

Advancing Family Science through Public Scholarship: Fostering Community Relationships and  
Engaging in Broader Impacts

J. Kale Monk

Tashel C. Bordere

Jacquelyn J. Benson

University of Missouri

Correspondence about this article can be sent to J. Kale Monk, Department of Human  
Development and Family Science, University of Missouri, 306 Gentry Hall, Columbia, MO  
65211, 573-882-1302, [Monkj@missouri.edu](mailto:Monkj@missouri.edu).

*Publisher's note: This is the peer reviewed version of the following article*

Monk, J.K., Bordere, T.C. and Benson, J.J. (2021), Emerging Ideas. Advancing Family Science Through Public Scholarship: Fostering Community Relationships and Engaging in Broader Impacts. *Fam Relat*, 70: 1612-1625, [10.1111/fare.12545](https://doi.org/10.1111/fare.12545)

which has been published in final form at <https://doi.org/10.1111/fare.12545>.

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## Abstract

**Objective:** To increase the awareness and support for family scientists' engagement in public scholarship. **Background:** Without appropriate dissemination efforts, important research findings may remain solely in academic journals and never reach the public. Grounded in a social justice perspective, we argue that family scientists are and should be on the frontlines of direct social change and activities related to broader impacts. **Method:** In this call-to-action, we articulate the utility and praxis of public scholarship, or the production and dissemination of scientific knowledge for and with communities to create social change for the public good. **Results:** When engaging in public scholarship, we can build community trust, increase our impact and demonstrate the relevance of family science. Therefore, we offer practical suggestions like collaborating with individuals who serve in complementary roles, hosting a research press conference to disseminate key findings, and writing for local outlets like community newspapers. We also provide insights to help implement (e.g., resources for developing press releases, infographics or visual abstracts) and document (e.g., in promotion and tenure materials) these activities. **Conclusion:** We encourage scholars to keep these suggestions in mind when trying to think of creative broader impacts activities that illustrate the relevance of research in people's lives. **Implications:** By shifting academic cultures and engaging in public scholarship, family scholars can increase their reach and contribute to the enfranchisement of marginalized populations, while also enhancing the visibility of findings, building their scholarly networks, and growing public support for family science.

*Keywords:* Career/professional development, family life education, family science, translational science, engagement, outreach

Advancing Family Science through Public Scholarship: Fostering Community  
Relationships and Engaging in Broader Impacts

Calls for academics to engage with society have increased over the years in order to strengthen public support for science and highlight the relevance of higher education in shifting political climates (Christie, Djupe, O'Rourke, & Smith, 2017). Family scholars have been engaging in public scholarship or the translation and dissemination of research for and with communities "since before it came into vogue" (Grzywacz & Allen, 2017, p. 568). Hamon and Smith (2017) note that engaging with the public by translating science into practice directly enriches the lives of community members and is a core feature of family science occupations like family life education, couple and family therapy, and family-focused positions within Cooperative Extension (see also Bartle-Haring & Slesnick, 2013; Myers-Walls, Ballard, Darling, & Myers-Bowman, 2011). Indeed, bridging the discovery-practice or research-application disconnect is inherent in the purpose and identity of family science as a discipline (Gavazzi, Wilson, Ganong, & Zvonkovic, 2014).

We advocate for a cultural shift in academia, using existing public scholarship models within family science as guides. Grounded in critical consciousness and socially just practices, we argue for an open dialogue about the implications of participation in public scholarship and institutional policy changes that foster and reward public scholarship participation, coupled with illustrations and practical suggestions for carrying out this important work. With a rich history rooted in practical application and translational research, family science as a discipline is well-suited to be at the forefront of public scholarship.

We, like many family scholars, entered the field because we wanted to have a direct impact on the lives of individuals, couples, and families. This work is vital because simply presuming policy makers, practitioners, or laypersons access our publications and use the practical implications provided neglects to account for real barriers that exist for populations peripheral to university settings. This passive approach to scholarly dissemination and impact is faulty for at least two reasons: (1) empirical research may be *available*, but it is often only *accessible* to academics who are privileged with the advantage of free access to resources (e.g., research articles) that are otherwise behind paywalls requiring the general public to pay expensive fees for only temporary access (see Davis & Walters, 2011; Lawrence, 2001), and (2) even if individuals were able to gain access, publications often include scientific jargon that can be incomprehensible to audiences who lack education and training in those content-specific areas (see Obradović, 2019).

Nevertheless, academia privileges expeditious publication (e.g., Rawat & Meena, 2014), which often necessitates moving from one empirical study to the next with little time for dissemination beyond publishing and presenting findings to other scholars at topic or discipline-specific conferences. Therefore, we describe public scholarship as a potential tool to support, recognize, and advance community-engaged research in academia.

### **Defining Public Scholarship**

Although many terms exist, some of which have distinct characteristics, for the purposes of this call-to-action, we use “public scholarship” as an umbrella term to encompass many related labels, such as engaged scholarship, science communication, translational research, applied work, scholar activism, public outreach, and broader impacts. Specifically, *public scholarship* is an intentional effort to create change through the translation and communication

of scholarship to persons outside the research setting (Sliva, Greenfield, Bender, & Freedenthal, 2019; see also Leavy, 2019) and encompasses diverse methods of producing and disseminating knowledge for and with communities for a public good (see Center for Community and Civic Engagement, 2018; Yappa, 2006). Barker (2004) expands on this collaborative relationship between scholars and communities by stating that scholarship of engagement “consists of research, teaching, integration, and application scholarship that incorporates reciprocal practices of civic engagement into the production of knowledge” (p. 124). Thus, relationships between campus researchers and practitioners or community partners should be mutually beneficial through the reciprocal exchange of knowledge (i.e., often in the form of evaluative feedback; Driscoll, 2008).

By this definition, some scholars argue that true public scholarship is not simply science communication that faculty or graduate students undertake as supplemental to their primary responsibilities and it is not achieved by, for example, simply adding community service to a course (see Colbeck & Wharton-Michael, 2006). Accordingly, public scholarship requires academicians to situate or reframe academic work so that teaching, research, and service are part of an inseparable whole to address societal needs (Colbeck & Wharton-Michael, 2006). Barriers such as time, resources, and training (e.g., Obradović, 2019), as well as meeting the expectations in the “publish or perish” culture of some universities, can make engagement challenging. Therefore, we argue for a more inclusive definition that conceptualizes public scholarship as a continuum in which individuals can start by engaging in activities that reflect a manageable degree of intensity (e.g., based on skill level, time) (See Figure 1).

