] to tell these stories that ought to reach not just the choir, but younger generations too?"

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Disrupting Negative Stereotypes in Design

The design industry has significant potential to help disrupt stereotypes of older persons and individuals with disabilities. This panel featured individuals from a variety of perspectives who work primarily in fashion design. The panelists were each given the opportunity to introduce themselves and give a synopsis of their backgrounds and experiences. Subsequently, Brendan McCarthy, the director of the undergraduate Fashion Design Program for Systems and Materiality and an assistant professor of fashion in the Systems and Society Pathway at the Parsons School of Design, moderated an open discussion among the speakers and the workshop participants.

INTRODUCTIONS

Brendan McCarthy
Parsons School of Design

Recognizing the value of unusual backgrounds and partnerships, McCarthy said, Parsons is introducing new methodologies to challenge its students' approaches to design. For example, in a pathway called Systems and Society, students examine critical social issues for specific communities in relation to fashion design. Instead of simply focusing on a garment as the outcome, students design entire fashion systems, from sourcing to distribution, using a more holistic approach. Within this approach, co-design is becoming increasingly important. McCarthy said that the students in his thesis class were first challenged to establish their individual frameworks of values: who they are, where they came from, what communities they care about, and what they believe in. As a result, the students developed a wide range of ideas for their design projects and brought in a variety of people to co-design with, including Iraq War veterans, a Brazilian grandfather with Parkinson's disease, formerly incarcerated Americans, a family of Mexican-American immigrants whose parents came to the United States as undocumented immigrants, survivors of sexual assault, an African-American woman who was deeply invested in Japanese anime and manga, a Korean grandmother who was "obsessed" with her dog, and a dad who loved basketball and denim. However, these partnerships really were not unusual at all, McCarthy said; instead, these collaborations were natural, as they emanated from the students themselves once they thought about whom they wanted to design *with* instead of whom they wanted to design *for.*

Overall, McCarthy said, co-design principles challenge students to think about what human-centered design means. He attributed the students' success, in part, to an emphasis on collaboration and the use of interdisciplinary methods. Professors at Parsons have a wide variety of backgrounds and disciplines (e.g., product design, engineering medicine, health care), and McCarthy pointed to his own unusual career path: he was a mathematics major in college and subsequently worked in finance on Wall Street before changing course and working at Donald Judd's museum in Marfa, Texas, where he eventually studied art and architecture. "That is creating an enormous amount of diversity in the outcomes," he said, "but it is also changing the landscape of the communities that fashion can engage and does engage."

In addition, McCarthy said there is a major shift at Parsons toward developing unusual external partnerships and relationships. For example, Parsons is collaborating with the United Nations on sexual health and reproductive rights in Kenya. Parsons also had a class whose students redesigned the hospital gown in collaboration with older patients as well as individuals representing hospital and laundry systems; they then partnered with a healthwear company that will be manufacturing and testing the use of the gowns in real medical systems. McCarthy said that these partnerships lead to new conversations "about the possibilities to not only disrupt stereotypes, but to rethink what is possible with respect to inclusivity."

Grace Jun
Open Style Lab

Jun is an alumna of Parsons, an assistant professor in the School of Fashion, and the executive director of Open Style Lab,[1] a nonprofit organization with a mission to make clothing (and sometimes wearable technologies) accessible to people with a wide range of disabilities (e.g., through aging, injury, or illness). Jun said that she challenges her students to think about the life course (including the increased risk for disability with age) and what the body itself means. As part of this work, she is exploring how to expand education and, perhaps most importantly, how to raise awareness about the importance of accessible clothing. For example, she said, if an individual has limited dexterity and it takes them 25 minutes to put on a shirt to go to work, then accessible clothing may be a more significant need for that individual than other more complex technologies.

Jun runs a 10-week summer program that invites individuals from various disciplines (e.g., designers, engineers, occupational and physical therapists) to come and co-design with a person with a disability. She said that getting to know the person and his or her ecosystem of needs and desires is at the core of the methodology:

> For example, we had April, who is an advocate and teacher, who wanted to share her life of having spinal cord injury. The students really just kind of went with her. They went to see concerts. They followed her and shadowed her home. They asked her about her husband, how he felt about some of the clothes that she had. Does she like them? How much money was she spending on clothing, such as gloves that wore out because she would either have them torn or abraised through using her wheelchair?

When following this approach, the students need to consider fabric choice and the use of different types of tools or technologies; they also have the opportunity to fit and test their designs with the client and the larger community. Co-design classes, Jun said, enable individuals with disabilities to describe what disability means in their own voices and inspire students "to design in a different way that they also see themselves wanting in the near future." Jun concluded by describing fashion as a tool for greater identity and self expression, and by saying that the development of better assistive devices can help to empower a greater sense of dignity.

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[1] For more information, see www.openstylelab.com (accessed December 6, 2017).

Shalethia Gable Washington
Veterans Campaign

Washington is a 2017 alumna of Parsons, and she participated in the Systems and Society course described previously. She expressed concern about how recent conversations about disrespecting veterans (e.g., the National Football League and the national anthem) often seem to be missing the voices of the veterans themselves. Therefore, for this course she worked with five Iraq War veterans to help them define themselves apart from how they may be described by others (e.g., politicians, film makers, and the makers of role-playing video games).

> Throughout this process, we tried several different ways to try to communicate their story through fashion. For me, I am not really in the business of selling clothes or just making collections just to make beautiful clothes. For me, fashion is about really having the opportunity to make clothes speak and to have them say something that is more than just aesthetics. This project was really about disrupting the negative stereotypes that people may have about veterans or assumptions that people may make about veteran's lives when they transition back into civilian life.

Washington introduced the participants to blind contour drawing, a process in which the individuals can only look at the object they are drawing and cannot look at or lift the pen from the paper they are drawing on. Looking at the blind contour drawings of military uniforms by both the veterans and a group of civilians, she observed that the veterans took much longer to complete their drawings and included more specific details. Washington said she then used the drawings to "get away from the traditional norms of fashion, of creating clothes, and really try to create a new form of fashion" by using the drawings as patterns that she used to create clothing. "The point of that," she concluded, "was to really just disrupt society's notion of how we see veterans and also a chance for them to define themselves."

Lucy Jones
Fashion For All (FFORA)

Jones reflected on how fashion can help to change perceptions of disability. As an example, she showed a 1978 leaflet from the National Health Service (NHS) in the United Kingdom called *Your Sight and the NHS*,[2] which stated "glasses are complex scientific instruments with a

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[2] For more information, see http://journal.sciencemuseum.org.uk/browse/issue-07/rather-unspectacular (accessed December 18, 2017).

medical purpose: to enable visual clarity and optical functionality." In contrast, Jones next showed a 2014 magazine cover on which a fashion model is featured wearing non-prescription lenses. She also shared an image of Amy Mullins, an athlete, model, and actress, wearing prosthetic blades on a 1998 cover of *Dazed and Confused* magazine. "In this image," she said, "I think it is striking how beautiful her blades look against her form. It is just so ergonomic and so sumptuous and a perfect example of design done well."

