Statement of Entrepreneurship and Project Management for Brady T. West

Since joining SRC in 2011, and especially since my promotion to Research Associate Professor in 2016, I have been very successful at independently obtaining funding to support my research activities and carefully managing all of these activities. With this statement of entrepreneurship and project management, I aim to summarize my entrepreneurial accomplishments and my managerial achievements, specifically in terms of the administrative and supervisory skills that I have demonstrated. I organize this statement by the major sources of funding for my work to date.

The National Survey of Family Growth. I was a key member of the team that submitted a proposal to conduct the National Survey of Family Growth (NSFG) 2011-2019. The contract was awarded to the University of Michigan (funding 2010-2020, $45,682,597 total). I served as the methodologist on the management team of the NSFG for the duration of this contract, which was as an important source of capacity-building for cross-sectional surveys at SRC and supported a large amount of methodological innovation and experimentation. Specifically, I led efforts of the NSFG team that were related to the collection of paradata, the implementation of innovative responsive survey designs, interviewer training, and the production and documentation of public-use NSFG data sets (e.g., Lepkowski et al., 2013). This included the preparation of detailed analysis guidelines for NSFG data users that have been recognized by my peers for their quality (Kolenikov et al., 2020). In my role on the NSFG management team at SRC, I helped to lead weekly production meetings, I participated in all quarterly meetings with the NSFG management team at the National Center for Health Statistics (NCHS), and I had primary responsibility for documenting all of SRC's peer-reviewed publications and accepted conference presentations related to the NSFG for regular communication with NCHS. The methodological work that I have led on the NSFG has resulted in several peer-reviewed publications and extended my research agenda in several areas (Wagner et al., 2012; West, 2013; West and Kreuter, 2013; West and Groves, 2013; West and Elliott, 2014; West and Peytcheva, 2014; Krueger and West, 2014; West and Kreuter, 2015; West et al., 2015; Wagner et al., 2017; West and Kreuter, 2018; Couper et al., 2018; West and Li, 2019; Andridge et al., 2019; Little et al., 2020; Wagner et al., 2020; West and McCabe, 2021).

At the conclusion of the 2010-2020 contract, the NSFG management team at SRC and I agreed that my leadership experience on this contract had prepared me well to serve as the PI / Project Director on a new proposal for the 2020-2030 NSFG contract. In this role, I led a team of SRC faculty members, methodologists, survey specialists, subject matter experts, ICPSR data management experts and SRO management and budget staff in the development of top-notch technical and business proposals that were collectively a true realization of SRC's vision for the future of the NSFG. I poured my heart and soul into the development of these proposals over a one-month period in June-July 2020. The proposal ultimately scored well but unfortunately was not awarded to SRC (which had held the NSFG contract since 1999), primarily for cost reasons. Despite this outcome, I could not have been prouder of the resulting proposal and consider it some of the best scientific work that I've ever done. I hope to have the opportunity to once again lead another large SRC project like the NSFG in the future. I am currently in discussions with David Weir about joining the leadership team of the Health and Retirement Study (HRS) and guiding methodological innovations on that project moving forward.

NIH-Funded Research Projects. I have established a track record of successfully obtaining funding for my methodological research via grants from the National Institutes of Health (NIH). In 2013, I was awarded an R03 grant from the NIH, which received an impact score of 10 (1st percentile). I served as the PI of this project, leading a team of undergraduate and Masters students that helped me to produce original methodological research on effective strategies for recording accurate interviewer observations (West and Kreuter, 2018; West and Li, 2019).

In 2016, I was awarded, along with co-PI James Wagner, an NIH-funded five-year R25 grant for the development of a Responsive Survey Design (RSD) Research Education Program. This proposal also received an impact score of 10 (1st percentile). In the past five years, we have developed a series of short courses and webinars on RSD that disseminate knowledge about these important data collection techniques to researchers outside of our field. Our full program of short courses has been offered annually as part of SRC's Summer Institute on Survey Research Techniques (SI) for the past four years. We converted these short courses to a webinar-only format in 2020 given the global pandemic. Converting in-person short courses to a webinar-only format required significant managerial efforts, especially since the majority of the instructors in our program are from other institutions. We have also led the development of a fully interactive, public-facing website for the program enabling regular discussion about RSD topics, and organized regular meetings with our advisory committee to discuss progress with the education program. We are currently developing a Coursera specialization of three massive open online courses (MOOCs) entitled *Total Data Quality* that draws on much of the material presented as part of this research education program. This effort is being supported by an agreement with U-M's Center for Academic Innovation, which will provide technical support in the production of videos and other course materials as well as a $25,000 award to SRC to support this development. We expect that the Coursera specialization will be a great opportunity to continue raising awareness about these techniques outside of the survey methodology field and advertise MPSM and RSD Education Program offerings.

