Dear Reviewing Committee,

I wish to apply for Spelman-NBER mentoring program to develop proposals for submission to NSF. Currently, I am a professor of economics at University of North Carolina at Pembroke, a Native American serving university. My research interests include microeconomic theory, game theory, financial literacy, information economics, behavioral economics, public economics, and experimental economics. My most recent work involves the combination of research and services to help local communities and Native Americans. The following is a list of awarded applications and submitted applications in this area.

- Building Resilience and Vital Equity (BRAVE) - Increasing COVID-19 Testing in American Indians ($1.8Million), awarded by National Institutes of Health, Principal Investigator, Nov. 13th, 2020 – July 31st, 2022.

- Improving Financial Literacy among Native American Communities using an Economic Education Program ($62,000), awarded by NC Collaboratory, Principal Investigator, Dec. 1st 2022 – Nov. 31, 2023.

- Understanding Native Americans by Identifying Trends using Educative Dashboard (UNITED): Community-level COVID-19 Dashboard implementation and impacts in Robeson County, North Carolina ($2,500,000). Grant Agency: National Institute of Health, Principal Investigator, submitted on Nov. 8th, 2021.

Additional external grant awards also include

- What motivates an academic coach in an online accelerated course? Using a qualitative approach ($10,000), awarded by Instructional Connections, Principal Investigator, Sep. 1st 2020 – August 31st 2021.

The mentoring program will help me prepare for an NSF grant application to expand my current project on financial literacy for Native Americans. I plan to perform the preliminary work and facilitate the collaborations in Spring and Fall 2023 to lay the foundation to obtain future funding from NSF to conduct financial literacy research and build economic education programs for Native American communities in North Carolina.

The Dean of School of Business, Dr. Mohamed Djerdjouri, supports this application and will send a letter of support separately. His contact information is mohamed.djerdjouri@uncp.edu and 9107754728.

Thank you for your time! Feel free to contact me if you have any questions.

Shi, Xinyan

Xinyan Shi
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Project Summary

Topic: Understanding Financial Well Being for Native Americans and Building an Economic Education Program

Background: According to census data, there are close to 27% of Native Americans living in poverty which is higher than the average rate of 15% for the rest of the country. National Financial Capability Studies show that Native Americans are 1.41 times more likely to have difficulty making ends meet, and 2.5 times more apt to have subprime credit (Urban Institute, Feb. 25, 2021). Research also finds that Native American respondents have the lowest scores on financial literacy assessments and the least confidence in financial decision making (Stoddard, 2019). The COVID-19 pandemic has widened these gaps and exacerbated existing barriers the group has faced in pursuing and achieving financial well-being.

In spite of the urgent need to address the financial fragility among this population, there is very little research examining the financial well-being of Native Americans and the impact of education policies on their financial capability. The issue is partially due to lack of available Native American specific data and inadequate Indigenous representation of data in the system. In this project, we address this issue by first identifying the main determinants of financial wellbeing for Native American communities by surveying the residents from Robeson County, who has the largest percentage of Native Americans in North Carolina, then examine the effects of statewide economic education policies in mitigating the identified barriers. Finally, we will apply these findings in designing a culturally sensitive economic education programs for Native American communities in North Carolina.

Objective 1: Identify barriers to asset accumulation for Native American communities in Robeson County. We will design culture sensitive surveys to be distributed in Robeson County. The survey questions will be mainly drawn from the National Financial Capability Study. In addition, we will use an oversample of zip-codes with a higher Native American presence. Multivariate regression analysis will be conducted to examine the relationship between socio-economic factors, demographic characteristics, financial capability, and numeracy.

Objective 2: Examine the effects of economic education policies in mitigating the identified barriers and improving financial literacy among Native American communities. The survey questionnaire will collect information for researchers to identify and assess the impact of economic education policies. Although the sample participants are drawn from Robeson county only, it is expected that the findings would not only be applicable to other NC Native American rural communities, but would also provide valuable insights on the differential impact of economic education policies between Native Americans and other races.

Objective 3: Establish a community-level economic education program that specifically focuses on Native Americans. Based on the findings, the team will design and propose culturally sensitive economic education programs for Native American communities. This will be done through collaborative partnerships (e.g. American Indian Mothers, Inc., Lumbee Tribe of NC) that focus on cultural sensitivity and community involvement. Successful implementation of proposed education policies and programs are expected to have a long term impact on the lives of citizens and the overall economy of North Carolina state.