When Jones was a student at Parsons, she delved into co-design with wheelchair users, an approach she calls *seated design*.[3] Her interest in this area began as a result of 2012 conversation with a family member with a disability who told her he did not feel included in the fashion design system. Jones posted an ad on Craigslist asking people with disabilities to speak with her about their lifestyles and what problems they had with clothing, and she met Ronnie, a woman with multiple sclerosis who allowed Jones to take extensive measurements of her body:

> One thing I had never considered before is how I had never approached design from the seated body. I have always approached the standing mannequin or a model on a runway. I had never thought about design seated. We measured everything. We measured her buttocks, her knee spread, her elbows, from the back of her neck down to her popliteal crease. We measured everything. And then I did the same with some friends, too. I measured everything. I measured a number of individuals to see how our bodies change from the standing and the seated position. Of course, what I discovered was when we sit down, [. . .] there is a lot of fabric that needs to be there that isn't there. There are also other things, such as our trouser legs not falling appropriately. There were so many discrepancies with our measurements that I thought, my goodness, I have been learning tailoring for standing bodies, but it doesn't apply when we sit down.

As a result of this experience, Jones created a manual for creating clothing with seated design in mind, including elements such as different entry points to garments and modular parts. Furthermore, Jones is launching her brand FFORA based on these experiences and her own questions: What is a world that is designed for all, and can we achieve it?

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[3] For more information, see www.lucyjonesdesign.com (accessed December 6, 2017).

Jean Shein
UNIQLO

Shein has worked with UNIQLO for more than 20 years in Europe, Japan, and the United States. Referring back to McCarthy's comments about unusual backgrounds and career paths, Shein noted his own background in cultural anthropology and East Asian studies and said that he met the founder of UNIQLO on a bus, which began his relationship with the company. Shein also referred to Jones's presentation by noting that while UNIQLO has sponsored both wheelchair-using and non-wheelchair-using athletes, they all wear the same athletic clothing. The focus has been on garments' performance and functionality (e.g., moisture-wicking ability), but not as much about fit. "I think that is something I need to look into a little bit more," he said.

Shein focused his remarks on UNIQLO's experience with older customers. He began by showing a married, retired couple in Japan who have developed a large following on Instagram under the name Bonpon511.[4] The couple posts pictures of themselves wearing coordinated outfits, and UNIQLO has sponsored them by providing clothing. However, Shein noted that UNIQLO does not design for any particular demographic. The company calls its line LifeWear[5]: "simple apparel with a not-so simple-purpose: to make your life better," and it uses the tagline "UNIQLO LifeWear. Simple made better." The idea for LifeWear came from the idea that there are many types of clothing (e.g., sportswear, casual wear, athleisure, formal wear), and so the company wanted to make clothing "for your life." When designing clothing, the company's designers use the "LifeWear filter," which looks at three aspects of clothing: sustainability, innovation (e.g., through fiber technology), and making people's lives better. Shein discussed the aging population of Japan, including the tendency of older Japanese to be isolated, and he described a project in which his team at UNIQLO set up mini stores in senior centers and town halls:

> The reaction was very positive. This is not a money maker for UNIQLO, but it is something we are going to continue to do. Our goal here is to bring UNIQLO to as many seniors as possible. This is a pretty rural area. This is not Tokyo, where there is a lot more mixing. To me, this is a true representation of what LifeWear is and can be more of.

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[4] For more information, see https://www.instagram.com/bonpon511 (accessed December 6, 2017).

[5] For more information, see https://www.uniqlo.com/us/en/special/lifewear (accessed December 6, 2017).

Rie Norregaard
SYPartners

Designers are very good at asking questions, Norregaard said, which is a good starting point for design. Early in her career, she said, she worked with Sam Farber and the team at Smart Design to design what became OXO products based on questions about how to make kitchen products attractive, as well as comfortable and usable for people with a weak grip. With this approach, she said, looking at the outer edges of ability can make a better experience and product for everyone. Using this experience, Norregaard set out to change the way we think about aging and disability through design:

> My thesis, my theory of the company that I cofounded with two other women, was that if we can design medical assistive devices in a way that would allow us to sell them in the world's best museum stores, then we could change attitudes, hearts, and minds on what it means to use such a medical device as a cane, for example. Very visible, very normal sign of disability. Most people don't want them. Lots of people need them.

Norregard said the company worked with designers and engineers to define the needs and common problems of these types of products, but that there is another side related to emotion, attraction, desire, and beauty. For example, a cane is something that nobody wants, she said, but by asking users about their favorite colors, you can begin to have a conversation about what their canes might look like and how they might relate to them. Design then becomes a way to remove stigma, to allow people to talk about things that are difficult to talk about when they do not want to be stereotyped. Norregaard also reflected back on earlier discussions on unusual partnerships by showing an image of keynote speaker Liz Jackson's bicycle, on which Jackson configured a way to accommodate her cane:

> That is another really important thing about design solutions. Once you let them into the wild, then the real fun starts. People start hacking their lives. They will make whatever you are making much better in ways that you can experience on a scale that you can't in your own lab environment, be it academic or the studio that you work in. That is fantastic.

Seeing design as a way to change attitudes led Norregaard to join SYPartners, a consultancy that uses creativity and design to transform organizations and shift mindsets and behaviors around large societal issues, such as diversity and inclusion. On the topic of bias in design, she said that "awareness is the first step to actually being able to solve things differently." She highlighted one exercise in which a group of strangers at an event are given blank nametags and asked to choose different stickers with labels such as *neat freak* and *entrepreneur* or *living with illness* to apply to their nametags throughout the day. This is a simple way to experience how people look at and stereotype each other, she said, as well as a way to see your own identity in a new way.

Inspiration can come from anywhere, Norregaard continued. As a designer, she looks to the edges, to art and other industries to better understand how to address problems more creatively. For example, Norregaard talked about the video game Overwatch, a multi-person shooter game that introduced a 60-year old female character. She cited this as an example of how a video game can creatively promote inclusion and redefine what a hero can be for a broad audience. Quoting Karan Barad, Norregaard concluded with an aspiration for what design can do to help us combat stereotypes: "What if we were to recognize that differentiating is a material act that is not about radical separation, but on the contrary, about making connections and commitments?"

DISCUSSION

McCarthy thanked the panelists, began the discussion with a question about methodologies, and then opened the floor to the audience.

Methodologies

McCarthy asked the panelists to reflect on their different methods for approaching design. Jun said that she often looks for common denominators and added that universal design principles "have been some of the underlying bedrock for why we choose an interdisciplinary methodology." Shein said that at UNIQLO, the designers look at what did well in the past and think about how to make it better. The company's major successes have all been products that have somehow added some extra value to the customer's life (e.g., to keep them a little bit extra warm or to be a little bit lighter). There has always been some aspect that is not superficial, he said, and the biggest challenge is to look for that "little magical thing." McCarthy said fashion and design can travel into unexpected places, which leads to unanticipated and unusual results:

> For me, the thing that I found most exciting in the last few years is trying to figure out how do we make sure that we maintain a diverse starting point? How do we maintain access to design education? What are the tools of our spaces? What do they look like? And how do we make sure as many different people from as many different communities are engaging them critically?