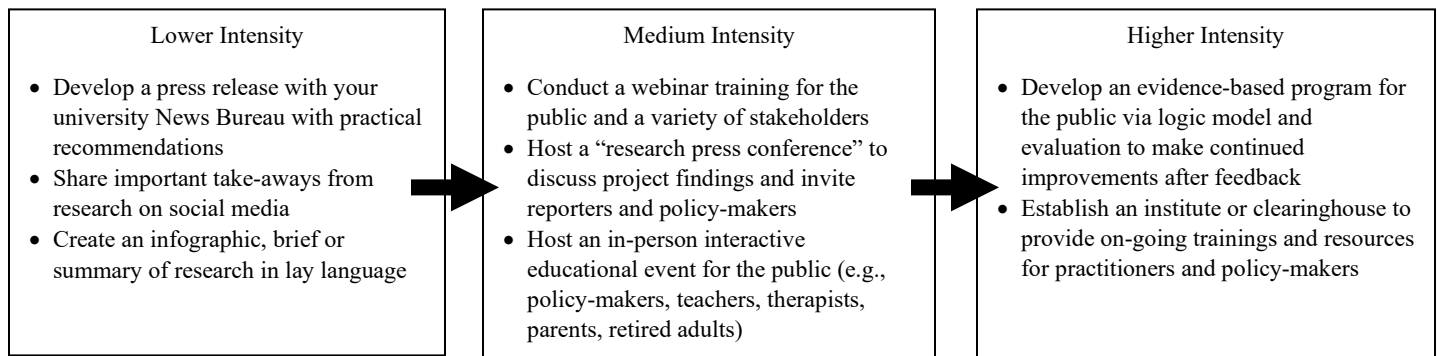


Figure 1. Continuum of Public Scholarship with Exemplar Activities

As outlined in figure 1, for example, family scientists new to public scholarship may start by engaging in science communication and translating research into practical implications readily accessible to the public (“lower intensity”). As scholars become more comfortable with the practice and potentially develop partnerships with practitioners or community-serving organizations, they may develop and conduct research-informed trainings (“medium intensity”) or even develop an evidence-based program over time (“higher intensity”).

### **Importance of Public Scholarship**

From a social justice standpoint, an interactive exchange of information for and with communities is central to trust-building and trust restoration, which are precursors to community collaborations. Affirmation of trust through public scholarship is particularly relevant in communities that have historically experienced, and continue to experience, exploitation when researchers collect data and neglect to complete the loop of verifying and communicating findings to communities and relevant entities (e.g., agencies, schools, churches). This practice of denying or limiting access to knowledge, whether intentional or unintentional, disenfranchises and impacts the mobility of marginalized populations in particular. It is vital to recognize that knowledge does not simply “flow out” from universities, but that “new knowledge is created in its application in the field and therefore benefits the teaching and research mission of the

university” (Yappa, 2006, p. 73). This new knowledge must also be culturally-informed, accounting for privilege and power differentials, inequities, and strengths of oppressed populations. It is, in part, through the co-creation of knowledge that scholars verify and appropriately represent the experiences of populations under study.

A common theme within the scholarship of engagement is social justice and citizenship, which highlights a duty among scholars to inform society (Beaulieu, Breton, Brousselle, 2018). Historically, Predominantly White Institutions (PWIs) have been rooted in privilege, power, and marginalization in which resources and access have been centralized and out of reach for populations standing at the margins (Bradley, 2018; Wilder, 2013). Systems of power and privilege are maintained through institutional policies that “dictate how information and knowledge is shared or withheld from particular groups of people” (Howard-Baptiste & Harris, 2014, p. 6). Hence, our call-to-action for public scholarship participation is based within a social justice perspective, which is particularly drawn from Bell’s (1997) definition:

Social justice includes a vision of society in which the distribution of resources is equitable and all members are physically and psychologically safe and secure....a society in which individuals are both self-determining (able to develop their full capacities) and interdependent (capable of interacting democratically with others). Social justice involves social actors who have a sense of their own agency as well as a sense of social responsibility toward and with others and the society as a whole. (p. 3)

Another reason we promote public scholarship is because the absence of effective research dissemination creates a disconnect between scholars and the public. According to the American Academy of Arts & Sciences (2018), confidence in scientific leaders has remained

fairly stable, yet skepticism about science persists. Skepticism can be perpetuated by a lack of interaction with scientists (e.g., the “out-of-touch professor in the Ivory Tower” stereotype), which can also result in wide gaps between scientific consensus and public opinion. Existing knowledge gaps between science and the public include issues like safe food practices, vaccinations, and climate change (e.g., Pew Research Center, 2015). These divides likely exist within family science as well when family scientists remain silent in the public discourse around parenting practices, relationship advice, and many other topics related to diverse family functioning.

Of course, skepticism about science can also result from the fact that scholars have been wrong in the past. Poorly designed (and fraudulent) studies requiring additional scrutiny exist, and many seminal studies have failed to replicate (i.e., the “replication crisis”; e.g., Maxwell, Lau, & Howard, 2015). These considerations certainly mean scholars need to be careful about making bold claims. These issues, however, make public scholarship more vital because science should be open to review and family scholars should be on the frontlines of discussing their own work. Indeed, if a layperson or reporter without training in the interpretation of science or prior knowledge of the study gains access to a publication, misinterpretation can result.

On the other hand, if scholars are able to discuss their own work with knowledge of the scientific process and a full description of limitations and appropriate caveats, we have more control of the narrative. Thus, it is vital that scientists do not stay silent but rather engage in public scholarship activities, such as reaching out to elected officials to illustrate why our work matters (Coons, 2017) and explain the implications of our work for the populations we study. Federal funding agencies are recognizing the importance of public scholarship in effort to ensure empirical work benefits the public and does not solely reside in academic journals. For example,



the National Science Foundation (n.d.) requires that applicants develop plans for broader impacts and reviewers assess these activities as important criteria for receiving funding.