In 2017, I was awarded a two-year R21 grant from NIH to study new statistical indices of selection bias for non-probability samples and other samples potentially subject to non-ignorable selection bias. This proposal received an impact score of 14 (1st percentile). As the PI of this project, I recruited a talented and multi-disciplinary team of statisticians and survey methodologists to work on the project, including Rod Little (SRC / U-M Biostatistics), Rebecca Andridge (Ohio State University), and Phil Boonstra (U-M Biostatistics). I also managed the work of multiple graduate students in MPSM on this project. This project was an extremely fruitful and productive collaboration that ultimately led to several high-impact contributions to the statistical and survey methodology literature (Andridge et al. 2019; Little et al., 2020; Boonstra et al., *In Press*; West et al., *In Press*), a GitHub repository of easy-to-use R software enabling the calculation of our measures of selection bias for both descriptive estimates and regression coefficients, and a large number of contributed and invited conference presentations, some of which are still being planned today. I look forward to seeing our measures become more widely used in practice and I will continue to disseminate guidance on their use.

In 2018, I was awarded my first R01 grant from NIH as a PI (impact score 21, 17th percentile). This five-year award is currently supporting the collection of original survey data on family formation, fertility,

and reproductive health from a national probability sample in the U.S., using innovative sequential mixed-mode approaches that rely on mail and web modes of data collection exclusively. My team's objective is to demonstrate that national data collections using these innovative techniques can effectively reproduce national estimates based on other gold-standard probability samples using face-to-face data collection at a fraction of the cost. Our first national sample replicate is currently in the field, and we are scheduled to start data collection with our second national sample replicate later this summer. In my role as a PI on this project, I have managed the work of a large team of researchers, support staff, and graduate students; led weekly production meetings; overseen the development of the data collection instruments and materials; managed all IRB applications; finalized data collection protocols; developed and updated a website for the study; and carefully monitored all data collection activities and costs. We have already published two papers related to preparation activities for this work (West et al., *In Press*; West and McCabe, 2021). We are currently drafting several papers describing initial results from our first sample replicate and disseminating early experimental results at national conferences on survey research (e.g., the virtual AAPOR annual conference in May 2021).

In addition to these NIH-funded projects where I have been a PI or co-PI, responsible for managing all aspects of the research, I have been awarded several grants from NIH for projects where I play the role of a co-Investigator (co-I). In 2018, I was a co-I on an NIH-funded three-year R01 grant that was awarded to James Wagner for developing a Bayesian approach to RSD. This project has also been extremely fruitful to date, resulting in multiple peer-reviewed manuscripts (West et al., 2020; Coffey et al., 2020; Wagner et al., 2020) and two manuscripts that have currently received revise and resubmit decisions at high-impact journals (West et al., *R&R*, *JSSAM*; Elliott and West, *R&R*, *Survey Methodology*). I have also been a co-I on several R01 grants awarded to Sean McCabe, serving as a survey statistician and methodologist. My long-standing partnerships with Dr. McCabe and his colleagues have resulted in several influential contributions in the areas of substance abuse and mental health. I am currently working on an R01 with Dr. McCabe that is rigorously examining alternative approaches to adjusting for attrition in longitudinal surveys. I am also the PI of an R03 proposal, with Dr. McCabe as a co-I, that is currently under review and aims to build on some of our recent work on survey measurement of sexual identity (West and McCabe, 2021). I am also currently a co-I on an R01 grant awarded to Bill Axinn, where I am assisting with the implementation of innovative data collection approaches for the long-standing Chitwan Valley Family Study, and I am a member of an international team that was recently awarded an R01 grant to support data analysis training and research infrastructure development in Lebanon. Finally, I am currently the director of the Scientific and Technical Core of the Population Dynamics and Health Program funded by a five-year NIH P2C grant to ISR's Population Studies Center. On all of these projects, I have played an active role in contributing my methodological and statistical expertise to the development of highly competitive NIH proposals that have ultimately been funded.

NSF-Funded Research Projects. I have also established a track record of successfully funding my own methodological research via grants and contracts from the National Science Foundation (NSF) and using this funding to publish original methodological contributions. In 2013, I was awarded a three-year grant from NSF to study the interviewer effects introduced by conversational interviewing techniques. As the PI of this project, I managed a national data collection in Germany, including the sampling, interviewer

training, experimental design, and development of respondent materials. This original work with my faculty colleagues and graduate students in our program was a fruitful international collaboration that resulted in several methodological contributions on this topic. I was also awarded a three-year grant from NSF in 2014 to lead a project examining the prevalence of analytic error in published secondary analyses of large national surveys. This work, for which I supervised several graduate students in our program, resulted in several publications that helped to underscore analytic error as an important component of the Total Survey Error (TSE) framework and disseminate guidance on appropriate approaches to the analysis of complex sample survey data.

I am currently a co-I on an NSF grant that was awarded to Fred Conrad and Michael Schober to study the TSE properties of live video interviewing. I have helped to supervise several graduate students working on this project. We have published one paper on this technique (Schober et al., 2020) and we are currently preparing several other papers. This includes a manuscript that I have written on the interviewer effects associated with live video interviewing that recently received a revise and resubmit decision from *JSSAM*. A team that includes myself, James Wagner, and also Frauke Kreuter, Chris Antoun, and Brian Kim at JPSM was also recently awarded a one-year contract from NSF to research improved data collection methodologies for surveys conducted by the National Center for Science and Engineering Statistics. As one of the leaders of this contract, I am currently supervising the work of multiple graduate students on these research and development tasks. We are currently taking steps to get this contract renewed and continue our research in this area for a second year.