Washington observed that all of the designers on the panel approach design as a way to solve a problem. However, she said that fashion has missed the mark when it comes to appreciating the cultures they draw inspiration from:

> When we think about sustainability, we think about how we are trying to monitor and manage the amount of things that we are actually using, but we don't actually think about the cultures that we're using at the same time. There is a lot of fashion out there that is really cultural appropriating. I think it is really sad. A lot of the times, those cultures are oppressed in a way. When we have these cultural appropriation collections, we completely ignore the problems that are going on within those communities. I think it is really important that everyone on this panel is avoiding that route and actually approaching design through solution-based ideas.

One workshop participant asked how designers help older persons or individuals with disabilities understand how their lives connect to the designer's work. Jones responded that she asked herself those same questions as she started her new company (which focuses on durable products such as handbags and other items that can be used on mobility devices). In order to connect with the customer, she said, you first need to take a systems approach:

> I have to understand how a wheelchair is bought and sold and what those parts look like and then [communicating about] that. You are then trying to convince the fashion customer, who may not understand the needs of someone who needs durable equipment, how the two can go hand in hand. So, I think it is about really tapping into how that system works and finding different points of distribution, where you can tie it all together.

Forging Intersectional Partnerships

Fernando Torres-Gil of the University of California, Los Angeles, said that while some may dismiss design and fashion as "frivolous and secondary or tertiary" to other more pressing priorities, the panel effectively showed how it is integral to "how we feel about ourselves and how the world views us." Therefore, he asked, how can designers connect with advocacy groups and social movements? Jones said that like the "nothing about us without us" movement, relationships such as those between designers and advocacy groups all start with individual connections. She encouraged continued conversations between the advocacy and the design worlds.

McCarthy agreed, emphasizing the importance of forging unusual partnerships that help all parties to recognize their synergies, reinvent methodological approaches, and have critical engagement across sectors. He thought the workshop itself—the National Academies of Sciences, Engineering, and Medicine's Forum on Aging, Disability, and Independence holding an event sponsored by AARP at the Parsons School of Design—represented a critical convening and a starting point for furthering such partnerships and connections. Shein agreed with the importance of the workshop, noting his excitement when he was invited to participate. He said that the aging demographic represents a huge market and that he would like to do more with this market, but he did not know where or how to start the conversation.

Erwin Tan of AARP commented on the opportunities to systemically create alliances that are intersectional. For example, he said that there has been an increase in grant funding from the National Institutes of Health for small businesses that address the needs of people with Alzheimer's disease. Therefore, he encouraged the panelists to think about how their products potentially improve the lives of these individuals. He also noted that there may be opportunities for alliances between the labor force involved in making garments and the end users, such as student movements like United Students Against Sweatshops.[6] In this way, he said, there may be potential for creating alliances between higher educational institutions and companies with a social mission.

Jun agreed, noting that the Parsons' Materiality Pathway engages big brand name companies; these companies donate fabric and materials, which are shared with students who have financial needs. Jun further noted that Open Style Lab is a nonprofit entity and receives donated fabrics from Woolmark and Polartech. She added that the lab's fellows who have disabilities or who come from different career backgrounds (e.g., engineering) often are the driving force to change products. Shein added that UNIQLO recycles as much as it can from its customers and also donates excess fabric to different schools. It also recently started an exchange program where high-level store employees visit factories and the factory workers come to work in the stores in an effort to give all the store employees a better understanding of the entire process. Norregaard commented that this type of cultural perspective within a large organization is very important. "It becomes a matter of values and experience within the organization," she said. "That is what actually propels the effort and the understanding."

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[6] For more information, see http://usas.org (accessed December 13, 2017).

Role of the Veterans Project in Addressing Distress

Ken Brummel-Smith from the American Geriatrics Society commented on Washington's veterans project. He said that he perceived the drawings as reflecting distress and asked how the veterans responded to seeing their own drawings as well as the drawings of the non-veterans. "Could this be a way to help veterans cope with some of the onslaught of feelings that were left over by their experiences?" he asked. Washington agreed that this process could be used as a coping mechanism, stating that when she started the project, she had targeted support groups for post-traumatic stress disorder, asking if she could sit in and hear the veterans' stories:

> Doing this process with them, it brought out a lot of their own stories. It brought out a lot of their own experiences that they weren't really comfortable talking about on an everyday situation, especially to their family and to their friends. While doing the drawing, a lot of them were just talking about their experience. In a way, it was almost kind of therapeutic for them, because it was an emotional release that they never really get a chance to say.

As a result of this experience, Washington said, she realized that she had previously been reluctant to talk to the veterans in her own family about their experiences. Overall, she said, she learned that "in reality, they need someone to talk to. Sometimes you just need to listen."

Sustainability and Affordability

Linda Flowers from AARP's Public Policy Institute asked about the sustainability principles that Parsons students follow, such as sourcing materials (e.g., making sure they are not coming from places where people are being exploited), because that could affect their ability to make their designs affordable. She acknowledged, however, that pricing in the real world is "what the market will bear." "Is there a way to continue to follow through with those principles and still make these garments affordable to a mass audience of people who are older or have disabilities?" she asked. Jones admitted she has spent a lot of time and resources thinking about the dilemma of trying to be environmentally friendly while also taking into account the fact that the people who need her products often have limited financial resources. She approaches the issue by being transparent about how to subsidize costs, she said. She continued:

> We know the cost of goods. We know things are expensive. We know someone's life is at stake somewhere on the line. . . . For me, it is about saying "This is how much it costs if you want this iconic leather bag,

> but just know that it costs this much because it is cheaper for someone else down the line who can afford it." Having that upfront model of "You are paying for this"—almost like [the] Tom's model, in a way, but knowing that you are giving back to someone else. It is not a charity. It is just doing good.

Jones added that there are other ways to approach this dilemma, such as by employing individuals with disabilities in the production of the goods. Washington used overstock fabric for her project and admitted that previously she had not thought about where the fabric was coming from, who was producing it, how long it took to arrive, and how much the shipping costs would be. The experience, she said, made her think more about the sustainability of the fabrics she uses.

McCarthy commented that discussions around sustainability tend to focus only on the materials themselves instead of on human sustainability and principles of longevity across the design system. Shifting to a focus on values at the individual or community level can become a driver for all of the systemic decisions (e.g., sourcing, labor, manufacturing, media and communication). In that way, he said, all of the decisions become linked, and the conversation changes away from "how can we scale this if it is currently expensive?" to rethinking the entire system, which may ultimately result in a cheaper product.

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Closing Remarks

At the workshop's end, Nancy Lundebjerg, chief executive officer of the American Geriatrics Society and the chair of the planning committee for the workshop, reflected on the day's discussions. Overall, she said, the nature of the day's conversations had shown that everyone is interested in helping people realize their dreams. The first key takeaway she identified was from a presentation by Patricia Devine (see Chapter 4): we can learn to tune into our own biases and become agents of change. "What a powerful statement that is," Lundebjerg said. "If we can actually listen to our inner voice and use the tools that she [Devine] has created to help us to do that, we can actually change the world."