Public scholarship also has a number of personal benefits for scientists. For example, science communication can enhance the visibility of findings and even increase citations (Hassan et al., 2017; Lamb, Gilbert, & Ford, 2018; Luc et al., 2020). For this reason, scholarly publications like the *Journal of Family Theory & Review* have begun digital scholarship initiatives utilizing social media campaigns to enhance attention to featured articles (see Russell et al., 2019). Science communication professionals at the National Alliance for Broader Impacts conference (Allen, Borchelt, Fenwick, LaMonica, & Weintraub, 2018) also noted that public scholarship can build scholarly networks (e.g., attract collaborators and interested students), reignite a scholar's passion and the passion of other scientists, grow public and financial support for research, and potentially make a direct difference by meeting a public need (see also Badgett, 2016). Providing education or services to meet community needs reinforces that public scholarship is also a cultural imperative. In research with Black female academicians, for example, participants reported that it is a social responsibility to improve societal conditions through educational access. Participants also noted that this work was an important element of their professional identity (Thomas, 2001) despite the lack of institutional recognition (i.e., "invisible labor") (June, 2015; Stanley, 2006).

### **Models for Engagement in Public Scholarship**

As noted earlier, public scholarship is inherently part of the family science discipline — a field rooted in bridging the research-practice divide by providing practical resources for individuals, couples, and families (Grzywacz & Allen, 2017; Grzywacz & Middlemiss, 2017). Consequently, there are a number of scholars engaged in public scholarship (e.g., Thomas,

2001), including prominent family scientists. Although space constraints do not allow us to highlight all those on the frontlines of outreach and engagement in the discipline, in this section we note several examples of family scholars engaging in public scholarship. These scholars provide a guide for engagement in the public arena through avenues such as media, family policy, activism and advocacy, community-based work, clinical practice, education, and Cooperative Extension. Thus, showcasing a variety of ways to engage in public scholarship depending on an individual's training or interests.

**Media Work.** Stephanie Coontz (2005), for example, is the Director of Research and Public Education for the Council on Contemporary Families and has written several high profile books and articles (e.g., Coontz, 2004, 2006), which have been featured in many national and international media outlets such as the *Today Show*, *PBS*, *NPR*, *the New York Times*, and *the Wall Street Journal*. In addition to being sought after as a public speaker to discuss the history of marriage and family, Coontz is also a frequent contributor for news outlets – having forged strong relationships with reporters. Through her experience, Coontz provides workshops and trainings for many organizations—including NCFR—that focus on working with journalists and writing op-eds (see Coontz, n. d., for more information). Likewise, Susan L. Brown, Wendy D. Manning, and Karen Benjamin Guzzo engage in the translation of research through their work with the press and through the creation of research briefs related to cohabitation, marriage, fertility, and other family issues; many of which are publicly available through the National Center for Family and Marriage Research ([www.bgsu.edu/ncfmr.html](http://www.bgsu.edu/ncfmr.html)).

**Policy, Community-Based Work, and Advocacy.** Karen Bogenschneider (2014, 2015) is a pioneer in the area of family policy through her work with the Family Impact Seminars in collaboration with other engaged family scholars like Shelly MacDermid Wadsworth

(Bogenschneider & MacDermid Wadsworth, 2019). The Family Impact Seminars include a series of presentations, briefing reports, and discussions for state policy makers as a means of connecting researchers to legislators (see also Bogenschneider et al., 2012). Also grounded in policy and change-making efforts, Bethany Letiecq and Elaine Anderson (2017) provide insight into the importance of engaging in research-informed activism and advocacy. Family scholars like Joe Grzywacz and Bethany Letiecq (e.g., Letiecq, Grzywacz, Gray, & Eudave, 2014), for example, advocate for marginalized populations through community-based participatory research (CBPR) as scholar-advocates and scholar-activists. Tera Jordan (née Hurt) also uses principles of CBPR in her work to develop partnerships with organizations and agencies to study issues of family well-being, including assessments of programming aimed at reducing the impact of diabetes (e.g., Hurt, Seawell, & O'Connor, 2015). Similarly, Velma McBride Murry (e.g., Murry, Berkel, & Liu, 2018) leads initiatives related to community engagement, clinical and translational science that are funded by organizations such as the National Center for Advancing Translational Sciences of the National Institutes of Health (NIH). Through these efforts, Murry provides insight into partnering with community stakeholders and translating research into prevention programming for marginalized and underserved communities (e.g., Brody, Murry, et al., 2004; Murry & Brody, 2004; Murry et al., 2004). In addition to working directly with the Sexuality Information and Education Council of the United States (SIECUS) and creating policy and outreach briefs, Stephen T. Russell focuses his research on creating social change and works to shape local and state policies related to school safety, sex, and sexuality education (e.g., Russell & Horn, 2017).

**Therapy and Educational Programming.** As perhaps one of the most prominent examples of public scholarship, the research of John Gottman (e.g., Gottman & Gottman, 2017)

has informed many clinical trainings, educational programs, and other outreach efforts. Gottman's work has been translated through many initiatives including the creation of the Gottman Institute ([www.gottman.com](http://www.gottman.com)) and is disseminated in many popular media outlets. As part of her program of research, Yan Ruth Xia describes and evaluates family life education programming across cultures (e.g., Xia & Zhang Creaser, 2018). In addition to having an active presence translating research on social media and in blogs and popular books, Scott Stanley (2001) engages in direct practice and research with clinical implications for the public. His work developing and implementing the Prevention and Relationship Enhancement Program (PREP) with colleagues like Howard Markman and Galena Rhoades (e.g., Markman, Stanley, & Blumberg, 2010; Stanley et al., 2014), for example, educates couples about skills and strategies designed to maintain and improve their relationships. Similarly, Francesca Adler-Baeder (e.g., Adler-Baeder, Higginbotham, & Lamke, 2004) and Ted Futris (e.g., Futris, Sutton, & Duncan, 2017) have provided research-informed education about relationships to a number of audiences including youth, couples, parents, and stepfamilies while working in Cooperative Extension and beyond (e.g., Adler-Baeder & Higginbotham, 2004; Adler-Baeder, Kerpelman, Schramm, Higginbotham, & Paulk, 2007). Other faculty including Jodi Dworkin (e.g., Dworkin & Karahan, 2005), Jenifer McGuire (McGuire, Dworkin, Borden, Perkins, & Russell, 2016), Christine Fruhauf (e.g., Fruhauf, & Pevney, & Bundy-Fazioli, 2015), and Adrienne Duke (Duke & Norton, 2017), for example, also leverage their Extension roles to create programming for families and broader communities; which illustrates that the purpose of Extension to provide education to communities is inherently intertwined with public scholarship (see Monk, Benson, & Bordere, 2019).