Reference

Stoddard, C. (2019). Education and Financial Well-Being for Native Americans. *Research Brief.*

CURRICULUM VITAE

Dr. Xinyan Shi

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Educations

- University of North Carolina at Chapel Hill: Ph.D. in Economics
- Kent State University: M.A. in Economics
- Tianjin University of Finance and Economics, China: B.A. in Economics

Professional Experiences

- University of North Carolina at Pembroke (Jan. 1st 2023 -): Interim Chair, Department of Economics and Decision Science
- University of North Carolina at Pembroke (May 2021 –): Professor of Economics
- University of North Carolina at Pembroke (2014 -2021): Associate Professor of Economics
- University of North Carolina at Pembroke (2008 – 2014): Assistant Professor of Economics
- Central Michigan University (2007 - 2008): Visiting Assistant Professor of Economics
- Tianjin Development and Planning Commission, Tianjin, China (July 1999 -May 2000): Project Manager
- Tianjin Yinzhu Import & Export Inc., Tianjin, China (August 1998 - June 1999): Preparing importing and exporting documents, quoting, negotiations.

Research Interests

Public economics, microeconomic theory, game theory, experimental economics, financial economics, behavioral economics

Academic Journal Publications

- **Shi, X.** and Lydia Gan. 'Equilibrium in Insurance Markets with Medical Tourism', *Studies in Microeconomics*, Nov. 30th, 2021.

- **Shi, X.** and Gao, G. "Brief Mindfulness Meditation and Individual Contribution to Public Goods" *Economics Bulletin*, vol. 41(3), pp. 1303-1312, 2021.

- Tracie Locklear, Patrick Strickland, William F Pilkington, Undi Hoffler, Victoria Billings, Tianduo Zhang, Laurin Brown, Irene Doherty, **Xinyan Shi**, Mary Ann Jacobs, Alice Kay Locklear, Tammy Maynor, Tasha Oxendine, Zhixin Richard Kang, SiAhn Mehng, Mary Beth Locklear, Deepak Kumar. 'COVID-19 testing and barriers to vaccine hesitancy in the Lumbee Tribe of North Carolina, *North Carolina Medical Journal*, 82 (6), 406-407, 2021.

- Collier, W., and **Shi, X**. "Mindfulness, Meditation and Belief in Free Will/Determinism" by *Psychological Report*, 123(5), 2020.

- Collier, W., and **Shi, X.**, "Relationship between Belief in Determinism/Free Will and Mindfulness", *Journal of Organizational Psychology*, 17(3), 2017, 85-92.

- **Shi; X.** and Riley, S., "Mortgage Choice, House Price Externalities and Default Rate", *Journal of Housing Economics*, 26, 2014, pp. 139-150.

- **Shi, X.** and Maysami, R., "Time-inconsistent Preferences and Reference Dependence", *Briefing Notes in Economics*, 89, 2013.

- Bahhouth, V., Shi, X. and Gan, L., "Firm Characteristics and Stock Returns during 2008 Financial Crash", *Journal of Social Sciences Research*, 2, 2013, pp. 109- 122.

- **Shi, X.,** "Information Disclosure and Vaccination Externalities," *International Journal of Economic Theory*, 9(3), 2013, pp. 229 - 243.

- **Shi, X.,** "Common-Value Auctions with Asymmetrically Informed Bidders and Reserve Price", *International Journal of Economic Theory*, 9(2), 2013, pp. 161-175.

- Bahhouth, V., Maysami, R. and **Shi, X.**, "An Empirical Study of the Financial Characteristics of Firms Showing Positive Price Movements During Declining Markets", *International Journal of Business and Economics Perspectives*, 7(1), 2012, pp. 82 - 92.

- **Shi, X.**, "Momentum and Incentive Intensities", *International Journal of Management Theory and Practices*, 7(1), 47-64, 2006.

Non-academic Journal Publications

- Shi, X. and Ariel Isolde, 'Peace Offering', Transformative Power of Art Journal, volume 1, 161-164, Summer 2022

Research Grants Awarded

- Improving Financial Literacy among Native American Communities using an Economic Education Program ($62,000), awarded by NC Collaboratory, Principal Investigator, Dec. 1st 2022 – Nov. 31, 2023.

- Building Resilience and Vital Equity (BRAVE) - Increasing COVID-19 Testing in American Indians ($1.8Million), awarded by National Institutes of Health, Principal Investigator, Nov. 13th, 2020 – July 31st, 2022.

- What motivates an academic coach in an online accelerated course? Using a qualitative approach ($10,000), awarded by Instructional Connections, Principal Investigator, Sep. 1st 2020 – August 31st 2021.

- Culture Comparison in Charity Giving ($5000) awarded by UNCP Office of Sponsored Research and Program, Principal Investigator, May 2020 – Oct. 2020.

- "Development of an Economical and Efficient Biodiesel Production Process" ($750,000), funded by U.S. Department of Energy, Co-Investigator, August 2011 - April, 2014.