Lundebjerg continued by commenting that the mission of the forum itself was reflected in the presentation by the keynote speaker Liz Jackson (see Chapter 2), who said that she is searching for beauty in the face of stigma. Lundebjerg said that she would add that the aging and disability communities are also searching for meaning and relevance.

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Appendix A

Workshop Agenda

Aging and Disability: Beyond Stereotypes to Inclusion
Public Workshop of the Forum on Aging, Disability, and Independence
The National Academies of Sciences, Engineering, and Medicine

Sponsored by
AARP

October 10, 2017

Theresa Lang Community and Student Center
Arnold Hall (Room I-202)
Parsons School of Design
The New School
55 West 13th Street
New York, NY

Workshop Objectives:
- Summarize the state of the knowledge about the impact of stereotypes on older adults and adults with disabilities, including the state of current practices to disrupt negative stereotypes.
- Highlight successful campaigns that have changed public discourse for other stereotypes and how they might apply to disrupting negative stereotypes of aging and disability and mitigate their effects.
- Explore effective communication, education, and system design strategies for aging and disability, with attention to media, marketing, and specific industries.
- Identify sustainable interventions that promote and support psychological and physical resilience in older adults and adults with disabilities.

10:00–10:25 a.m. **Welcome and Opening Remarks**

Terry Fulmer, *Forum Co-Chair*
The John A. Hartford Foundation

Fernando Torres-Gil, *Forum Co-Chair*
University of California, Los Angeles

Burak Cakmak
Parsons School of Design

Jonathan Stevens
AARP

10:25–10:55 a.m. **Keynote Speaker: Who Is Worthy of Choice?**

Liz Jackson, *Inclusive Fashion & Design Collective*

10:55–11:05 a.m. BREAK

11:05 a.m.–12:20 p.m. **Panel 1: State of the Knowledge: Stereotypes and Their Impact**

Facilitator: Margaret L. Campbell, *Campbell & Associates Consulting*

Benefits and Detriments of Age Stereotypes
Becca Levy, *Yale University*

Disability Stereotypes and Biases
Katie Wang, *Yale University*

Ageism and the Workplace
Michael S. North, *New York University*

Speaker Q&A with Audience

12:20–1:05 p.m. LUNCH

1:05–2:20 p.m. **Panel 2: Disrupting Stereotypes in Practice**

Facilitator: Rebecca Stoeckle, *Education Development Center*

Breaking Prejudice Habits
Patricia G. Devine, *University of Wisconsin–Madison*

Structural Stigma and Health
Mark L. Hatzenbuehler, *Columbia University*

Disrupting Stereotypes and the Reframing Aging Project
Julie Sweetland, *FrameWorks Institute*

Speaker Q&A with Audience

2:20–2:30 p.m. BREAK

2:30–3:45 p.m. **Panel 3: Disrupting Negative Stereotypes in the Media**

Facilitator: Janni Lehrer-Stein, *Independent Consultant, Disability Policy and Advocacy*

Karen Chong, *Disrupt Aging, AARP*

Lisa Takeuchi Cullen, *Telivision Writer, Author, and Journalist*

Robert David Hall, *Actor, Musician, and Disability Advocate*

Annie Marter, *Nine Stories*

Speaker Q&A with Audience

3:45–4:00 p.m. BREAK

4:00–5:30 p.m. **Panel 4: Disrupting Negative Stereotypes in Design**

Facilitator: BRENDAN C. MCCARTHY, *PARSONS SCHOOL OF DESIGN*

SHALETHIA GABLE WASHINGTON, *PARSONS FASHION: SYSTEMS AND SOCIETY ALUMNUS AND VETERANS PROJECT CREATOR*

LUCY JONES, *FFORA (INCLUSIVE DESIGN)*

GRACE JUN, *OPEN STYLE LAB AND PARSONS SCHOOL OF DESIGN*

RIE NORREGAARD, *SYPARTNERS*

JEAN SHEIN, *UNIQLO*

Speaker Q&A with Audience

5:30–5:45 p.m. CLOSING REMARKS

Nancy Lundebjerg, *Workshop Planning Committee Chair*
AMERICAN GERIATRICS SOCIETY

5:45 p.m. ADJOURN

Appendix B

Biographical Sketches of Workshop Speakers and Moderators

Burak Cakmak, M.B.A., the dean of fashion at the Parsons School of Design (Parsons), has extensive experience in forging strong partnerships as a business strategist and sustainability expert for some of the largest, most prestigious retail companies and luxury brands in the world. With his expertise in the field of sustainable design, he is focused on guiding the academic programs at Parsons into a new era, where an emphasis on socially conscious and transformational design formulates the educational approach and training of the next generation of creators. For more than a decade, he has facilitated successful collaborations with a wide range of stakeholders, including suppliers, retailers, nongovernmental organizations, governments, and the media in order to drive positive, ethical industry change. He has been invited to speak at a number of prominent, globally recognized conferences, including the Copenhagen Fashion Summit, WebSummit, and Fashion Asia Hong Kong. In addition, he had the opportunity to sit on a number of esteemed juries in New York and Europe, including the Council of Fashion Designers of America (CFDA) + Lexus Fashion* Initiative and Open Style Lab. Prior to joining Parsons, Mr. Cakmak worked at the Swarovski Group as the company's first vice president of corporate responsibility, where he established global programs fostering corporate stewardship. Under his leadership, he implemented best-practice industry standards across all business functions, including raw material sourcing, supply chain management, crystal manufacturing, jewelry assembly, and retail operations. In addition, he led the Swarovski Waterschool Initiative's education program that reached more than 2,000 schools worldwide. Previously, Mr. Cakmak acted as general manager of MADE-BY Benelux in the Netherlands, advancing fashion sustainability practices for brands such as H&M, Tommy Hilfiger, Acne, Primark, Ted Baker, and G-Star, among others. Prior to that, Mr. Cakmak spearheaded innovation-driven sustainability strategies as the first director of corporate sustainability for Kering's luxury brands, including Gucci, Bottega Veneta, Yves Saint Laurent, Alexander McQueen, Sergio Rossi, Balenciaga, Stella McCartney, and Boucheron. His career in the fashion industry began at Gap Inc., where he served as the senior manager of social responsibility in their San Francisco and London offices for 8 years. He played a vital role in the creation of the Sustainable Technology for Future Luxury Scholarship at the University of the Arts London Central Saint Martins and the master of fine arts (MFA) Fashion Design Scholarships at Parsons. He has also lectured widely as a visiting professor at SKEMA Business School in France and China.