### **Engaging in Public Scholarship?**

In addition to barriers that make this work difficult including time and resources (i.e., what activities are incentivized by universities) and promotion and tenure expectations, faculty often lack training in terms of communicating to lay audiences, or have concerns about the repercussions of speaking on topics that have become unjustly politicized (e.g., scholar activism with regard to topics that select groups with power considered “controversial” despite being rooted in science and social justice; see Badgett, 2016; Colbeck & Wharton-Michael, 2006; Hobin et al., 2012; McBride et al., 2019). These concerns are particularly salient for untenured and minority faculty who may be especially vulnerable to political backlash or constraints on their time (see Bradley, 2018). Thus, we propose a few ideas for family scientists looking for ways to engage in public scholarship and attempt to organize these suggestions by level of intensity, which can make the work seem less intimidating or daunting for those who are still learning to conceptualize this work as a cultural imperative and therefore an essential component of their research in the same way that many faculty of color are already socialized (Stanley, 2006; Thomas, 2001; see Table 1).

Table 1. Suggested Ideas for Public Scholarship Activities

| <b>Lower Intensity Strategies*</b>                   |  |  |
|--|--|--|
| <b>Idea</b>  | <b>Description</b>   | <b>Resources and Additional Information</b>  |
| Share Research on Social Media                       | Use Facebook, Twitter, Instagram, etc. as platforms to translate and discuss practical implications of research with lay audiences.<br>Host chats or live video events describing findings that are relevant to people’s lives | See the Journal of Family Theory and Review on Facebook and Twitter for an example of public scholarship through social media.<br><br><a href="https://twitter.com/jftr_ncfr?lang=en">https://twitter.com/jftr_ncfr?lang=en</a><br><a href="https://www.facebook.com/jftrpage/">https://www.facebook.com/jftrpage/</a>   |
| Partner with Existing Public Scholarship Initiatives | University and research-based centers working toward translation of research findings to practice.   | Relevate is focused on making relationship science accessible to the public (Monk, Vennum, & Kanter, 2019). The North Central Region Aging Network (NCRAN) ( <a href="http://www.ncran.org/">http://www.ncran.org/</a> ) provides resources and webinars for those working with older adults. The Surviving Healing Evolving around Death (S.H.E.D.) Grief and Loss Tools Program provides resources and education in loss, bereavement and coping for youth serving organizations.<br><a href="https://high5.egnyte.com/dl/5FwGaDcuaG/">https://high5.egnyte.com/dl/5FwGaDcuaG/</a> |

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| Create Brief List of Major Findings or Tips as an Appendix to Research Article | Include an appendix to publish research focused on summarizing results and implications for applied work.  | See Bordere, 2017  |
| Develop an Infographic or Visual/Graphical Abstract                            | Create infographics and visual/graphical abstracts, which offer visual depictions of research findings that can highlight information most important for applied settings.   | Several resources for writing press releases can be found online. Academic publishers have recommendations for promoting creating visual/graphic abstracts. Websites like Canva and Piktochart can help scholars create infographics.  |
| Create a Press Release with Key Take-Aways                                     | Work with the News Bureau or Communications & Marketing department at your university to develop a press release.  | Several resources for writing press releases can be found online.  |
| <b>Medium Intensity Strategies*</b>  |  |  |
| Partner with Practitioners   | Reach out to Extension specialists embedded in communities, relationship and family life educators, clinicians, and other community health leaders to partner on research and educational initiatives.   | These partnerships can be mutually beneficial as campus researchers can provide needed updates to programming and practitioners can disseminate science through their programs and connect scholars with other community stakeholders (see Monk, Benson, & Bordere, 2019, for more information).   |
| Organize Public Engagement Events  | Connect with local venues who might be willing to host events (e.g., movie theater, restaurant, or religious center). Invite researchers to describe their work to community members or invite experts to discuss research relevant to a specific community event or activity. | For example, the University of Missouri hosts “Extra Credit” and Texas Tech University hosts “Sexism in Cinema” where scholars are invited to discuss relevant research after the screening of a film.<br><br>Extra Credit at the University of Missouri:<br><a href="http://theconnector.missouri.edu/extra-credit-series-with-ragtag-cinema/">http://theconnector.missouri.edu/extra-credit-series-with-ragtag-cinema/</a><br>Sexism in Cinema at Texas Tech University:<br><a href="https://www.depts.ttu.edu/wstudies/events_sexismincinema.php">https://www.depts.ttu.edu/wstudies/events_sexismincinema.php</a><br>“Science on Tap” and “Science on Wheels” at the University of Missouri:<br><a href="http://theconnector.missouri.edu/event/science-on-tap/">http://theconnector.missouri.edu/event/science-on-tap/</a><br><a href="http://scienceonwheels.missouri.edu/">http://scienceonwheels.missouri.edu/</a> |
| Host a Panel or Educational Session about Public Scholarship                   | Start conversations at your university by inviting scholars who engage the public to discuss their work and the importance of engagement.  | The Promoting and Engaging in Public Scholarship (P.E.P.S.) Program (Monk, Benson, & Bordere, 2019) has an example presentation you can adapt to facilitate conversations about partnering to enhance broader impacts: <a href="http://hdfs.missouri.edu/PEPS.html">http://hdfs.missouri.edu/PEPS.html</a>   |
| Serve on a Board/ Commission for a Local Organization or School District       | Many human services agencies, clinics, and policy-making organizations have advisory boards or commissions that would benefit from experts who are willing to volunteer their time.  | See <a href="https://www.cpsk12.org/Page/11332">https://www.cpsk12.org/Page/11332</a> or <a href="http://extension.missouri.edu/hes/families/shed.htm">http://extension.missouri.edu/hes/families/shed.htm</a> for examples of partnerships with community organizations or schools.<br><br>See Badgett, 2016, for more information on this and additional suggestions.  |