Research Grants submitted

- Understanding Native Americans by Identifying Trends using Educative Dashboard (UNITED): Community-level COVID-19 Dashboard implementation and impacts in Robeson County, North Carolina ($2,500,000). Grant Agency: National Institute of Health, Principal Investigator, submitted on Nov. 8th, 2021.

Teaching Grants

- Mindfulness, altruism, and personality through the public good game, awarded by UNCP Teaching and Learning Center for teaching excellence ($2500), Principal Investigator, Fall 2019.

- UNC General Administration RFP Grant for distance-delivered professional skills courses ($10,146) with Drs. Richard Barnes and Rebecca Gonzalez, Principal Investigator, March 2015 - June 2015.

Honors and Awards

- Being nominated for Board of Governor Award for Excellence in Teaching, Fall, 2022.
- Being nominated and recipient of Graduate Faculty Mentor Award, Spring 2020.
- Being nominated for UNCP Outstanding Teaching Award, Spring 2016.
- Being nominated for UNCP Adolph Dial Award for Community Service, Spring 2015.
- The recipient of Service - Learning fellowship for 2012 - 2013
- Best Paper Awarded by 2012 International Academy of Business and Public Administration Disciplines (IABPAD)
- Best Student Paper awarded by 2006 Southwest Decision Science Institute

Peer Reviewed Presentations (selected)

- Ishuan, Li and Shi, X.,, 'A Pilot Course for Improving Financial Literacy in College Students', 2023 Allie Social Science Association meeting, New Orleans, Louisiana, Jan. 5-8, 2023.

- Shi, X., SiAhn Mehng and Hongwei Song 'Mindfulness and Motivation: A study of Academic Coach in an Online Course Using Self-Determination Theory', 2022 Southeast Institutes for Operations Research and the Management Science, Mytle Beach, SC, Oct. 6-7, 2022

- Simonson, I. L., and Shi, X., 'A Pilot Course for Improving Financial Literacy in College Students', 2022 Annual Conference on Financial Education (virtual), April 25-27.

- Gao, G., Shi, X., Travis Myers, Elena Chen, 'A Field Experiment on Racial Discrimination in the Rental Housing Market of Hawaii', American Economic

Association meeting (virtual), January 6-8, 2022.

- Shi, X., and Gao, Guanlin, “Culture Comparison In Charity Giving”, 2021 ASSA Annual Meeting, Jan. 3rd - Jan. 5th.

- Shi, X., "A Public Goods Experiment with Demonstration and Mindfulness", Southern Economic Association Annual Meeting, Fort Lauderdale, FL, Nov. 23rd – Nov. 25th, 2019.

- Shi, X., "Mindfulness and Public Good Game", Canadian International Conference on Humanities and Social Sciences, Toronto, Canada, May 19 - May 20, 2018.

- Doyle, J. and Xinyan Shi, "Antecedents of Enjoyment, Approach Intentions, and Helpful Feedback: Website Design and Aspects of Consumer Psychology", Annual Meetings of Southern Management Association, St. Pete Beach, Florida, Oct. 24 - Oct. 28, 2017.

- Shi, X., "Voluntary Contribution to a Public Good and Mindfulness", Annual Meetings of Midwest Economic Association, Cincinnati, OH, March 31 - April 2nd, 2017.

- Collier, W., Shi, X., "Relationship between Belief in Determinism/Free Will and Mindfulness", AIB Southeast 2016, Tampa, FL, Nov. 10-14, 2016.

- Shi, X., "Epidemic Outbreak and Information Disclosure", Midwest Economic Association Annual meetings, Minneapolis, MN, March 27-29, 2015.

- Collier, W., Shi, X., "Examining Mindfulness, Emotion and Belief in Determinism", Southeastern Psychological Association Annual Meeting, March 18 - 21, 2015, Hilton Head, SC.

- Shi, X., "Strategic Interaction between Insurance Company and Consumer in Medical Tourism", Annual Meetings of Southern Economic Association, Atlanta, GA, Nov. 21 - Nov. 24th, 2014.

- Shi, X., "Securitization, House Price Externalities and Default Rate", Annual Meetings of Midwest Economic Association, Evanston, IL, March 21 - March 23, 2014.

- Bahhouth, V., Shi, X., and Gan, L., "Examining the Negative Price Movements in Healthcare Industry during 2008 Financial Crisis", Annual Meetings of Midwest Economic Association, Columbus, OH, March 22 -March 24, 2013.

- Shi, X., and Riley, S., "Adjustable and Fixed Rate Mortgages under Lending Externalities and Asymmetric Information", Annual Meetings of Midwest Economic Association, Evanston, IL, March 30-April 1, 2012.

- Bahhouth, V., Maysami, R. and Shi, X., "An Empirical Study of the Financial Characteristics of Firms Showing Positive Price Movements During Declining Markets", 2012 International Academy of Business and Public Administration Disciplines (IABPAD), Orlando, FL., Jan. 2 - 5, 2012.