Margaret L. Campbell, Ph.D., recently retired from the National Institute on Disability, Independent Living and Rehabilitation Research (NIDILRR), Administration for Community Living, at the U.S. Department of Health and Human Services. Dr. Campbell is now serving as a consultant with Campbell & Associates Consulting to organizations and individual researchers at the intersection of aging, disability, and technology research and policy. During her 17-year career at NIDILRR (formerly the National Institute on Disability and Rehabilitation Research [NIDRR]), Dr. Campbell served as a rehabilitation program specialist and as a senior scientist for planning and policy support. In this position, Dr. Campbell's primary responsibilities involved providing scientific direction for strategic planning and priority development in the areas of aging with disability, technologies to promote health and wellness and successful aging, health disparities and health equity, and accessible health information technology; serving as a project officer for NIDILRR's grants in these areas; and coordinating NIDILRR's research-capacity-building efforts for both the Advanced Rehabilitation Research Training program, which funds institutions of higher education to conduct multidisciplinary postdoctoral rehabilitation research, and the Switzer Research Fellowship Program, which awards Merit and Distinguished Fellowships to qualified individuals. In addition, Dr. Campbell represented NIDILRR on the following scientific and interagency committees: the National Academies of Sciences, Engineering, and Medicine's Forum on Aging, Disability, and Independence; the Healthy People 2020 Workgroup on Disability and Health; the Federal Interagency Workgroup for Healthy People 2020; and the Health Information Technology Research and Development Subcommittee of the Networking and Information Technology Research and Development

Program. During the last 4 years of her federal career, Dr. Campbell also focused on promoting the use of translational research strategies to help fill the gap in the availability of evidence-based interventions for individuals with disabilities that have been demonstrated to be effective in community settings. Prior to joining NIDRR in 1999, Dr. Campbell served for 9 years as the research director for the NIDRR-funded Rehabilitation Research and Training Center on Aging with Disability at the Rancho Los Amigos National Rehabilitation Center in Downey, California, and for 4 years as a research associate at the Andrus Gerontology Center at the University of Southern California, directing the Longitudinal Study of Intergenerational Family Relations. During her career, Dr. Campbell has presented widely and published numerous peer-reviewed articles on aging with physical disability. She has also been active in several professional associations in both disability and aging, and she currently serves as the chair of the policy committee for the Gerontological Society of America. Dr. Campbell's advanced degrees are in human development and family studies from Cornell University (1986) and in social relations from Lehigh University (1978).

Karen Chong, the director of audience and influencer engagement at Disrupt Aging, AARP, is a leader in synergistic marketing and partnerships. Throughout her career she has focused on maximizing value for leading corporations and nonprofit organizations by leveraging traditional and innovative social media to amplify messaging through technology information products, sales forces, and multi-platform content marketing campaigns. In her role as the director of audience and influencer engagement at AARP, she is responsible for identifying and developing strategic partnerships that drive integrated content across sponsored events and social activations. One of her main areas of focus is #DisruptAging, an initiative aimed at reaching across demographics to change the conversation around age and aging by redefining what longevity means and rethinking the negative stories we tell ourselves.

Lisa Takeuchi Cullen is a television writer, author, and journalist. She has written television pilots for CBS, A&E, and Warner Bros.; her drama pilot "The Ordained" was produced by CBS, featuring Charlie Cox, Audra McDonald, Hope Davis, and Sam Neill. Previously she worked as a staff writer and foreign correspondent for *TIME* magazine. Her books are the novel *Pastors' Wives* (Plume/Penguin) and the nonfiction *Remember Me: A Lively Tour of the New American Way of Death* (HarperCollins), a Barnes & Noble Discover Great New Writers pick. She was born and raised in Japan and lives in New Jersey with her family. Ms. Cullen is an elected council member of the Writers Guild of America East and a member of its diversity committee.

Patricia G. Devine, Ph.D., is the Kenneth and Mamie Clark Professor of Psychology at the University of Wisconsin–Madison. She received her Ph.D. from the Ohio State University and joined the faculty of the University of Wisconsin in 1985. Dr. Devine's original examinations of the dynamics of intergroup relations informed the contemporary manifestations of Gunnar Myrdal's 1944 study *The American Dilemma*, the reality that people's actual (discriminatory) behaviors belie their egalitarian sentiments. In addition, her evenhanded blending of psychological theory and social problems has enriched societal understanding of the troubling intergroup relations that characterize every society. Her path-breaking work continues to define the cutting edge of the field. Her most recent work has focused on developing an intervention to break the prejudicial habit of unintentional forms of bias. Dr. Devine has received numerous awards for her scholarly contributions including the Gordon Allport Intergroup Relations Prize from the Society for the Psychological Study of Social Issue (SPSSI), the American Psychological Association Early Career Award, and the Society of Experimental Social Psychology (SESP) Scientific Impact Award. She has fellow status in the Association of Psychological Science, the Society of Personality and Social Psychology (SPSP), SPSSI, and the SESP. Dr. Devine has served as the editor of the *Journal of Personality and Social Psychology* and the president of SPSP. As one of her university's most exceptional teachers, Dr. Devine is highly committed to creating an intellectually stimulating, high-quality environment for students. Dr. Devine has received numerous teaching awards within the university and within the field of psychology.

Terry Fulmer, Ph.D., RN, FAAN, is the president of The John A. Hartford Foundation in New York City, a private national philanthropy dedicated to improving the care of older adults. She previously served as a distinguished professor and the dean of the Bouvé College of Health Sciences, and before that as the Erline Perkins McGriff Professor of Nursing and founding dean of the New York University (NYU) College of Nursing. Dr. Fulmer is nationally and internationally recognized as a leading expert in geriatrics and is best known for her research on the topic of elder abuse and neglect. Her clinical appointments have included the Beth Israel Hospital in Boston, the Massachusetts General Hospital, and the NYU Langone Medical Center. She is an elected member of the National Academy of Medicine.

Shalethia Gable Washington is the co-founder of the creative platform Koegzist, a 2017 alumna of Parsons, and the originator of Blind Contour Fashion. Over the course of her last 8 months at Parsons, she created the Veterans Campaign, a collection of uniforms co-designed with U.S. Iraq war veterans and civilians that challenges perceptions and negative stereotypes surrounding the identity and experience of the U.S veteran. This campaign provided a space for open dialogue between veterans and civilians while also providing a platform where veterans are no longer defined by images of cinema, video games, politicians, and American symbols, but exclusively by themselves.

Robert David Hall, actor, musician, and disability advocate, portrayed the quirky coroner Dr. Albert Robbins on CBS television's *CSI: Crime Scene Investigation*. A double leg amputee and a devoted community activist, he is one of the most prominent disabled actors working today. Mr. Hall serves on the board of directors of the National Organization on Disability and is the national chairman of the Performers with Disabilities Caucus for the Screen Actors Guild, the American Federation of Television and Radio Artists, and Actor's Equity. He was honored to introduce President Obama at the 20th anniversary celebration of the Americans with Disabilities Act on the White House lawn. He was also honored to present the Franklin Delano Roosevelt International Disability Award at the United Nations to the country of New Zealand and to King Abdullah II of Jordan. In demand as a public speaker, Mr. Hall spends time addressing a variety of organizations and corporate entities.