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|---|--|--|
| Write for Local Outlets                               | Provide updates about the state of specific topics in your area that are relevant to local agencies or newspaper columns.  | Connect with local agency directors and newspaper editors about recent research related to their missions/stories. You can also provide them with a research brief or an “op-ed.” Many non-profits and government-funded agencies have periodic newsletters and their editors would likely appreciate assistance with developing content.  |
| Create a Webinar or Podcast for Science Communication | Record a video or host an interactive training session in a webinar, podcast, Facebook Live, or other format to engage with the public around your research area (e.g., Singer, 2019).   | See organizations offering webinars<br>The National Council on Family Relations ( <a href="https://www.ncfr.org/events/webinars">https://www.ncfr.org/events/webinars</a> ), The National Alliance for Grieving Children ( <a href="https://childrengrieve.org/education/online-learning">https://childrengrieve.org/education/online-learning</a> ), Cooperative Extension ( <a href="https://learn.extension.org/events/recent">https://learn.extension.org/events/recent</a> )  |
| <b>Higher Intensity Strategies*</b>                   |  |  |
| Form a Committee or Task Force on Public Scholarship  | Assemble a group of scholars and educators at your university to advocate for cultural change and the integration of public scholarship into promotion and tenure requirements. Calleson, Jordan, & Seifer (2005) provide potential guidelines for evaluating these efforts (see also McBride et al., 2019). | Universities that support or incentivize engagement may serve as helpful models. To get started, see some of the recommendations and services offered through Michigan State University’s Office University Outreach and Engagement: <a href="https://engage.msu.edu/">https://engage.msu.edu/</a>   |
| Hold Research Press Conferences                       | Invite reporters, policy makers, and/or other stakeholders relevant to your research topic (e.g., clinicians, educators, parents, attorneys) to a presentation about your project and the research of others. Make the presentations more focused on the applied implications.                               | Many state universities host “Family Impact Seminars,” for example, which can serve as templates for starting similar initiatives at your university (e.g., Bogenschneider et al., 2012).<br><br>See a list of Family Impact Seminars by State: <a href="https://www.purdue.edu/hhs/hdfs/fii/state-seminars/">https://www.purdue.edu/hhs/hdfs/fii/state-seminars/</a><br><br>Also see the National Issues Forums for an additional guide on this type of initiative: <a href="https://www.nifi.org/">https://www.nifi.org/</a> |
| Train Students in Public Scholarship                  | Provide service-learning opportunities in undergraduate classes and mentor graduate students on writing and speaking to different audiences (e.g., explaining findings in a way an 8 <sup>th</sup> grader could understand).   | Books like “Houston, We Have a Narrative” by Randy Olson, “Am I Making Myself Clear?” by Cornelia Dean, “Going Public: A Guide for Social Scientists” by Arlene Stein and Jessie Daniels, and “The Social Scientist’s Soapbox: Adventures in Writing Public Sociology” by Karen Sternheimer may be useful resources.<br><br>See also Bogenschneider, 2006; Sabatelli, 2017, for helpful suggestions with regard to training students   |
| Present to Local, State, or Federal Representatives   | Set up meetings with relevant officials or staffers to express interest in (1) serving as an expert witness on court cases relevant to your research, (2) presenting research at city council hearings, or (3) provide policy recommendations based on your research to the state legislature or congress.   | See Badgett, 2016, for more information on this and additional suggestions.  |

*Note.* See Jensen & Kainz, 2019; Sliva et al., 2019; Leavy, 2019; Sherraden, Lough, Sherraden, Williams Shanks, & Haung, 2019; Spoth, 2008, for additional suggestions.

\*Some examples may be more or less intensive depending on the type and degree of barriers a particular scholar faces. For example, the time one must dedicate to organizing panel events or convening a task force can vary tremendously depending on the scholar's access to resources, support staff, and any previously established connections the scholar may have already fostered.

It is important to note that the types of activities scholars adopt (like the examples outlined in Table 1) will depend on the intended audience. Thus, public scholars will want to consider the various stakeholders involved. When working with policy makers, for example, information will need to be provided in a brief format and content should be selected that offers justification or information on particular issues (e.g., voting for or against a bill; establish a policy based on community need). Information with practical tips for how to help a given population or the clinical implications from research (e.g., key take-aways), for example, may be most useful to practitioners (e.g., family therapists or family life educators) in order to translate the findings into direct practice.

Similarly, as we allude to in Table 1, an important step underlying many of these ideas may be to think about who you can partner with to support your public scholarship efforts. To make the work more manageable and well-informed, public scholarship should be a collective effort. If producing knowledge is your main role, for example, in addition to partnering with other *producers* of knowledge (i.e., researchers), you might also think about working with *designers* — people who can help you with curriculum development and design (e.g., communication & marketing experts, graduate students skilled in graphic design). A designer could take the content provided by producers and translate it in an aesthetic way to make it appealing and accessible. Next, *distributors* — individuals who provide education or therapy directly (e.g., family life educators, Extension specialists, social workers and therapists) — can help implement the work if that is not your skillset or they can provide suggestions to support



your efforts to engage in direct outreach. Similarly, you may need to identify *connectors* or individuals who can act as informants or gatekeepers to connect you with communities, agencies, or other stakeholders (e.g., community agency directors and board members). For example, family life educators focused on the development and delivery of educational programming and family scientists in the “ivory tower” focused on the production of evidence-based information can partner to leverage their complementary foci for the public good. We refer to these roles (i.e., producers, designers, distributors, and connectors) as “complementary counterparts,” because they are all vital to public scholarship. It is also important to note that individuals might possess multiple roles, yet emphasize different, vital components to varying degrees. The connector role, for example, is one that many family scientists may find themselves fulfilling, in addition to their role as producer, when they participate in several collaborations.

Furthermore, making a public impact in our work is of interest to upper administration (McBride et al., 2019), so there is support from many academics in positions of power to make change in university culture. However, there is often a divide between the rhetoric encouraging public scholarship and the actual reward structure at universities (Hutchinson, 2011). For example, researchers may feel discouraged from engaging in public scholarship if it is not directly outlined in their requirements for tenure or promotion, which could cause scholars to fear how it will be viewed or evaluated by colleagues (Hutchinson, 2011; see also Colbeck & Wharton-Michael, 2006; Colbeck & Weaver, 2008).

Moore and Ward (2008) note the importance of documenting engagement with communities in a way that reflects teaching, research, and service missions of universities. According to their interviews with scholars and analysis of curriculum vitae, Moore and Ward found that faculty might fold their public scholarship into the traditional roles of research (e.g.,

grants focused on dissemination and broader impacts; scholarly publications focused on community-based issues), teaching (e.g., scholarship of teaching and learning, service-learning efforts, community-based education), and service (e.g., consultation and affiliations with community-based organizations) as a means of demonstrating impact and the development of a reputation as an expert. However, public scholarship was also presented as transcending these traditional categories by scholars working to synergize efforts and highlight community engagement for the important work it is — often through highlighting such accomplishments in the tenure and promotion narrative (Moore & Ward, 2008; see also Calleson et al., 2005; Leavy, 2019).