- Bahhouth, V., Maysami, R. and Shi, X., "Examining the Features of Resilient Firms", 2011 Annual Meeting of the Southeastern Institute for Operations Research and the Management Sciences (SE InfORMS), Mytle Beach, SC., Oct. 6 -7, 2011.

- Shi, X., and Riley, S., "Regulatory Mechanisms for Pooled-Risk Lending in the Private Mortgage Market "Annual Meetings of Midwest Economic Association, St. Louis, MO., March 17 - 20, 2011.

- Shi, X., "The Value of Commitment m Common-Value Auctions with Asymmetrically Informed Bidders", Annual Meetings of Eastern Economic Association, New York, Feb. 25 -27, 2011.

- Shi, X., "Reserve Prices in Common Value Auctions with Asymmetrically Informed Bidders", Annual Meetings of Midwest Economic Association, Evanston, IL, March 19-21, 2010.

- Shi, X., "Dynamic Auctions with Asymmetric Information and an Application to Outer Continental Shelf (OCS) Auctions", Annual Meetings of Western Economic Association International, Vancouver, Canada, June 29-July 2, 2009.

- Shi, Y., "Momentum and Incentive Intensities", 37th Southwest Decision Science Institute Conference, Oklahoma City, Ok, March 1-4, 2006.

- Shi, Y., "Epidemic Outbreak and Information Disclosure", 2nd International Conference for Social Science, Orlando, FL, Decemeber, 2005.

News Articles

- 'Student Project Lends a Hand to SJP's Outreach Effort', *The Pilot*, March 3rd, 2015

- 'College Class Offers Help to Area Businesses, Nonprofits', *The Pilot,* July 29th, 2014

Professional Activities

- Associate Editor, *The American Economist*, an official publication of Omicron Delta Epsilon, The International Honor Society in Economics, ongoing
- Reviewer for *Economics Bulletin*, *The American Economist*, *Journal of Knowledge Economy*, *Games*, *Technological and Economic Development of Economy*, *International Journal of Economic Theory*.
- External Peer Reviewer for Hongwei Song's tenure and promotion, Bellarmine University
- Invited speaker by Tianjin University of Finance and Economics and Tianjin University of Commerce, Summer 2015.
- Invited speaker by Nankai University and Tianjin University of Finance and Economics, Summer 2014.

University Committee Services

- Served on University Adhoc budget committee, Spring 2019 – Spring 2020.
- Serve on PURC council, Fall 2013-Spring 2015 and Fall 2019 – present
- Served on Honors College Dean Search Committee, Fall 2019 - Spring 2020
- Served on Student Success Steering Committee, Spring 2019
- Serve on Graduate School Award Committee, Fall 2016 - present
- Chaired the SACL- Student Affairs and Campus Life Committee, Fall 2017 - ongoing
- Served on the Executive Committee of Senate, Fall 2017 - Spring 2018
- Chaired University Promotion and Tenure committee, Fall 2016 - Spring 2017
- Served on Faculty Senate, Fall 2015 – Spring 2018
- Served on Faculty and Institution Affairs Committee, Fall 2015 - ongoing
- Served on Promotion and Tenure Committee, Fall 2015 - ongoing
- Served on Search Committee for position in IVF, Fall 2015.
- Served on Chancellor Search Committee, Fall 2014- Spring 2015.
- Served on Carnegie Re-Classification Application Task Force, Spring 2014.
- Served on Curriculum Committee, Fall 2012 to Spring 2014.
- Served on Service Learning Committee, Fall 2012 to Spring 2013.
- Served on General Education Subcommittee, Fall 2010 to Spring 2012

School of Business Committee Services (selected)

- ODE advisor and organized ODE speaker event
- Serve on School of Business Dishonest Task Force

- Serve on School of Business Faculty Evaluation Task Force
- Serve on PEC for Dr. Cliff Mensah
- Serve on PEC for Dr. SiAhn Mehng
- Serve on MBA committee in School of Business
- Serve on Online Task Force in School of Business
- Serve on School of Business Engagement Committee
- Serve on SOB impact task force

Community Services

- Serve as a board member on American Indian Mothers, Inc., ongoing
- Serve as a board member for a nonprofit organization called 'Sand Dollar Fund' in Southern Pines area, ongoing.
- Served as a board member and treasure for 'Sandhill Land Trust', Spring 2017-Jan. 2018.
- Serving on Education Committee for Carolina Philharmonic, Fall 2015– Spring 2016.
- Serving as a member on Board of Adjustment for Village of Whispering Pines, 2015 -2018.
- Serving as treasurer for Mindfulness Community of Pines, Jan. 2014 - Jan. 2015.
- Serving as an alternate member on Board of Adjustment for Village of Whispering Pines, 2013 - 2014.