Mark L. Hatzenbuehler, Ph.D., is an associate professor of sociomedical sciences and sociology at Columbia University's Mailman School of Public Health. He completed his doctoral degree in clinical psychology at Yale University and his postdoctoral fellowship at Columbia University, where he was a Robert Wood Johnson Foundation Health and Society Scholar. Dr. Hatzenbuehler's research examines how structural forms of stigma, including social policies, increase risk for adverse health outcomes among members of socially disadvantaged populations, with a particular focus on lesbian, gay, and bisexual individuals. Dr. Hatzenbuehler has published more than 100 peer-reviewed articles and book chapters, and his work has been published in several leading journals, including *American Psychologist*, *Psychological Bulletin*, *American Journal of Public Health*, and *JAMA Pediatrics*. His research has been funded by the National Institute of Mental Health, the National Institute on Drug Abuse, the Centers for Disease Control and Prevention, and the Swedish Research Council for Health, Working Life, and Welfare. In recognition of this work, Dr. Hatzenbuehler received the 2015 Louise Kidder Early Career Award from the Society for the Psychological Study of Social Issues, the 2016 Early Career Award for Distinguished Contributions to Psychology in the Public Interest from the American Psychological Association, and the 2016 Janet Taylor Spence Award for Transformational Early Career Contributions from the Association for Psychological Science. His work has been widely covered in the media, including interviews on NPR and MSNBC, and it has been cited in amicus curiae briefs for cases on status-based discrimination. Dr. Hatzenbuehler currently serves on four editorial boards and also recently served as a member of a consensus committee on peer victimization and bullying at the National Academies of Sciences, Engineering, and Medicine.

Liz Jackson is the founder of the Inclusive Fashion & Design Collective (IFDC), an ecosystem of products, ideas, and people who prioritize the exception rather than the rule. The mission of the IFDC is to increase the impact of beautiful, functional products in people's everyday lives and in the global economy. After a chronic neuromuscular diagnosis in 2012, Ms. Jackson began to wonder why her eyeglasses were fashionable when her cane and all other assistive products were stigmatizing. Ms. Jackson is a TED Resident, Nantucket Project Scholar, and SYPartners Fellow. The IFDC debuted at the White House on September 16, 2016.

Lucy Jones is a designer residing in New York City whose focus is on universal design. She recently graduated as one of the start-up companies from XRC Labs, an accelerator in retail and consumer goods. Ms. Jones founded Fashion For All (FFORA), a new lifestyle brand that serves the disability community and believes in a world that is designed for all. Originally from Wales, Ms. Jones moved to New York after accepting a place to study fashion design at Parsons. Her award-winning collection, Seated Design, which focused primarily on manual wheelchair users, led to her receiving several awards and designations including the Parsons Womenswear Designer of the Year 2015, the Kering Empowering Imagination 4.0 award, and Forbes 30 Under 30 Class of 2016. More recently, Ms. Jones completed a yearlong social innovator residency at Eileen Fisher in partnership with the CFDA. The project concluded with a scalable, profitable, and sustainable solution for the Green Eileen damaged garments accumulated in the take-back program. Ms. Jones' work Seated Sleeves was commissioned for the Museum of Arts and Design's (MAD's) exhibition *Fashion after Fashion* in April 2017 through August 2017. Ms. Jones' work Seated Pantyhose, commissioned by the Museum of Modern Art, is currently exhibited in the *Items: Is Fashion Modern?* show. Ms. Jones is systematic in her approach to product creation and user experience, remaining authentic throughout the process, dissecting lifestyles and habits of specific demographics, theorizing and drawing conclusions as to why such mannerisms occur, and observing moments of intervention. It is her belief that designers should be held accountable for the products they place into the world and that they should think critically at all stages of design about the positive and negative impacts of their creations, including social and environmental outcomes.

Grace Jun, M.F.A., is a designer and social entrepreneur working at the intersection of universal design and fashionable technology. A graduate of Rhode Island School of Design, she is an assistant professor of fashion at Parsons, where she received her M.F.A in design and technology. As the executive director at Open Style Lab, Ms. Jun leads the nonprofit organization's mission to make style and wearable technology accessible to people with diverse abilities (i.e., the elderly and people with disabilities). Her work at Open Style Lab has received nationwide attention and has been featured at the White House Fashion Show Celebrating Inclusive Design, Assistive Technology, and Prosthetics, NBC News, *Fast Company*, *Vogue*, and most recently, *The New York Times*. She has been asked to speak about disability and design in numerous settings, including Design Indaba 2017 and Forum for the Future. Ms. Jun currently also serves on the board at the Fashion Institute of Technology Museum's Body Advisory Committee and as an advisor to AXS Lab, an award-winning film/new media dedicated to telling the stories of the disability experience. Prior to Parsons and Open Style Lab, Ms. Jun's design work was found in several of the early feature phones, smartphones, and wearable watches launched through Verizon or T-Mobile by Samsung Electronics. Her experience as a UX designer and design strategist at Samsung for 5 years helped develop her research focus on the wearable experience and fashion technology products. Before joining Samsung, Ms. Jun had freelanced for Tiffany and Company for website design and worked at Hearst Corp.

Janni Lehrer-Stein, J.D., is an attorney and resident of San Francisco, California. She received her undergraduate degree at Yale University, with a law degree from the University of Toronto Law School and a visiting year at Harvard Law School. Ms. Lehrer-Stein practiced law in Washington, DC, and San Francisco. Diagnosed with a degenerative retinal disease at age 26, she became engaged with disability rights advocacy. Current national board appointments include the New York Advisory Board; the California board of directors of Disability Rights Advocacy, a nonprofit law firm that specializes in disability rights; and the Foundation Fighting Blindness, the premier research organization seeking cures for blindness. In 2011 Ms. Lehrer-Stein was appointed by President Obama and confirmed by the U.S. Senate to the National Council on Disability, an independent federal agency that advises the president, the U.S. Congress, and the nation on national disability policy. During her two terms, which ended in December 2016, she served as a chair, co-leader, and member of teams that produced groundbreaking analyses of disability rights issues, including parenting rights, veterans' benefits, implications of advancing technology, the autonomous vehicle, and more. More recently, she served as one of three senior disability policy advisors to the Hillary for America campaign, formulating and leading nine teams of experts and stakeholders to craft disability policy, raising more than $2 million from the disability community to support the campaign, and guiding disability social media presence.