As a reasonable first step, scholars should consider the value in reporting metrics of impact like number of reads and shares on social media for a blog post, the number of downloads for a podcast or webinar, or the number of media mentions for a relevant publication. In addition to possibly forming a task force or committee to advance public scholarship recognition at an institution (see Table 1), for example, a place to start advocating for the recognition of public scholarship is for family scholars to include a “public scholarship,” “engagement,” or “broader impacts” section on their curriculum vitae, where they can note efforts like news media interviews, community-based outreach, and other broader impacts activities. Unless scholars have an extension or outreach component to their position, it can be easy to dismiss public scholarship efforts that instead should be highlighted when documenting accomplishments.

Relatedly, family scientists should ensure their efforts in public scholarship are measured and evaluated. As scientists we are trained to purposefully select measures and carefully collect data to test our hypotheses before disseminating our findings to the broader scientific community. This is important in program implementation and evaluation as well (see Small,

1990), for example, because scholars often learn from the application of research in the field (Yappa, 2006). Similarly, as public scholars we should be sure to collect data on our processes and outcomes and share this knowledge for training purposes as well as to provide an evidence-base on the impact of public scholarship. These evaluation efforts not only inform scholars' future research, but it can also aid them in documenting their impact.

### **Conclusion**

As family scholars, we should not consider a research project complete after a peer-reviewed publication. Instead, before moving on to the next publication, family scientists should ask themselves: how can this project and my research truly benefit the lives of individuals, couples, and families in my community—even in a small way? What can I do next to make sure the results and implications of this research are communicated to the populations that were studied, institutions that provide services to the families, and to policy makers?

Faculty, particularly untenured and minority faculty, however, are vulnerable when they are lacking the support and resources from their universities that are relied upon to complete their work (Ellison & Eatman, 2008). We hope that our discussion of these issues will motivate scholars to encourage their administrators to communicate clearly how their institutions value public scholarship (Christie et al., 2017). Demonstrating the importance of public scholarship to those in positions of power can be a catalyst to shift the culture to move beyond superficial support or “lip-service” paid to public scholarship and encourage the provision of tangible support for public scholarship so academics can move from “talking the talk of engagement” to “walking the walk” (Britner, 2012, p. 64). Family scientists, are well-suited to be at the forefront of this effort to push for more wide-spread change across academia as a social justice imperative.

### **References**

- Adler-Baeder, F., & Higginbotham, B. (2004). Implications of remarriage and stepfamily formation for marriage education. *Family Relations*, 53(5), 448-458. doi: 10.1111/j.0197-6664.2004.00053.x
- Adler-Baeder, F., Higginbotham, B., & Lamke, L. (2004). Putting empirical knowledge to work: Linking research and programming on marital quality. *Family Relations*, 53(5), 537-546. doi: 10.1111/j.0197-6664.2004.00063.x
- Adler-Baeder, F., Kerpelman, J. L., Schramm, D. G., Higginbotham, B., & Paulk, A. (2007). The impact of relationship education on adolescents of diverse backgrounds. *Family Relations*, 56(3), 291-303. doi: 10.1111/j.1741-3729.2007.00460.x
- Allen, M., Borchelt, R., Fenwick, J. LaMonica, M., & Weintraub, J. (2018). *Science engagement through the media*. Panel presentation conducted at the annual meeting of the National Alliance for Broader Impacts, Providence, RI.
- American Academy of Arts & Sciences. (2018). *Perceptions of science in America*. Cambridge, MA: American Academy of Arts & Sciences
- Badgett, M. L. (2016). *The public professor: How to use your research to change the World*. NYU Press.
- Barker, D. (2004). The scholarship of engagement: A taxonomy of five emerging practices. *Journal of Higher Education Outreach and Engagement*, 9, 123-137.
- Bartle-Haring, S., & Slesnick, N. (2013). Family therapy: An “emerging field.” In G.W. Peterson & K. R. Bush (Eds.), *Handbook of marriage and the family* (3rd ed.) (pp. 845- 860). New York: Springer.

- Beaulieu, M., Breton, M., & Brousselle, A. (2018). Conceptualizing 20 years of engaged scholarship: A scoping review. *PloS One*, *13*(2), e0193201. doi: 10.1371/journal.pone.0193201.
- Bell, L. A. (1997). Theoretical foundations for social justice education. In M. Adams, L. Bell, & P. Griffin (Eds.), *Teaching for diversity and social justice: A sourcebook* (pp. 3-15). New York: Routledge
- Bogenschneider, K. (2006). Teaching family policy in undergraduate and graduate classrooms: Why it's important and how to do it better. *Family Relations*, *55*, 16-28.
- Bogenschneider, K. (2014). *Family policy matters: How policymaking affects families and what professionals can do* (3<sup>rd</sup> ed.). New York: Routledge.
- Bogenschneider, K. (2015). Family law and public policy: Why it's a core competency for family life educators. In Walcheski, M. J. & Reinke, J. S. (Eds.). *Family life education: The practice of family science* (pp. 223-234). Minneapolis, MN: National Council on Family Relations.
- Bogenschneider, K., & MacDermid Wadsworth, S. (2019). Guest editors' introduction: Fast-forward to the next frontier of family policy. *Journal of Family Theory & Review*, *11*(1), 9-17.
- Bogenschneider, K., Little, O., Ooms, T., Benning, S., Cadigan, K., & Corbett, T. (2012). The family impact lens: A family-focused, evidence-informed approach to policy and practice. *Family Relations*, *61*, 514-531.
- Bordere, T. C. (2017). Disenfranchisement and ambiguity in the face of loss: The suffocated grief of sexual assault survivors. *Family Relations*, *66*(1), 29-45.
- Bradley, S. M. (2018). *Upending the ivory tower: Civil rights, Black power, and the ivy league*.

NY: New York University Press.

Britner, P. A. (2012). Bringing public engagement into an academic plan and its assessment metrics. *Journal of Higher Education Outreach and Engagement*, 16, 61-78.

Calleson, D. C., Jordan, C., & Seifer, S. D. (2005). Community-engaged scholarship: Is faculty work in communities a true academic enterprise? *Academic Medicine*, 80, 317-321.

Center for Community and Civic Engagement. (2018, September 20). *What is public scholarship?* Retrieved from [https://apps.carleton.edu/ccce/scholarship/what\\_is/scholarship/](https://apps.carleton.edu/ccce/scholarship/what_is/scholarship/)

Christie, L. D., Djupe, P. A., O'Rourke, S. P., & Smith, E. S. (2017). Whose job is it anyway? The place of public engagement in the liberal arts college. *Journal of Higher Education Outreach and Engagement*, 21(4), 23-50.

Colbeck, C. L., & Weaver, L. D. (2008). Faculty engagement in public scholarship: A motivation systems theory perspective. *Journal of Higher Education Outreach and Engagement*, 7-32.