I was also part of an organizing committee led by Dr. Kristen Olson that received an NSF award to develop an international conference on interviewer effects in 2019. I worked closely with this committee to develop and carry out a very successful conference for researchers and practitioners that ultimately led to the publication of a new edited volume titled *Interviewer Effects from a Total Survey Error Perspective* (Olson et al., 2020). Finally, I was a co-I on an NSF proposal awarded to Dr. Jon Miller to extend the Longitudinal Study of American Youth (LSAY), where I led the development of weights and sampling error codes for the public-use LSAY data, along with documentation for data users. As was the case with the NIH awards discussed earlier, I played an active role in the development of each of these NSF proposals to ensure that they were as strong as possible. My NSF proposal-writing activities continue: I currently have an NSF proposal on record linkage with a colleague from the George Mason statistics department (Dr. Martin Slawski) under review and I am working on the development of an NSF proposal to study modular survey design techniques with Dr. Ipek Bilgen at NORC.

Advisory Relationships with Specific Branches of Government. I share the opinion with my colleagues at SRC that a key to long-term entrepreneurial success is advisory service to branches of the government that are highly engaged in data collection activities. In 2016, I was nominated to be a member of the Technical Advisory Committee of the U.S. Bureau of Labor Statistics (BLS-TAC). While this is not a funded position, I continue to serve on this committee, providing guidance to BLS technical staff conducting methodological research on a yearly basis. This work has resulted in my being invited to join a team from Abt Associates that will soon respond to a BLS-initiated request for proposals for a five-year contract to improve the methodology underlying many BLS data collections.

For the past five years, I have also served as the local (U-M) PI of a cooperative assistance grant from the USDA's Economic Research Service (ERS), providing methodological advice and guidance on the National Household Food Acquisition and Purchase Survey (FoodAPS). Via this grant, I have managed the efforts of a large number of graduate students who have assisted the FoodAPS team at ERS with several methodological evaluations of the FoodAPS data collection, primarily in preparation for the second FoodAPS study (Hu et al., 2017; Ong et al., 2018; Hu et al., 2019; Hu et al., 2020; Zhang et al., 2020). The ERS team has been very happy with this work, renewing this grant multiple times to date. In my role as the local PI of this grant, I write quarterly progress reports and guide the work of the graduate students on the project. I am also working with the Veterans Administration (VA) on an IPA, where I provide consultation on data collection activities. I have also worked on a VA contract where I consulted on sampling, weight development, and analysis for a national survey of veteran college students (Valenstein et al., 2020). Finally, I worked with RTI on a contract with the U.S. Census Bureau in 2012 to study the use of ACASI in federal data collections, and with the CDC from 2013-2015 on a contract to evaluate sampling weight development for a survey of HIV care providers (e.g., Weiser et al., 2016).

In addition to my work advising specific branches of government, I have also supported myself with a contract from Nielsen (e.g., Yan et al., 2016) and a grant from the Robert Wood Johnson Foundation for a survey of the behaviors of consumers with high-deductible health plans (e.g., Kullgren et al., 2018). Overall, I have a demonstrated record of successfully obtaining research funding and using that funding to lead collaborative research projects that make meaningful contributions to the literature.

Additional Managerial Achievements. I conclude this statement with a summary of my additional managerial achievements to date. I currently serve as the director of the Survey Methodology Program (SMP) within SRC. In this role, I have led two national searches for new SMP faculty, led an overall review of SMP activities conducted by SRC in 2019, coordinated SMP research efforts, and provided consistent leadership of monthly SMP faculty meetings. I also currently serve as the director of the Scientific and Technical Core of the Population Dynamics and Health Program (PDHP), which is the research infrastructure program funded by the NIH P2C grant awarded to the Population Studies Center at ISR in 2017. In this role, I manage a team of three analysts that I hired, I provide leadership on the program's steering committee, I help to plan technical workshops sponsored by the PDHP, I evaluate proposals written by junior faculty for small grants and mentorship programs, and I provide statistical consulting services.

I am also the director of the Junior Fellows Program at JPSM, where I manage the overall operations of that program and help to coordinate the assignment of undergraduate students to internships at federal agencies and other statistical institutions. I also help to manage the work of a team of graduate students serving on the steering committee of the annual Michigan Student Symposium on Interdisciplinary Statistical Sciences (MSSISS), serving as a faculty advisor. Finally, I currently serve as the co-director of the Statistical Design Group (SDG) at SRC with James Wagner, helping to coordinate all SDG meetings and recruit external clients for the SDG. These leadership and project management roles have helped me to become a more effective leader of my own research projects, ultimately increasing the quality of the work that I produce in collaboration with others.