Becca Levy, Ph.D., is a professor of epidemiology and psychology at Yale University. Her research explores the psychosocial factors that influence older individuals' cognitive and physical functioning as well as their longevity. She is credited with creating a field of study that focuses on how positive and negative age stereotypes, which are assimilated from the culture, can have beneficial and adverse effects, respectively, on the health of older individuals. Her studies have been conducted by longitudinal, experimental, and cross-cultural methods. She has received a Brookdale National Fellowship for Leadership in Aging, the Springer Award for Early Career Achievement in Adult Development and Aging from the American Psychological Association, the Scholar Award for Research Related to Disadvantaged Older Adults from the Gerontological Society of America and Senior Service America, the Margret M. and Paul B. Baltes Foundation Award in Behavioral and Social Gerontology, and the Ewald W. Busse Research Award in the Social Behavioral Sciences from the International Association of Gerontology and Geriatrics that is given once every 4 years. She is an associate editor of the *Handbook of Psychology of Aging*, a consulting editor for *Psychology and Aging*, is on the founding editorial board of *Stigma and Health*, and serves on the editorial boards of *GeroPsych* and *Journal of Gerontology: Psychological Science*. Dr. Levy has given invited testimony before the U.S. Senate on the effects of ageism and contributed to briefs submitted to the U.S. Supreme Court in age discrimination cases. She received her Ph.D. in psychology from Harvard University and held a National Institute on Aging postdoctoral fellowship at the Division of Aging and Department of Social Medicine at Harvard Medical School. Her research has been supported by the National Institute on Aging; the National Heart, Lung and Blood Institute; the National Science Foundation; and The Patrick and Catherine Weldon Donaghue Medical Research Foundation.

Nancy Lundebjerg, M.P.A., is the chief executive officer (CEO) of the American Geriatrics Society (AGS). For almost 20 years, Ms. Lundebjerg has been a leading advocate for programs and services that will improve the health, well-being, and quality of life of older Americans. She is a champion for geriatrics health professionals and, because of her own experiences as a family caregiver, recognizes the important role these professionals play in caring for frail older people. Under her leadership, the AGS has emerged as a leading advocate for programs and policies that benefit older adults, supported the development of geriatrics academic leaders, expanded the number of surgical and related medical specialists who are focused on improving care of older adults in their discipline, and enhanced AGS outreach to the public through the AGS Health in Aging Foundation. As CEO, Ms. Lundebjerg also leads the Association of Directors of Geriatric Academic Programs, a supporting organization of the AGS, as well as the AGS Health in Aging Foundation. Prior to becoming CEO, she served as the AGS chief operating officer from 2008 through 2015, having joined the AGS in 1998. Ms. Lundebjerg previously was administrator of the Center for the Study of Society and Medicine at the Columbia University College of Physicians and Surgeons, where she was responsible for programmatic support, budget development and management, grant writing and funder relationships, and overseeing human resources. Ms. Lundebjerg earned her M.P.A. from the University of Hartford and her B.A. from Connecticut College.

Annie Marter is an executive vice president with Nine Stories. As a film executive for 15 years, Ms. Marter has collaborated on more than 30 films, including *Sunshine Cleaning*, *Let Me In*, *Jack Goes Boating*, *The Crazies*, *The Men Who Stare at Goats*, *Traitor*, *Law Abiding Citizen*, *The Door in the Floor*, and *The Visitor*, which was nominated for an Academy Award. In 2014, Ms. Marter conceived of and produced the science fiction film *Transcendence*, starring Johnny Depp and Morgan Freeman, directed by Wally Pfister, produced by Christopher Nolan, and released by Warner Bros. Most recently she oversaw the upcoming films *My Abandonment* and *Roman J. Israel, ESQ* (starring Denzel Washington) as the senior vice president at First Look Media. In October 2017 Ms. Marter joined Jake Gyllenhaal and Riva Marker's Nine Stories as executive vice president of production and development.

Brendan C. McCarthy, M.F.A., is the director of the undergraduate Fashion Design Program for Systems and Materiality at Parsons. He is an assistant professor of fashion and teaches courses in Parsons' new Systems and Society Pathway, which examine critical issues in diverse social systems in relation to the design and development of fashion systems.

His curricular development work has explored how the integration of interdisciplinary, human-centric, and collaborative methodologies into the fashion design process has the potential to enable fashion to be more inclusive and serve a wider range of communities. He received his B.A. in mathematics from Columbia University and an M.F.A. in fine art from Parsons. His academic training also includes studying architecture at Harvard University's Graduate School of Design. Prior to his transition to art and design, Mr. McCarthy worked in finance for Morgan Stanley as a research analyst. He is extremely passionate about teaching and working with students. His professional and research practices are deeply intertwined with his pedagogical endeavors and echo the interdisciplinarity of his academic training. He is presently engaged in a fashion systems research project entitled elLABel with artist and garment maker, Isabelle Webster. elLABel is an experimental, human-centered fashion design and production laboratory that mines diverse histories and traditions of fashion, specific people, communities, materials, and making processes to engage critical social matters, including issues around aging and sustainability. Mr. McCarthy's artwork, which has been exhibited in China, the United Kingdom, and the United States, explores filmmaking, performance, and installation art and combines darkly humorous, quixotic sensibilities with the use of precisely selected materials with rich, complex histories. Previously, he has been artist-in-residence at Mildred's Lane, as well as the Wassaic Project.

Rie Norregaard is the managing creative director at SYPartners. She is passionate about humanity design and creating compelling consumer experiences. From collaborations with the Jet Propulsion Laboratory to launching the controversial fashion brand Omhu, Ms. Norregaard sees around corners and creates the stories and products to take us there. Before joining SYPartners, she worked as a creative director at leading design firms, such as Smart Design, Arnell Group, Organic, Quirky, and Frog Design, and she has designed solutions for brands including American Express, Chanel, Cisco, HP, Johnson & Johnson, Microsoft, Nike, OXO, TED, Vogue, Samsung, GE, and Mattel. Outside of her role as managing creative director at SYPartners, Ms. Norregaard is an advisor to several tech and consumer product start-ups, and is a frequent speaker in the international design and design education communities. Ms. Norregaard trained as a communication designer in Copenhagen, Denmark, and lives in San Francisco with her family.

Michael S. North, Ph.D., is an assistant professor of management and organizations at the NYU Stern School of Business and the founding director of the NYU Accommodating Generations in Employment (AGE)

Initiative. He received his B.A. in psychology from the University of Michigan, Ann Arbor, and his Ph.D. in psychology and social policy from Princeton University, and he completed a 2-year postdoctoral position at Columbia University. His research focuses primarily on age, ageism, intergenerational tension, and related management and policy applications. His research has been published in leading academic journals, including *Psychological Bulletin*, *Personality and Social Psychology Bulletin*, and *Research in Organizational Behavior*, and he has authored op-eds for *Harvard Business Review*, *Quartz*, and *New Scientist*. His work has been featured in *The New York Times*, *The Wall Street Journal*, *The Washington Post*, and *Time* magazine, among other outlets. He was recently designated a Rising Star by the Association for Psychological Science.