Colbeck, C. L., & Wharton-Michael, P. (2006). Individual and organizational influences on faculty members engagement in public scholarship. *New Directions for Teaching and Learning*, 105, 17-26. doi: 10.1002/tl.220

Coons, C. (2017). Scientists can't be silent. *Science*, 357, 431-431. doi: 10.1126/science.aao4665

Coontz, S. (2004). The world historical transformation of marriage. *Journal of Marriage and Family*, 66(4), 974-979. doi: 10.1111/j.0022-2445.2004.00067.x

Coontz, S. (2005). Putting on a public face. *Contexts*, 4, 78-79.

Coontz, S. (2006). *Marriage, a history: How love conquered marriage*. New York: Penguin.

- Davis, P. M., & Walters, W. H. (2011). The impact of free access to the scientific literature: A review of recent research. *Journal of the Medical Library Association, 99*(3), 208-217. doi: 10.3163/1536-5050.99.3.008
- Driscoll, A. (2008). Carnegie's community-engagement classification: Intentions and insights. *Change: The Magazine of Higher Learning, 40*(1), 38-41.
- Duke, A.M., & Norton, J. (2017). Extension's Efforts to help kids Be SAFE: An evaluation of a statewide bullying prevention program. *Journal of Extension, 55*, 3RIB6.
- Dworkin, J., & Karahan, A. R. (2005). Parents forever: Evaluation of a divorce education curriculum. *Journal of Extension, 43*, 1RIB6.
- Ellison, J., & Eatman, T. K. (2008). *Scholarship in public: Knowledge creation and tenure policy in the engaged university*. Syracuse, NY: Imagining America.
- Fruhauf, C. A., Pevney, B., & Bundy-Fazioli, K. (2015). The needs and use of programs by service providers working with grandparents raising grandchildren. *Journal of Applied Gerontology, 34*(2), 138-157.
- Futris, T. G., Sutton, T. E., & Duncan, J. C. (2017). Factors associated with romantic relationship self-efficacy following youth-focused relationship education. *Family Relations, 66*(5), 777-793.
- Gavazzi, S. M., Wilson, S. M., Ganong, L., & Zvonkovic, A. (2014). Furthering the conversation on the future of the discipline of family science: Comments on the articles by Hamon & Smith and Hans. *Family Relations, 63*(3), 333-342. doi: 10.1111/fare.12076
- Gottman, J., & Gottman, J. (2017). The natural principles of love. *Journal of Family Theory & Review, 9*(1), 7-26. doi: 10.1111/jftr.12182

- Grzywacz, J. G., & Allen, J. W. (2017). Adapting the ideas of translational science for translational family science. *Family Relations*, 66(4), 568-583. doi: 10.1111/fare.12284
- Grzywacz, J. G., & Middlemiss, W. (2017). Looking backward, around, and forward: Family science has always been translational science. *Family Relations*, 66(4), 547-549. doi:10.1111/fare.12280
- Hamon, R. R., & Smith, S. R. (2017). Family science as translational science: A history of the discipline. *Family Relations*, 66(4), 550-567. doi: 10.1111/fare.12273
- Hassan, S. U., Imran, M., Gillani, U., Aljohani, N. R., Bowman, T. D., & Didegah, F. (2017). Measuring social media activity of scientific literature: An exhaustive comparison of Scopus and novel Altmetrics big data. *Scientometrics*, 113(2), 1037-1057.
- Hobin, J. A., Deschamps, A. M., Bockman, R., Cohen, S., Dechow, P., Eng, C., ... & Rubenstein, P. (2012). Engaging basic scientists in translational research: Identifying opportunities, overcoming obstacles. *Journal of Translational Medicine*, 10:72. doi: 10.1186/1479-5876-10-72
- Howard-Baptiste, S., & Harris, J. C. (2014). Teaching then and now: Black female scholars and the mission to move beyond borders, *The Negro Educational Review*, 65(1-4), 5-22.
- Hurt, T. R., Seawell, A. H., & O'Connor, M. C. (2015). Developing effective diabetes programming for Black men. *Global Qualitative Nursing Research*, 2, 1-9. doi: 10.1177/2333393615610576
- Hutchinson, M. (2011). Outside the margins: Promotion and tenure with a public scholarship platform. *Journal of Public Scholarship in Higher Education*, 1, 133–151.



- Jensen, T. M., & Kainz, K. (2019). Positioning social work researchers for engaged scholarship to promote public impact. *Journal of the Society for Social Work and Research, 10*(4), 591-609.
- June, A. W. (2015). The invisible labor of minority professors. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/The-Invisible-Labor-of/234098>.
- Lamb, C. T., Gilbert, S. L., & Ford, A. T. (2018). Tweet success? Scientific communication correlates with increased citations in ecology and conservation. *PeerJ, 6*, e4564. doi: 10.7717/peerj.4564
- Lawrence, S. (2001). Free online availability substantially increases a paper's impact. *Nature, 411*, 521-522.
- Leavy, P. (Ed.). (2019). *The oxford handbook of methods for public scholarship*. Oxford University Press, USA.
- Letiecq, B. L., & Anderson, E. A. (2017). From education to advocacy and activism: Alternative approaches for translating family science to policy. *Family Relations, 66*(4), 729-740. doi: 10.1111/fare.12274
- Letiecq, B. L., Grzywacz, J. G., Gray, K. M., & Eudave, Y. M. (2014). Depression among Mexican men on the migration frontier: The role of family separation and other structural and situational stressors. *Journal of Immigrant and Minority Health, 16*(6), 1193-1200. doi: 10.1007/s10903-013-9918-1
- Luc, J. G., Archer, M. A., Arora, R. C., Bender, E. M., Blitz, A., Cooke, D. T., ... & Antonoff, M. B. (2020). Does tweeting improve citations? One-Year results from the TSSMN