Jean-Emmanuel Shein, M.A., has been with Fast Retailing, the parent company of the brand UNIQLO, since 1997 and is currently global director for sustainability, based in New York. Mr. Shein is focused on developing and implementing community engagement programs at the local and global levels for UNIQLO as well as working to further the company's sustainability efforts across all of its brands, including Theory, J Brand, Comptoir des Cotonniers, and Pricesse tam-tam. Prior to this, Mr. Shein held leadership roles in marketing at UNIQLO and was instrumental in opening a number of new markets for the brand, including France, the United Kingdom, and the United States. He was the first non-Japanese person hired to work at the company's offices. UNIQLO is always working to find new ways to create new customers. In Japan, UNIQLO has started to look seriously at seniors as a new customer base and candidate pool from which to hire. These initiatives are driven by the sustainability department and dovetail with the company's notion of LifeWear, clothing that makes your life better. Mr. Shein is looking at how to expand these early efforts in Japan as well as in other markets with similar demographic profiles. He studied anthropology and East Asian studies at Columbia (B.A.) and Stanford (M.A.), which engendered a rigorous academic approach to problem solving that was quickly tempered by the less predictable world of retail.

Jonathan Stevens, M.B.A., M.P.H., is the senior vice president of thought leadership at AARP, a social welfare organization focused on health care, employment and income security, and protection from financial abuse. Prior to joining AARP, he was the chief innovations officer at Family Matters of Greater Washington and the director of the Global Futures Project at the Bertelsmann Foundation. He began his professional career as an epidemiologist at the Centers for Disease Control and Prevention in Atlanta. Throughout his career, Mr. Stevens has built and led diverse teams designed to meet domestic and international challenges in the areas of public health and health care, global demographics, and education. He holds a B.A. in biochemistry from Florida State University, an M.P.H. in epidemiology from the University of South Florida, and an M.B.A. from the University of North Carolina at Chapel Hill.

Rebecca Jackson Stoeckle is a vice president within the Education Development Center's Health and Human Development Division, where she directs initiatives in health and technology. Her primary focus is the intersection between innovation and impact in the design and scaling of interventions in health care, especially for clinicians and those facing health disparities. She is a practitioner of the human-centered design approach to intervention development, which emphasizes the importance of understanding cultural and contextual feasibility and appeal to ensure uptake and therefore impact in a particular target audience. For more than two decades she has directed projects and teams aimed at improving health services and the integration of behavioral health services in community settings, primary care, and hospital settings, addressing some of the world's foremost health and education challenges, including end-of-life care, the prevention of falls in long-term care, and ethical practices in the Veterans Health Administration system. Ms. Stoeckle has extensive experience in implementing models of care and working with older adults, leading the development of a curriculum for Decisions Near the End of Life, the first national initiative to tackle this difficult issue with physicians, nurses, and pastoral caregivers in hospitals and nursing homes. The project's early publications established baseline knowledge, attitudes, and practices among clinicians dealing with end-of-life care, and subsequent publications documented the impact of the intervention. Ms. Stoeckle is a member of the World Health Organization's G7 Advisory Group on Aging and the Environment, charged with making recommendations to the Health Ministers of the G7 nations for policies and initiatives that support healthy aging. She has also led complex, multi-component collaboration projects, bringing together clinicians and academics to develop effective and scalable responses to health challenges such as advanced care planning, posttraumatic stress disorder among veterans, HIV prevention, and breast and cervical cancer. Her work has been funded by the U.S. Agency for International Development, the Centers for Disease Control and Prevention, the U.S. Veterans Health Administration, and by the private sector and she has received national recognition and awards for excellence in innovation and sustainable systems change.

Julie Sweetland, Ph.D., is a sociolinguist and the vice president for strategy and innovation at the FrameWorks Institute, where she leads efforts to diffuse the organization's cutting-edge, evidence-based reframing recommendations throughout the nonprofit sector. Since joining FrameWorks in 2012, she has led the development of powerful learning experiences for nonprofit leaders and has provided strategic communications guidance for advocates, policy makers, and scientists nationwide and internationally. Prior to joining FrameWorks, Dr. Sweetland was actively involved in improving teaching and learning for more than a decade as a classroom teacher, instructional designer, and teacher educator. At the Center for Inspired Teaching, she served as the director of teaching and learning and helped to found a demonstration school with an embedded teacher residency. As founding director of the Center for Urban Education, she launched a graduate teacher preparation program for the University of the District of Columbia. Dr. Sweetland's linguistic research has focused on the intersection of language and race; on the role of language variation and language attitudes on student learning; and on effective professional learning for teachers. Her work has appeared in publications such as the *Journal of Sociolinguistics*, *Educational Researcher*, and *Education Week*, and she is the co-author of *African American, Creole, and Other Vernacular Englishes in Education*. She is a graduate of Georgetown University and lectures regularly at her alma mater. She completed her M.A. and Ph.D. in linguistics at Stanford University.

Fernando Torres-Gil, M.S.W., Ph.D., is a professor of social welfare and public policy at the University of California, Los Angeles (UCLA), an adjunct professor of gerontology at USC, and the director of the UCLA Center for Policy Research on Aging. He has served as an associate dean and acting dean at the UCLA School of Public Affairs and as the chair of the Social Welfare Department. His research spans topics of health and long-term care, disability, entitlement reform, and the politics of aging. He earned his first presidential appointment in 1978 when President Jimmy Carter appointed him to the Federal Council on Aging. He was selected as a White House Fellow and served under Joseph Califano, then Secretary of the Department of Health, Education, and Welfare (HEW), and continued as a special assistant to the subsequent Secretary of HEW, Patricia Harris. He was appointed (with Senate confirmation) by President Bill Clinton as the first U.S. Assistant Secretary on Aging in the U.S. Department of Health and Human Services (HHS). In this position, Dr. Torres-Gil played a key role in promoting the importance of the issues of aging, long-term care and disability, community services for the elderly, and baby boomer preparation for retirement. He served under HHS Secretary Donna Shalala, managing the Administration on Aging and organizing the 1995 White House Conference on Aging, in addition to serving as a member of the President's Welfare Reform Working Group. In 2010 he received his third presidential appointment (with U.S. Senate confirmation) when President Obama appointed him as vice chair of the National Council on Disability, an independent federal agency that reports to the U.S. Congress and White House on federal matters related to disability policy. He also served as the staff director of the U.S. House Select Committee on Aging under Congressman Edward R. Roybal. At the state level, he was appointed by former Governor Gray Davis to the Governor's Blue Ribbon Task Force on Veterans' Homes and by Governor Arnold Schwarzenegger as a delegate to the 2005 White House Conference on Aging. He is also a board member of the AARP Foundation. Dr. Torres-Gil earned his A.A. in political science at Hartnell Community College, a B.A. in political science from San Jose State University, and an M.S.W. and a Ph.D. in social policy, planning, and research from Brandeis University.

Katie Wang, Ph.D., is an assistant professor in the Department of Social and Behavioral Sciences at the Yale School of Public Health. She received her Ph.D. in social psychology from Yale University and completed a postdoctoral fellowship at Yale's Center for Interdisciplinary Research on AIDS. Integrating her background in social psychology and public health, Dr. Wang examines various mechanisms (e.g., self and emotion regulation processes) through which stigma operates to drive adverse mental and behavioral health outcomes among people with disabilities, sexual minorities, and individuals with mental illnesses. Additionally, she is interested in identifying adaptive coping resources that mitigate the negative impact of stigma on health, with the objective of developing accessible, cost-effective psychosocial interventions to alleviate health disparities.