- prospective randomized trial. *The Annals of Thoracic Surgery*. Advanced online publication. doi: 10.1016/j.athoracsur.2020.04.065
- Markman, H. J., Stanley, S. M., & Blumberg, S. L. (2010). *Fighting for your marriage: A deluxe revised edition of the classic best-seller for enhancing marriage and preventing divorce*. San Francisco, CA: Jossey-Bass.
- Maxwell, S. E., Lau, M. Y., & Howard, G. S. (2015). Is psychology suffering from a replication crisis? What does “failure to replicate” really mean? *American Psychologist*, 70(6), 487-498. doi: 10.1037/a0039400
- Murry, V. M., Berkel, C., & Liu, N. (2018). The closing digital divide: Delivery modality and family attendance in the Pathways for African American Success (PAAS) Program. *Prevention Science*, 19(5), 642-651. doi: 10.1007/s11121-018-0863-z
- Brody, G. H., Murry, V. M., Gerrard, M., Gibbons, F. X., Molgaard, V., McNair, L., ... & Chen, Y. F. (2004). The Strong African American Families Program: Translating research into prevention programming. *Child Development*, 75(3), 900-917. doi: 10.1111/j.1467-8624.2004.00713.x
- McGuire, J. K., Dworkin, J., Borden, L. M., Perkins, D., & Russell, S. T. (2016). Youth motivations for program participation. *Journal of Youth Development*, 11(3), 7-25.
- Monk, J. K., Benson, J. J., & Bordere, T. C. (2019). Public scholarship: A tool to strengthen relationships between extension, campus, and communities. *Journal of Extension*, 57(3), 3TOT1.
- Monk, J. K., Vennum, A. V., & Kanter, J. B. (2019). How to use crowdfunding in Extension: A relationship education example. *Journal of Extension*, 57(4), 4TOT3.

- Moore, T. L., & Ward, K. (2010). Documenting engagement: Faculty perspectives on self-representation for promotion and tenure. *Journal of Higher Education Outreach and Engagement, 12*, 5-28.
- McBride, A. M., Abrams, L. S., Dettlaff, A., Gregoire, T., Jenkins, D., & Uehara, E. (2019). Advancing the public impact of social work scholarship: Perspectives of deans and directors. *Journal of the Society for Social Work and Research, 10*(4), 611-621.
- Murry, V. M., & Brody, G. H. (2004). Partnering with community stakeholders: Engaging rural African American families in basic research and the Strong African American Families preventive intervention program. *Journal of Marital and Family Therapy, 30*, 271-283.
- Murry, V. M., Kotchick, B. A., Wallace, S., Ketchen, G., Eddings, K., Heller, L., & Collier, I. (2004). Race, culture, and ethnicity: Implications for a community intervention. *Journal of Child and Family Studies, 13*, 81-99
- Myers-Walls, J. A., Ballard, S. M., Darling, C. A., & Myers-Bowman, K. S. (2011). Reconceptualizing the domain and boundaries of family life education. *Family Relations, 60*(4), 357-372. doi: 10.1111/j.1741-3729.2011.00659.x
- National Science Foundation (n.d.). *Broader impacts review criterion*. Retrieved from: <https://www.nsf.gov/pubs/2007/nsf07046/nsf07046.jsp>
- Obradović, S. (2019). Publication pressures create knowledge silos. *Nature Human Behaviour, 3*(10), 1028-1028. doi: 10.1038/s41562-019-0674-7
- Pew Research Center (2015). *Public and scientists' views on science and society*. Retrieved from <https://www.pewresearch.org/science/2015/01/29/public-and-scientists-views-on-science-and-society/>

- Rawat, S., & Meena, S. (2014). Publish or perish: Where are we heading?. *Journal of Research in Medical Sciences, 19*(2), 87-89.
- Russell, L. T., Chapman, A. L., Kanter, J. B., Roach, A. L., & Crossman, K. A. (2019). What's next in digital scholarship for the Journal of Family Theory & Review. *NCFR Report, 64*, 10-11.
- Russell, S. T., & Horn, S. S. (Eds.). (2017). *Sexual orientation and gender identity in schooling: The nexus of research, practice, and policy*. New York: Oxford University Press.
- Sabatelli, R. M. (2017). Training translational scholars within family science programs. *Family Relations, 66*(4), 766-772. doi: 10.1111/fare.12262
- Sherraden, M., Lough, B. J., Sherraden, M. S., Shanks, T. R. W., & Huang, J. (2019). Applied social research: Aiming for impact. *Journal of the Society for Social Work and Research, 10*(4), 545-570.
- Singer, J. B. (2019). Podcasting as social scholarship: A tool to increase the public impact of scholarship and research. *Journal of the Society for Social Work and Research, 10*(4), 571-590.
- Sliva, S. M., Greenfield, J. C., Bender, K., & Freedenthal, S. (2019). Introduction to the special section on public impact scholarship in social work: A conceptual review and call to action. *Journal of the Society for Social Work and Research, 10*, 529-544.
- Small, S. A. (1990). Some issues regarding the evaluation of family life education programs. *Family Relations, 39*(2)132-135.
- Spoth, R. (2008). Translating family-focused prevention science into effective practice: Toward a translational impact paradigm. *Current Directions in Psychological Science, 17*(6), 415-421.

- Stanley, C. A. (2006). Coloring the academic landscape: Faculty of color breaking the silence in predominantly white colleges and universities. *American Educational Research Journal*, 43(4), 701–736. doi: 10.3102/00028312043004701
- Stanley, S. M. (2001). Making a case for premarital education. *Family Relations*, 50(3), 272-280.
- Stanley, S. M., Rhoades, G. K., Loew, B. A., Allen, E. S., Carter, S., Osborne, L. J., ... & Markman, H. J. (2014). A randomized controlled trial of relationship education in the US Army: 2-year outcomes. *Family Relations*, 63(4), 482-495.
- Thomas, G. D. (2001). The dual role of scholar and social change agent: Reflections from tenured African American and Latina faculty. In R. O. Mabokela & A. L. Green (Eds.), *Sisters in the academy: Emergent Black women scholars in higher education* (pp. 81-92). Sterling, VA: Stylus Publishing.
- Wilder, C. S. (2013). The edges of the empire. In C. S. Wilder, *Ebony and ivy: Race, slavery, and the troubled history of American universities* (pp. 15-36). New York: Bloomsbury Press.
- Xia, Y. R., & Zhang Creaser, C., (2018). Family life education in China. In M. Robila & A. Taylor (Eds.), *Global perspectives on family life education*. New York: Springer.
- Yapa, L. (2006). Public scholarship in the postmodern university. *New Directions for Teaching and Learning*, 105, 73–83.

*This is the peer reviewed version of the following article:*

Monk, J.K., Bordere, T.C. and Benson, J.J. (2021), Emerging Ideas. Advancing Family Science Through Public Scholarship: Fostering Community Relationships and Engaging in Broader Impacts. *Fam Relat*, 70: 1612-1625, 10.1111/fare.12545

which has been published in final form at <https://doi.org/10.1111/fare.12545>.

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